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FEMALE INFLUENCE ON CHILDREN.

The power which well adapted books may exert on the minds of children, can hardly be stated in too extravagant terms, and will be allowed by every one to be great. And when we consider further, that early impressions, though often weakened, are seldom entirely erased; that good seed on good ground affords an abundant return at the harvest time; that "the child is father of the man;" and that a strong direction once given, is long, and in a majority of cases always retained: and to put the subject in one other point of view, when we consider that the mother's influence, which, next to the influence of heaven itself, is the best and dearest, and most heavenly, and has been the most frequently and gratefully acknowledged by its objects, may be so effectually aided in its operations by the hints which the parent receives, and the stores of auxiliary instruction and entertainment which are placed at her disposal, in judicious books for children, we shall regard such books not with pleasure alone, but with respect; we shall esteem it no act of condescension in ourselves, nor in any one, to turn over their pages; we shall perceive more solid instruction, more beauty, truth, power, in many a little work stitched up in coloured paper, bearing a simple wood cut on each side, and thrown about the nursery with as much freedom of dissemination as the most ardent republican could desire, than in many a proud octavo, redolent of Russia, and tenacious of its standing on shelves of mahogany.

Such being the importance of juvenile books, who are best qualified to make them? To the first question, we answer—women. They are the best qualified to make books for children, who are most in the company of children; who have almost the sole care of children; whose natural sympathies unite them most closely with children, even such of them as have never been mothers themselves; who best know the minds, the wants, the hearts of children; and whose tender-

ness and gentleness gracefully bend to the ignorance of children, and assimilate most easily and happily with their soft and confiding natures. The child, in its early years especially, has no guardian like woman, and can therefore have no instructor like woman.

And, when we come to answer the next question, who have really devoted their best talents and most anxious care to the education of children, who have written the best books for and about children? We are thankful we again can answer—women. Thirty years ago, if we had been in existence then, we could not have answered thus. We should have been compelled to say, There are no books for children; these important members of the human family are destitute; this immense, valuable, and indefinitely fertile field, lies neglected and runs to waste. No seed has been sown there for the propitious skies to mature; the grain has yet to be deposited; the weeds are yet to be eradicated; both man and woman pass it by, and take their labour to other places, and think not of redeeming it, nor know that by care and culture it may be made to blossom like the rose, and fill the earth with its fruits. This we should at that time have been obliged to say. But now we can say, that those whose part and province it was to do this work, have done it, and done it well. We can point to the names of Barbauld and Edgeworth, Taylor and Hofland, and confidently ask where there are worthier. Men talk of eras in literature. The era of the two first named of those ladies, the era of the hymns for children and the Parent's Assistant, was a golden era, pure and bright, and full of riches, and deserving a rank among the most glorious dates of improvement. Since that time, labourers have been fast coming into the same field, and have worked it well; though we must still say that those who came first worked best. Our own country-women have been neither tardy in advancing to this delightful task, nor inefficient in their services. We believe that the best children's books which we have, and we have many which are excellent, are the composition of females; and if we felt ourselves at

liberty to do so, we could repeat an honorable, and by no means scanty list of the names of those who have earned something better than mere reputation, by contributing to form the minds and hearts of our children. Those who are conscious that they belong to the catalogue, have little to ask of fame, and certainly nothing to receive from it half so valuable as that which they already possess—the gratulations of their own hearts.

The department of juvenile literature, then, is almost entirely in female hands. Long may it remain there. Long, for the interests of virtue and the improvement of our kind, may it be in the heart of woman to nurture the growth, and watch over and direct the early puttings-forth of youthful intellect and feeling. While she retains the office, so delightful in itself, and so grave and momentous in its ends, and even adds to its beautiful dignity by the graceful and effectual manner in which she has hitherto performed its duties, she inspires us with an admiration of a deeper and more lasting, and we must also believe, more flattering character, than was the most glowing and romantic love of the days of chivalry. Talk not to us of chivalry, unless it be in poetry, and with the usual latitude and license of poetry. In truth and in prose, the most refined devotion of knighthood and chivalry is no more to be compared, in purity and elevation, to the sentiments which female excellence now commands, than are those fair ones who then presided at the great duels which we read of under the poetical name of tournaments, and who by their presence and plaudits animated the legalized and courtly slaughter, which was raging and struggling beneath them, to be compared to the females of our own time, who as beautiful, no doubt, and as accomplished as they, find it their more appropriate privilege and pleasure to stimulate the fresh powers of childhood to the competitions of knowledge and virtue, and to hold out the meed of approbation to the exertions of innocent and ingenuous minds.

CIRCLE OF THE SCIENCES, WITH SUITABLE REFLECTIONS.

ASTRONOMICAL SKETCHES.—NO. I.

Astronomy is the most ancient, sublime, perfect, and useful science, that ever engaged the attention of the thinking part of mankind. It is a science that has occupied the understandings of the most wise and learned, in all ages of the world; and which is calculated to impress the mind with the most awful and lofty views of the wisdom, power, goodness, and majesty of the Almighty.

Whether we contemplate the magnitude, number, and situation of the heavenly bodies, or the mysterious laws by which they are governed and upheld, we are equally lost in astonishment. The Royal Psalmist has elegantly expressed his sentiments on this noble and majestic subject in the eighth and nineteenth Psalms: "O Lord, our Lord, how excellent is thy name in all the earth! who has set thy glory above the heavens!—When I consider the heavens, the work of thy fingers, the moon and stars which thou hast ordained, what is man, that thou visitest him?—The heavens declare the glory of God, and the firmament showeth his handy work. Day unto day uttereth speech, and night unto night showeth knowledge. There is no speech nor language where their voice is not heard: their line is gone through all the earth, and their words to the end of the world." Or, their voice is heard without speech or language;—they speak a universal and powerful language to the minds of intelligent beings, relative to the existence and perfections of Him who created all things, and who sustains all things by the word of his power.

These beautiful sentiments of the Psalmist are agreeable to the conclusion which the wise and good of all nations have made from God's works, particularly from those of the heavens. "Men," says Plutarch, "began to acknowledge a God, when they saw the stars maintain so great harmony, and the days and nights

"Jesus Christ came into the world to save sinners." What evidence have I that he is my salvation? "If any man be in Christ, he is a new creature." Have I passed from death unto life; have all things become new? If so, then the fruits of the spirit will appear in my conduct, the glory of God will rest upon me, and "the joy of the Lord will be my strength."

Wishing you, sir, and your readers, a happy new year, I remain yours, &c. S. A. D.

BIOGRAPHICAL SKETCHES.

EURIPIDES AND SIMONIDES.

Euripides flourished about 407 years before Christ. He was one of the Greek poets who excelled in tragedy, and was a native of the island of Salamis. He studied under the most celebrated masters, and frequented the lectures of Anaxagoras for natural philosophy, and of Perdicus for rhetoric.

We are told that Socrates never appeared at the theatre, but when Euripides contended with the tragedians, for the tragedies of this poet were so full of fine morality, that they were exceedingly pleasing to that philosopher. He repaired to the court of Macedon, where he met with a very agreeable reception. He there came to a tragical end, about the seventy-fifth year of his age, for as he was walking in a wood, the intenseness of his thoughts led him too far, till being met at last by the Prince's dogs which were then hunting, he was torn in pieces by them.

We have but twenty tragedies of this writer left—To inspire his mind with solemn and terrific ideas, he composed his pieces in a gloomy cave. In the opinion of many excellent judges, he was the most accomplished of all the tragic poets, having interspersed many moral reflections through his pieces.

SIMONIDES.—Simonides flourished in the time of Xerxes' expedition; he was a native of Ceos, an island in the Ægean sea, and set up a school there. He soon

left his native country, upon some disappointment it is supposed, and retired to Sicily, where he was entertained at the court of Hiero, and several times escaped imminent danger of losing his life by accidents. This is the poet whose remark to Dionysius concerning the Deity, was so remarkable and striking—"The longer I consider the subject, the more difficult it appears to be."

In his old age he appears to have been covetous to excess even of avarice, the reason of which he gave was, that he might leave something after his death to his enemies. His way of life, we are told was narrow and mean; he was covetous, even of dishonest gain. He lived to a great age, being, when he died, ninety-two, still at the court of Hiero.

He has been censured as the first who let out the Muses for hire, and who disgraced them through a mercenary spirit. His wit was beyond the attacks of critics; his poetry was composed in almost all strains, but he succeeded chiefly in elegies. His Lamentations was one of the most famous poems he wrote, and to which Horace has an allusion. His poetical genius was so strong, that he disputed the prize of poetry at eighty years of age. R. S.

EXAMPLES FROM HISTORY.

INTPERANCE—SENTIMENTS.

The sad effects of luxury are these:
We drink our poison, and we eat disease.
Not so, O Temperance bland, when ruled by thee,
The brute's obedient, and the man is free;
Soft are his slumbers, balmy is his rest,—
His veins not boiling from the midnight feast.
'Tis to thy rules, bright Temperance! we owe
All pleasures which from health and strength can flow:
Vigour of body, purity of mind,
Unclouded reason, sentiments refined;
Unmixed, untainted joys, without remorse,
The intemperate sensualist's never-failing curse.

The greatest pleasures of sense turn disgustful by excess.

The gratification of desire is sometimes the worst thing that can befal us.

It was a maxim of Socrates, "that we ought to eat and drink to live; and not to live in order to eat and drink."

Luxury may contribute to give bread to the poor; but if there were no luxury there would be no poor.

Pride and luxury are the parents of impurity and idleness, and impurity is the parent of indigence.

Sensual enjoyment, when it becomes habitual, loses its relish, and is converted into a burthen.

Be moderate in your pleasures, that your relish for them may continue.

Temperance is the preservation of the dominion of soul over sense, of reason over passion. The want of it destroys health, fortune and conscience; robs us of personal elegance and domestic felicity; and what is worst of all, it degrades our reason and levels us with the brutes.

Anacharsis, the Scythian, in order to deter young men from that voluptuousness which is ever attended with ill effects, applied his discourse to them in a parable, telling them, "that the vine of youthful gratification and intemperance had three branches, producing three clusters; on the first, says he, grows pleasure; on the second sottishness, and on the third sadness."

To show the dangers of intemperance, the Catholic legends tell us of some hermit to whom the devil gave his choice of three crimes; two of them of the most atrocious kind, and the other to be drunk. The poor saint chose the last as the least of the three; but when drunk he committed the other two.

Examples—One of our most celebrated poets has somewhere observed that "Dull sleep instructs, nor sport vain dreams in vain." The following may serve as an instance. Chremes of Greece, though a young man, was very infirm and sickly, through a course of luxury and intemperance, and subject to those strange sorts of fits which are called trances. In one of these he thought that a philosopher came to sup with him;

who, out of all the dishes served up at the table, would only eat of one, and that the most simple; yet his conversation was sprightly, his knowledge great, his countenance cheerful, and his constitution strong. When the philosopher took his leave, he invited Chremes to sup with him at a house in the neighbourhood; this also took place in his imagination, and he thought he was received with the most polite and affectionate tokens of friendship, but was greatly surprised when supper came up, to find nothing but milk and honey, and a few roots dressed up in the plainest manner, to which cheerfulness and good sense were the only sauces. As Chremes was unused to this kind of diet, and could not eat, the philosopher ordered another table to be spread more to his taste; and immediately there succeeded a banquet composed of the most artificial dishes that luxury could invent, with great plenty and variety of the richest and most intoxicating wines. These too were accompanied by damsels of the most bewitching beauty. And now Chremes gave a loose to his appetites, and every thing he tasted raised ecstasies beyond what he had ever known. During the repast the damsels sung and danced to entertain him; their charms enchanted the enraptured guest, already heated with what he had drank; his senses were lost in ecstatic confusion; every thing around him seemed Elysium, and he was upon the point of indulging the most boundless freedom, when, lo! on a sudden their beauty, which was but a vizor, fell off, and discovered to his view forms the most hideous and forbidding imaginable. Lust, revenge, folly, murder, meagre poverty, and frantic despair, now appeared in their most odious shapes, and the place instantly became the direct scene of misery and desolation. How often did Chremes wish himself far distant from such diabolical company! and how dread the fatal consequence which threatened him on every side! His blood ran chill to his heart; his knees smote against each other with fear, and joy and rapture were turned into astonishment and horror. When the philosopher perceived that this scene had made a sufficient impression on his guest, he thus addressed him: "Know,

Chremes, it is I, it is Æsculapius, who have thus entertained you; and what you have here beheld is the true image of the deceitfulness and misery inseparable from luxury and intemperance. Would you be happy, be temperate. Temperance is the parent of health, virtue, wisdom, plenty, and of every thing that can render you happy in this world or the world to come. It is indeed the true luxury of life; for without it life cannot be enjoyed." This said, he disappeared; and Chremes, awaking, and instructed by the vision, altered his course of life, became frugal, temperate, industrious; and by that means so mended his health and estate, that he lived without pain to a very old age, and was esteemed one of the richest, best, and wisest men in Greece.

Such is the beautiful moral drawn by the pen of elegant and instructive fiction; with which if there be any mind so insensible as not to be properly affected, let us only turn to that striking reality presented to us in the case of Lewis Cornaro. This gentleman was a Venetian of noble extraction, and memorable for having lived to an extreme old age; for he was above a hundred years old at the time of his death, which happened at Padua in the year 1565. Amongst other little performances he left behind him a piece entituled, "Of the Advantages of a Temperate Life." He was moved, it seems, to compose this little piece at the request and for the benefit of some young men for whom he had a regard; and who, having long since lost their parents, and seeing him, then eighty-one years old, in a fine florid state of health, were desirous to know of him what it was that enabled him to preserve, as he did, a sound mind in a sound body, to so extreme an age. He describes to them, therefore, his whole manner of living, and the regimen he had always pursued, and was then pursuing. He tells them, that when he was young he was very intemperate; that his intemperance had brought upon him many and grievous disorders; that from the thirty-fifth to the fortieth year of his age, he spent his nights and days in the utmost anxiety and pain; and that, in

short, his life was grown a burthen to him. The physicians, however, as he relates, notwithstanding all the vain and fruitless efforts which they made to restore his health, told him, that there was one method still remaining, which had never been tried, but which, if they could but prevail with him to use with perseverance, might free him, in time, from all his complaints; and that was, a temperate and regular way of living. They added, moreover, that unless he resolved to apply instantly to it, his case would soon become desperate; and there would be no hopes at all of his recovery. Upon this, he immediately prepared himself for his new regimen; and now began to eat and drink nothing but what was proper for one in his weak habit of body; but this was at first very disagreeable to him. He often wanted to live again in his old manner; and did indeed indulge himself in a freedom of diet sometimes, without the knowledge of his physicians; but, as he informs us, much to his own detriment and uneasiness. Driven, in the mean time, by the necessity of the thing, and resolutely exerting all the powers of his understanding, he at last grew confirmed in a settled and uninterrupted course of temperance; by virtue of which, as he assures us, all his disorders had left him in less than a year; and he had been a firm and healthy man from thenceforward until the time in which he wrote his treatise.

THE ANCIENT AND MODERN HISTORY OF NATIONS.

ANCIENT SACRED HISTORY.

Scripture history being so much interwoven with the different parts of ancient history in general, we intend to give a rapid sketch of the principal epochas into which the Old Testament history is usually divided. In doing this, we trust, that we shall be performing a work that will be deemed useful and interesting, especially to our young readers.

The *first* remarkable period of the Old Testament history contains the age of the antediluvian patriarchs,

which includes about one thousand six hundred and fifty-six years, from the creation to the deluge. The most remarkable characters who flourished during this space of time, were our first parents, Adam and Eve, who, for disobedience to the divine command, were banished from the garden of Paradise. From these descended Cain, whose name is infamous on account of the murder of his brother Abel; and Seth, from whom the race of patriarchs descended. Under the patriarchal government every father had the sole government of his family, and exercised the power of distributing justice and inflicting punishment, according to his own will, upon those who had been indebted to him for existence. Enoch is another remarkable character that flourished in this period, who, on account of his piety, was translated from earth to heaven. Methuselah is celebrated on account of his great age; and Noah for having lived both before and after the flood. The antediluvian fathers are supposed to have been ignorant of arts and letters, but the great extent of their lives must have enabled them to obtain considerable knowledge of nature, and of the business of agriculture. It appears also that the art of building* and music, and some of the handycraft arts were known and practised in this period.

The *second* period of ancient sacred history includes eight hundred and fifty-seven years, or the space which passed from the deluge to the going forth of the Israelites out of Egypt. Noah with his family entered the ark in the year before Christ 2348: and we are informed that when the waters assuaged, the ark rested upon Ararat, a mountain of Armenia. By this event the earth is supposed to have undergone considerable alterations; the spoils of the sea, such as the bones of fish, &c. which are frequently found on the tops of mountains and in the midst of rocks, do not merely render this supposition highly probable, but demonstrate the certainty of such an event as the deluge having taken place at some period of the world. Noah had

* Gen. iv. 17. 21. 22.

three sons, Shem, Ham, and Japhet, whose descendants peopled the earth. Europe, with a part of Asia, fell to Japhet; the rest of Asia to Shem; and Africa to Ham. Of the posterity of Ham and Japhet we have no certain accounts; but the Scriptures have given us a very ample history of the descendants of Shem, the most remarkable of whom are Abraham, Isaac, Jacob, and Joseph. Abraham was styled the father of the faithful. He passed into the land of Canaan, called the holy land, a district of Asia, bordering on the Mediterranean Sea, which has been since inhabited by Jews, Christians, and Mahometans, and at present is subject to the Turks. Circumcision was instituted by Abraham, by which his posterity was distinguished from other nations. Isaac, the only son of Abraham by Sarah, was father to Jacob. Jacob, afterwards called Israel, left twelve sons, the founders of the twelve tribes of Israel. With the interesting history of Joseph all our readers are doubtless acquainted. After Joseph's death the offspring of Jacob increased in Egypt to such a degree as to alarm the reigning monarch, who commanded the destruction of every male infant; but Moses was saved by the interposition of Pharaoh's daughter. Moses was employed in executing the divine command for freeing the Israelites from Egyptian bondage. The fate of Pharaoh and his army has been already described in our history of Egypt. The Israelites continued travelling in the deserts of Arabia forty years, when they entered into the promised land under the conduct of Joshua, which closes the second period of ancient sacred history. The circumstances which deserve particular notice in this period are the institution of the rite of circumcision by Abraham; and the promulgation of the written law by Moses from Sinai, which is a mountain in Arabia Petræa, near the Red Sea, and about two hundred and sixty miles east of Cairo.

The *third* period of sacred history commences with the going out of the Israelites from Egypt, and extends to the time of the kings, a period of three hundred and ninety-six years. During this period the people of Israel were governed first by Joshua their leader, then by the

elders, and afterwards by judges, who were extraordinary magistrates, appointed for the purpose of defending the people against their enemies;—of promulgating the law;—and of preserving the purity of divine worship. For the history and transactions of these we refer the reader to the books of Joshua and Judges in the Old Testament. The character of Samuel, the last of the judges of Israel, deserves to be had in remembrance; he was an excellent magistrate, and, upon his death, the people fell again into the practice of idolatry, and were in consequence of it oppressed and kept in bondage eight years, by Chushan, a king of Mesopotamia. This whole history exhibits striking and remarkable instances of the inconstancy of the Hebrews, and shows that their piety varied in proportion to the prosperity or adversity of their worldly concerns.

(To be continued.)

LIVES OF CELEBRATED CHILDREN.—NO. I.

VOLNEY BECKNER, born at Londonderry, in 1748, and devoured by a shark at the age of twelve years.

The child whom we here commemorate, had not the advantage of springing from a wealthy or distinguished family; but of what importance is birth? What is the effect of riches? They often corrupt the morals. He who is worthy, he who is honest and wise has no need of ancestors. Volney Beckner was the son of a poor Irish sailor; he received no instruction but what related to his father's profession. Yet, all destitute as he was of education, he does not the less deserve a place in this biography. Nature had endowed his body with singular address and agility, and his mind with unusual intelligence and penetration. He had a soul of no common temper; and from his earliest years he discovered sentiments of valour, which would certainly have led him to great enterprizes, had he run a longer course. One art essentially necessary to a sailor, and to all others who travel by sea, is that of

swimming. Besides that this exercise is very favourable to the health, and that it gives suppleness to the limbs, it is indispensable in a shipwreck; there is no medium in such a case; a person must either swim or be drowned. After little Beckner was weaned, his father taught him to move and to guide himself in the water. He threw him down into the sea from the stern of the ship; then suddenly plunging into this perfidious element, which swallows so many men and so much riches, he sought for him again. He afterwards supported him with one hand, taught him to extend his little arms and legs, and thus accustomed him from his cradle to brave dangers in their very bosom. When he grew a little bigger the ship-boy already knew how to render himself useful to the crew. In tempestuous weather, when the wind blew with violence, when it tore the sails, and the rain fell in torrents, he was not one of the last in manœuvering. When he was at the top of the highest mast, even in the fiercest of the storm, he appeared as little agitated as a passenger stretched on his hammock. Such is the force of habit and example! Happy are those who see none but good ones! Cradled in the effeminacy of cities, abandoned to timorous and ignorant nurses, most children tremble like a leaf at the creaking of a door, they are ready to faint at seeing a mouse pass by at their feet. It is not so with those who are brought up in the midst of toils, and contemplate brave men. To be fed with biscuit broken with a hatchet, sparingly moistened with muddy water full of worms, to be half covered with a garment of coarse cloth, to take some hours of repose stretched on a plank, and be suddenly wakened at the moment when his sleep was the soundest; such was the life of Volney, and yet he enjoyed a robust constitution. He never caught cold, he never knew fevers, or any of that crowd of diseases springing from gluttony and idleness. A severe and hardy education is always the best, it alone forms superior men; of this fact the history of all ages furnishes us with a multitude of examples. Such was the aptitude and industry of Beckner in his twelfth

year, that at this age he was judged worthy of a higher station, and double pay. The captain of the ship, on board which he served, cited him as a model to the other boys. He did not even fear to say once, in the presence of the whole crew, "If this little man continues to conduct himself with so much valour and prudence, I have no doubt of his obtaining a place much above that which I occupy." Little Volney was very sensible to the praises that he had so well deserved. Although deprived of the study of letters, which cultivates the mind, extends our knowledge, and gives us juster ideas of things, he loved glory by instinct, and made great efforts for its acquisition. From several instances of intrepid daring, which he manifested in many dangerous emergencies, we shall only select the following, since this alone is sufficient to confer eternal honour on the memory of the young sailor.

A little girl, the daughter of an American gentleman, who was going to Port-au-Prince, had slipped from her nurse, who was ill, and ran upon deck. There, whilst she fixed her eyes with greedy curiosity on the immense expanse of water, a sudden heaving of the ship caused her head to turn, and she fell into the sea. The father of Volney darted after her, and in five or six strokes caught her by her frock. Whilst he swam with one hand to regain the vessel, and with the other held the child close to his breast, Beckner perceived at a distance a shark advancing directly towards him. He called out for assistance. The danger was pressing. Every one ran on deck, but no one dared to go farther; they contented themselves with firing off several carbines; and the animal, lashing the sea with his tail, and opening his frightful jaws, was now just about to seize his prey. In this terrible extremity, what strong men would not venture to attempt, filial piety excited a child to execute. Little Volney armed himself with a broad and pointed sabre; he threw himself into the sea; then plunging with the velocity of a fish, he slipped under the animal, and stabbed his sword into him. Thus suddenly assailed, and deeply wounded, the shark quitted the sailor, but

he returned doubly exasperated, against the aggressor, who attacked him with repeated blows. What a heart-rending sight! How worthy of admiration! On one side the American, trembling for his little girl, who seems devoted to destruction; on the other a generous mariner exposing his life for a child not his own; and here the whole crew raising their hands to heaven, on seeing young Volney contending with an enemy so greatly superior, and encountering inevitable death, to divert it from his father! Who can recal a scene like this, without dissolving into tears of tenderness?

The combat was too unequal, and no refuge remained but in a speedy retreat. A number of ropes were quickly thrown out to the father and the son, and they each succeeded in seizing one. They were hastily drawn up; already they were more than fifteen feet above the surface of the water; already cries of joy were heard: "Here they are, here they are—they are saved!" Alas! no—they were not saved! at least one victim was to be sacrificed to the rest. Enraged at seeing his prey about to escape him, the shark plunged to make a vigorous spring, then issuing from the sea with impetuosity, and darting forward like lightning, with his sharp teeth he tore asunder the body of the intrepid and unfortunate child while suspended in the air. A part of his palpitating and lifeless body was drawn up to the ship with his father and the fainting American.

Thus died, at the age of twelve years and some months, this hopeful young sailor, who so well deserved a better fate. When we reflect on the generous action which he performed, and the sacred motive by which he was animated to the enterprize, we are penetrated with sorrow to see him sink under it. Yet these great examples cannot be lost. The memory of them does not perish with the individual who gave them. A faithful relation of them cannot but animate with a generous zeal the tender minds of youth, and produce from age to age the repetition of actions not less praiseworthy.

POPULAR AND INSTRUCTIVE TALES.

THE SIGHTLESS.

I do not always think, Ellen, said Catharine Dorman, that I could have been so happy as I now feel, under this affliction. When I first knew that I was no more to see the familiar faces that I had so long loved, I thought that as sleep, a darkness would be for ever upon my heart, as that which dwelt perpetually around me in the outward world.

The speaker was a young pale girl, who was sitting with the companion she addressed upon the steps of a vine-wreathed portico. As she turned her face while she spoke, it caught a slight flush from the rich glow of a summer sunset, and her beautiful eye—beautiful even amidst its darkness—seemed to discourse almost as eloquently as in former hours.

Ellen answered only by stooping to touch her lips to the quiet brow of her companion.

It is true, resumed the gentle speaker, that there are sometimes moments when I feel impatient and sorrowful; but when I hear the soft step of my mother, or the approaching tread of your own light foot, Ellen, your affection seems such a deep fountain of blessedness, that I wonder how I could for an instant yield to repinings. I did not love you half so well, my friend, when I could read your thoughts in your gentle eye, as now that your face has become to me only as a memory.

Then how finely acute are the other perceptions rendered by blindness! I did not know half the exquisite touches of the human voice till now—nor the thousand melodies of nature—nor the numberless delicate varieties of perfume that are mingled in the smell of sweet flowers—nor the almost impalpable differences of touch; and then, although I can no longer look abroad upon the living forms of nature, I have them all pictured here upon my heart, vividly and distinctly—as a lens will throw back into a darkened apartment, in

beautiful miniature proportions, a perfect shadowing of the outward scene.

It is true I cannot see the beautiful blossoms that are clustering in such profusion about my head, but I could tell them all over by their names; and although I may not look again, dear Ellen, upon the glorious sunset sky, that we have watched together so often, yet I *know* how the clouds are sprinkled, in their golden shadowing, over the blue concave—so I will not be sad that you must gaze upon them in loneliness.

Surely "God tempereth the wind to the shorn lamb," murmured Ellen, while an affectionate tear trembled on her eyelids;—then in a quicker and clearer voice she added, "Shall we sing, dear Catharine?" and the music of their sweet voices went up together.

Oh, hallow the beautiful sunset hour,
When it comes with the hush of its chastening power!
Though the thoughts of the world, through the day glare, have been
Betwixt God and thy heart like a shadowing screen,
Now the hot pulse of nature is still'd into rest,
So cool thou the fever that burns in thy breast.

The time of the twilight!—oh cherish it well,
For its whispering hush hath a holy spell!
And the weary burden of earthly care,
Is flung from the heart by the spirit's prayer;
And the haunting thoughts of the sinful day,
Should pass with its garish beam away.

The sunset hour!—how its bright hues speak
Of the dying smile on the Christian's cheek!
And the stirring leaves, with their low sweet tone,
Have a voice to the listening spirit known:
And holier tho'ts on your breast have power,
Midst the hush of the beautiful sunset hour.

INDUSTRY AND APPLICATION.

Franklin has given you a lesson rich with salutary instruction. Toil, unremitted and zealous toil; severe, searching, and untiring thought, occupied both his mind and his body. You who have read his memoirs—and who has not?—have only to contrast your own

situations with that of this persevering mechanic. Imagine yourselves the rudely dressed and ungainly boy wending his way, homeless and pennyless, through the streets of Philadelphia. Look again, and how is he changed! The materials of his greatness, arranged, and strengthened by years of painful exertion, have burst forth in all their splendor. He has called about him the elements of the storm, and made, as it were, a plaything of the lightning. Kings, at the head of nations, are doing homage to his genius. The proudest and the lovliest of earth, the terrible in war, and the mighty in council, are bending like worshippers at the shrine of his intellect.

Romantic as this may seem, there was nothing of romance or poetry in the temperament of Franklin. He indeed sought out new paths, and looked deep into the phenomena of nature, and the character of man—but it was no flight of his imagination that overlooked the false and limited boundary of science. It was the fixed glance of an inquisitive, but disciplined mind.

Take Perkins for another example. He has acquired a high reputation in his native country, and in Europe. Yet had this man contented himself with listless activity—had he relaxed in the least from his habits of severe study and patient investigation, he would have been at this moment the very reverse of all he is—an unregarded and indolent sojourner on the great theatre of human action. Talk of genius as you may—speak of it as unsought for, an immediate revelation of transcendant power—whatever it has been called, or whatever it may be, it is useful and glorious only in those who have struggled with passion and circumstance, and built up by slow and almost imperceptible degrees, the temple of their greatness. There may be at times a phenomenon of mind which bursts forth at once in the full possession of power, like Pallas, from the brow of the infidel deity. It may flash out like a comet in the starry heaven of intellect—dazzling and flaming for a moment, but it will leave no traces of its path, no gem

of light and knowledge in the horizon, over which it has hurried.

RUINS OF BABYLON.

Mr. Buckingham, from whose speech we intend furnishing our readers with some occasional extracts, and who, in his travels in the East, visited the site of the ancient Babylon, thus describes the ruins of that vast city.

Very few antiquities are now discernable, two towns, Clesiphon and Saleuca, having been built with bricks taken from the ruins of Babylon. The country all around is perfectly flat and smooth, while the space within the walls presents in every part an undulating and uneven surface, caused by the immense quantity of ruins: an appearance unequivocally indicating the vast extent of the ancient city. Amidst the general desolation, a part of the celebrated tower of Babel, or temple of Belus, is still visible. This wonderful edifice, it will be recollected, is described by Herodotus, Cho. cap. 181, to have been constructed in the following manner: Its base was an extensive stone structure, perfectly square, about 800 feet in extent on every side, and 100 feet in height, on this square base was erected another similar though smaller square building, of about 600 feet in length, and 100 or upwards in height, and so on, each successive square diminishing in size up to the top. Four of these stages (if we may so term them) still remain, and the ascent is extremely easy on account of the immense quantities of rubbish which has accumulated from the fall of the upper portions. In Alexander's time, this condition of the ruins caused him, after many efforts, to abandon the design of restoring the temple of Belus, and it is calculated by Arrian, that it would have employed ten thousand men for a year to remove the rubbish, before the first attempt at rebuilding could be made. There is so much facility of ascent in consequence, that I was enabled to mount to the top on horseback. The view I found extremely beautiful, and comprehending a

large extent of country. The castellated palace of Semiramis, and the hanging gardens still present traces of their former grandeur. The general ruins are covered with a thick crust, which may be broken, and, in many instances, the apartments beneath may still be discerned.

INTERESTING AND INSTRUCTIVE EXTRACTS.

BIRD'S NEST.

"Where the birds make their nests: as for the stork, the fir trees are her house." PSALMS civ. 17.

Most admirable is that wisdom and understanding which the Creator hath imparted to the birds of the air, whereby they distinguish times and seasons, choose the properest places, construct their nests with an art and exactness unattainable by man, and secure and provide for their young. Is it for the birds, O Lord, which have no knowledge thereof, that thou hast joined together so many miracles? Is it for the men who gave no attention to them? Is it for those who admire them, without thinking of thee? Rather is it not thy design, by all these wonders, to call us to thyself? to make us sensible of thy wisdom, and to fill us with confidence in thy bounty, who watchest so carefully over these inconsiderable creatures, two of which are sold for a farthing?"

Wesley's Survey.

EVENING.

There are two periods in the life of man, in which the evening hour is peculiarly interesting—in youth and in old age. In youth we love it for its mellow moonlight, its million stars, its then rich and soothing shades, its still serenity; amid these we can commune with our loves or twine the wreaths of friendship, while there is none to bear us witness but the heavens and the spirits that hold their endless sabbath there—or look into the deep bosom of creation, spread abroad like a canopy above us, and look and listen till we can almost see and

hear the waving wings and melting songs of other worlds —to youth the evening is delightful; it accords with the flow of his light spirits, the fervor of his fancy, and the softness of his heart. Evening is also the delight of virtuous age—it affords hours of undisturbed contemplation; it seems an emblem of the calm and tranquil close of busy life—serene, placid, and mild, with the impress of its great Creator stamped upon it; it spreads its quiet wings over the grave, and seems to promise that all shall be peace beyond it.

LOVE.

Love is the fountain and principle of all practical virtue. But love itself requires some regulation to direct its exertions; some law to guide its motions; some rule to prevent its aberrations; some guard to hinder that which is vigorous from becoming eccentric. With such a regulation, such a law, such a guard, the divine ethics of the Gospel have furnished us.

AN EXTRACT.

He who would undermine those foundations upon which the fabric of our future hope is reared, seeks to beat down that column which supports humanity. Let him think but a moment, and his heart will arrest the cruelty of his purpose. Would he pluck its little treasure from the bosom of poverty? Would he wrest the crutch from the hand of age, and remove from the eye of affliction the only solace of its wo? The way we tread is rugged at best; we tread it, however, lighter by the prospect of the better country, to which we trust it will lead. Tell us not it will end in the gulf of eternal dissolution, or break off in some wild which Fancy may fill up as she pleases, but Reason is unable to delineate; quench not that beam which, amid the night of this world, has cheered the despondency of ill-requited worth, and illumined the darkness of suffering virtue."

SERENITY.

A military officer being at sea, in a dreadful storm, his lady, who was sitting near him, and filled with alarm for the safety of the vessel, was so surprised at his composure and serenity, that she cried out, "My dear, are you not afraid? How is it possible you can be so calm in such a storm?" He arose from a chair lashed to the deck, and supporting himself by a pillar of a bed-place, he drew his sword and pointing it to the breast of his wife, he exclaimed, "Are you not afraid?" She instantly replied, "No, certainly not." "Why?" said the officer. "Because," rejoined his lady, "I know the sword is in the hand of my husband, and he loves me too well to hurt me." "Then (said he) remember I know in whom I have believed, and that He holds the winds in his fist, and the waters in the hollow of his hand."

THE INFIDEL.

It is an awful commentary on the doctrine of infidelity, that its most strenuous supporters have either miserably falsified their sentiments in the moment of trial, or terminated their existence in obscurity and utter wretchedness. The gifted author of the "Age of Reason," passed the last years of his life in a manner which the meanest slave that ever trembled beneath the lash of the task-master, could have no cause to envy. Rosseau might indeed be pointed out, as in some degree an exception—but it is well known, that the enthusiastic philosopher was a miserable and disappointed man. He met death, it is true, with something like calmness, but he had no pure and beautiful hope beyond the perishing things of the natural world. He loved the works of God for their exceeding beauty—not for their manifestation of an overruling intelligence. Life had become a burthen to him, but his spirit recoiled at the dampness and silence of the sepulchre—the cold, unbroken sleep, and the slow wasting away of mortality. He perished, a worshipper of that beauty which but faintly shadows forth the unimaginable glory of its Creator. At the

closing hour of day—when the broad West was glowing like the gates of Paradise, and the vine-hung hills of his beautiful land were bathed in the rich light of sunset, the philosopher departed. The last glance of his glazing eye, was to him an everlasting farewell to existence—the last homage of a godlike intellect to holiness and beauty. The blackness of darkness was before him—the valley of the shadow of death was to him unescapable and eternal—the better land beyond it was shrouded from his vision.

FIVE REASONS FOR NOT USING SPIRITUOUS LIQUORS.

1. Because it poisons the blood and destroys the organs of digestion. 2. Because an *enemy* should be kept *without* the gate. 3. Because I am in health and need no medicine. 4. Because I have my senses and wish to keep them. 5. Because I have a *soul* to be saved or lost. To the man whose mind is untouched by all or any of the above reasons, a volume on the subject would be useless. He is unfitted for society; and the sooner he is in his grave the better—*better* for society and for himself—For society—because of his example—For himself—because his future torment will be less.

NOTICES OF RECENT PUBLICATIONS.

REVIEW.

Addresses on the Beatitudes; By Mrs. Cameron. 18*mo.*, *pp.* 72. 75 *cents per doz.*: 8 *cents each.*

The first thought which arose in our mind upon a cursory glance at the pages of this excellent little book, was, Here, at last, is some solid substantial food for the youthful mind, amid the piles of light, enticing viand and empty trash which are daily offered! It is really of a different cast from the popular productions of the day, and therefore we are not surprised that it should not give universal satisfaction Those who can relish nought but 'tales,' or amusing narratives, (often novels in disguise,) may think these simple and impressive lectures dry, and alarm themselves with the anticipation that 'it will be difficult to get children to read them.' But there is too deep knowledge of human nature, too intimate ac-

quaintance with the habits and mental associations, and feelings of children; and above all, too pure religious truth, in this book, to leave it devoid either of interest or effect. We do not doubt—we regret that it should be so; but we do not doubt that the taste which is being formed in the youthful mind, for what may emphatically be called dainty reading, will bar these valuable addresses from access to the perusal, and from influence upon the hearts of very many; but we still hope, nay, we feel confident, that they will be the means of stimulating and guiding many children in the successful pursuit of those divine beatitudes, whose value and the way to whose attainment they do most faithfully and intelligibly exhibit and commend.

Maternal Instructions: or History of Mrs. Murray and her Children. 18mo. pp. 180.

This little volume contains more instructive matter than is often to be met with in a single book designed for the use of children. It is an account of the manner, in which Mrs. Murray, a prudent, judicious, and pious mother, proceeded in the education of her children, whose minds she endeavoured to imbue with sentiments of piety and benevolence, both by her instructions, and her example. The narrative is given in a plain and simple style, and, with the exception of a few passages, in which allusion is made to natural scenery, or something else, peculiar to Scotland, where the author resided, may be understood by many of even the youngest Sabbath school children; and if read with care, cannot fail to increase their knowledge and improve their minds and hearts.

The Orphan Boy. By Mrs. Sherwood. 18*mo.*, *pp.* 16.

The truth that though all have not silver and gold, yet that few are destitute of talents of some kind or other which may be profitably employed in serving God, and promoting the welfare of our fellow-men, is most happily illustrated in the story of a little orphan, who, provided with temporal goods by others of the villagers, was faithfully instructed and well furnished with the bread which endureth, divine truth, by an aged and pious widow, whose penury alone prevented her providing him with food and raiment. Many useful lessons are taught throughout the book, and pointed out in the *addition*.

A Dictionary of important names, objects, and terms found in the Holy Scriptures. By Rev. Howard Malcom. 1 *vol.* 18*mo.* 1830.

There are few books, if any, in existence, so well calculated as this to inspire the young with a taste for reading the Scriptures. The child, in reading the Bible, meets with many words and allusions to ancient customs which it is impossible for him to understand, and which considerably lessen the pleasure he would otherwise take in this exercise. By referring to this book he finds all

necessary explanations, and by its assistance gains a far greater knowledge of the Bible, and consequent love for it, than he possibly could do by reading six times the amount of matter with these difficulties unexplained. It is of convenient price and size, and though particularly useful to children will be found a valuable acquisition to adults.

POETRY.

ON THE SUMMIT OF AN EGYPTIAN PYRAMID.

THRON'D on the sepulchre of mighty Kings,
  Whose dust in solemn silence sleeps below,
Till that great day, when sublunary things
  Shall pass away, ev'n as the April bow
Fades from the gazer's eye, and leaves no trace
Of its bright colours, or its former place;

I gaze in sadness o'er the scenery wild,—
  On scatter'd groups of palms, and seas of sand,—
On the wide desert, and the desert's child,—
  On ruins made by time's destructive hand,—
On temples, towers, and columns laid in dust,—
A land of crime, of tyranny, and lust.

O Egypt! Egypt! how art thou debased!—
  A Moslem slave upon Busiris' throne;
And all thy splendid monuments defac'd!
  Long, long beneath his iron rod shall groan
Thy hapless children:—thou hast had thy day,
And all thy glories now have pass'd away.

O! could thy princely dead rise from their graves,
  And view with me the changes Time has wrought,—
A land of ruins, and a race of slaves,
  Where wisdom flourish'd, and where sages taught,—
A scene of desolation, mental night!—
How would they shrink with horror from the sight!

Ancient of days! nurse of fair science, arts!
  All that refines and elevates mankind!
Where are thy palaces, and where thy marts,
  Thy glorious cities, and thy men of mind?
For ever gone!—the very names they bore,
The sites they occupied, are now no more.

But why lament, since such must ever be
  The fate of human greatness, human pride?
Ev'n those who mourn the loudest over thee,
  Are drifting headlong down the rapid tide
That sweeps, resistless, to the yawning grave,
All that is great and good, or wise and brave.

Ev'n thou, proud fabric! whence I now survey
  Scenes so afflicting to the feeling heart,
Maugre thy giant strength, must sink, the prey
  Of hoary age, and all thy fame depart;
In vain thy head, aspiring, scales the sky,—
Prostrate in dust that lofty head must lie.

The soul alone (the precious boon of Heaven)
  Can fearless brave of time and fate the rage,
When to thy deep foundations thou art riven,
  Yea, Egypt! blotted from the historic page,
She shall survive, shall ever, ever bloom,
In radiant youth, triumphant o'er the tomb. Z.

FIRST MORNING OF SPRING.

Break from your chains ye lingering streams,
Rise, blossoms, from your wintry dreams,
Drear fields, your robes of verdure take,
Birds, from your trance of silence wake,
Glad trees, resume your leafy crown,
Shrubs, o'er the mirror-brooks bend down,
Bland zephyrs, wheresoe'er you stray,
The Spring doth call you,—haste away.—
——Thou too, my Soul, with quicken'd force
Pursue thy brief, thy measur'd course,
With grateful zeal each power employ,
Catch vigor from Creation's joy,
Stamp *love to God,—and love to man,*
More deeply on thy shortening span,
And still with added patience bear
Thy crown of thorns, thy lot of care.—
—But Spring with tardy step appears,
Chill is her eye, and dim with tears,
Fast are the founts in fetters bound,
The flower-germs sink within the ground,
Where are the warblers of the sky?
I ask—and angry blasts reply.—
——It is not thus in heavenly bowers,
Nor ice-bound rill, nor drooping flowers,
Nor silent harp, nor folded wing,
Invade that everlasting Spring,
Toward which we turn with wishful tear,
While pilgrims in this wintry sphere.

Hartford, March 1, 1830.

TIME'S COLD HAND.

Here are visions to shine in the eye of the youth,
  That appear as they ne'er will be faded;
Here are hopes that will beam with the splendour of truth,
  But soon will that splendour be shaded;
For tears on those hopes and those visions must fall;
  Time's cold hand will touch them and wither them all.

Here are perfumes to steal on the senses of wealth,
  And wrap them in heavenly slumbers;
Here's a harp whose soft notes will flow by as in stealth,
  And call up sweet dreams with its numbers;
Yet tears on that harp and those perfumes must fall;
  Time's cold hand will touch them and wither them all.

Here is Fancy, the poet to crown with its bays,
  And from heav'n fire etherial to borrow;
Here is Feeling with mildness to hallow his days,
  And steal a few pangs from pale sorrow;
But tears upon feeling and fancy must fall;
  Time's cold hand will touch them and wither them all.

AN EVENING IN JUNE.

The clouds were dispersed, and the tempest was o'er,
  The crimson of evening illumined the sky,
And the soft heaving waves as they rippled ashore,
  Gleamed bright with the tint of its magical dye.

The swallows were sweeping the fields of the air,
  The blackbird sang forth from its leafy retreat,
And the flow'rs, renewed in their bloom, smiled as fair,
  As the long promised land at the Israelites' feet.

Besides me the roses and lilies were spread,
  The pink and carnation of delicate vest,
The columbine lifted the pride of its head,
  And the dial of the sunflower was turned to the west.

The butterfly wantoned on wings of delight,
  While the bee, on her errand of industry bent,
Was rifling the blooms, at the fall of the night,
  For a noonday of tempest in idleness spent.

To the main, to the mountains, with love-blooming eye,
  Rejoicing I turned, and their looks were as calm,
As the beautiful arch of that deep azure sky,
  Whose aspect was holy, whose zephyr was balm.

Oh! thus, ere the days of this pilgrimage cease,
  May the sunset of life be as placid and mild,
The storms of Adversity stilled into peace,
  All passion becalmed, and all sorrow exiled!

THE CAR OF JUGGERNAUT.

shout is again
acted, till the
for the

THE MONTHLY REPOSITORY,

AND LIBRARY OF

Entertaining Knowledge.

Vol. I. JULY, 1830. No. 2.

JUGGERNAUT.

The description given by Mr. Sutton of what he witnessed during the Rhut Jattra, in 1827, is striking and appalling. Approaching the cars when a storm was commencing, he observes—

"Just as I came within sight of the cars the storm came on violently—the thunder roared, the lightning flashed, and the rain poured down in torrents, as if the elements had conspired together to manifest their indignance at the insults offered to the Majesty of heaven. In about an hour the storm subsided, and the business of idolatry proceeded. The scattered multitude, which dispersed in every direction at the bursting of the storm, again assembled at the deafening sound of the tomtoms, and the discordant clanging of the barbarous trumpets. Here I beheld a promiscuous multitude prostrate before the all-commanding Mahamah (glory) of Juggernaut, unrestrained by the mud, or even the water, though knee deep, which the last soaking storm had left. There was seen a zealous mother bowing down her infant's head before the idol, and thus early initiating her tender offspring into the degradation of idolatry. In another place was a group of men, women, and children, bowing down with profound reverence, so that they might touch with their foreheads the ropes of the different cars; and in some conspicuous spot, a devotee, eager to distinguish himself, advancing with clasped hands and steady eye towards the idol, till a clear space was afforded him, he threw himself flat on his face, and worshipped; he lay perhaps

[redacted], then half raising himself, stretches forth [redacted]wards the idol, mutters a repetition, and then prostrates himself afresh before his god. But suddenly the scene changes—a shout is heard—a body, perhaps, of 2000 men, armed with sticks and boughs, rush forward to the cars; a louder shout is heard—the people seize the huge ropes;—the clanging of instruments sounds with a more vehement peal, and the car moves on, but it moves with a tardy pace: and to animate the draggers of the ponderous vehicle, one of Juggernaut's adorers stepped forward to the extreme front of the car, and practised the most licentious gestures that an impure imagination can conceive of; he then exerts his stentorian lungs in as abominable expressions; and again he turned towards the god, and repeated his abomination. The god was pleased, the draggers were fired with fresh zeal, and the enormous load, as it rolled on its 16 wheels, grated harsh thunder, but they ran foul of a house, and crushed the falling ruins.

They still proceeded, women and men of all descriptions and casts, united to drag the ponderous wain. Presently two miserable wretches are seen, one with his shattered arm and another his writhing back, bleeding and torn by the destructive car, whether accidently or intentionally or unintentionally I know not. All seems infernal revelry; the wretches in the huts, with their obscenity; the wonder-gazing mob with their vociferations; the crowds of women with their jarring hoot (a noise something like that made by a bird called an Eve Jar on a fine summer's evening in England, the indescribable noise of the harsh sounding instruments; the gay colors and long streamers of the cars; the ugly shape and great staring eyes of the idols; the mad enthusiasm of the vast multitude; and a thousand things which can scarce be described; all tend to impress one with the idea of a holiday in hell, with its blaspheming monarch riding in triumph through his fallen associates.

Oh idolatry! idolatry! thou destroyer of body and soul, when shall thy infernal influence be curtailed, and thy long-extended reign be brought to a close, and thy power to curse mankind be known no more? Ah Chris-

tian, what should be thy prayer? but the shout is again heard, and again and again the scene is acted, till the three cars have reached the assigned distance for the night. I then went forth and distributed books to as many as could read, and bade farewell to the intoxicating throng for the night."

THE ANCIENT AND MODERN HISTORY OF NATIONS.

ANCIENT SACRED HISTORY.

The *next* period of this history begins from the government of the Israelites, in the year B. C. 1095, by kings, and continues to the end of the Babylonish captivity, which includes a space of five hundred and fifty-nine years.

The principal fact that happened during the history of the kings, is the schism that happened in the reign of Rehoboam, when the people were divided into two parts, and thence into two distinct kingdoms, Judah and Israel. Three kings only reigned over Israel in its undivided state, viz. Saul, David, and Solomon, The ten tribes revolting from Rehoboam, made choice of Jeroboam for their king, consequently Rehoboam and his successors henceforth governed only the two tribes of Judah and Benjamin. From that time the kings of Judah are to be distinguished from those of Israel, to which the reader of the Old Testament should pay attention, if he would well understand the narrative. Of the kings of Judah the most remarkable in history were, Rehoboam, through whose weakness and folly the kingdom was divided; Jehoiachim, who was conquered by Nebuchadnezzar, and carried into Babylonish captivity; and Zedekiah, under whom Jerusalem was taken and destroyed, and the rest of the Jews carried into captivity. Jerusalem was the capital and residence of the kings of Judah; and Samaria the royal city of the monarchs of Israel.

The most celebrated among the kings of Israel were Jeroboam, the founder of the new kingdom; Ahab, known for his impiety and persecution of the prophets; and Hosea, in whose reign the royal city of Samaria

was besieged and taken by the Assyrians, and the ten tribes carried away into captivity.

Under the first kings divine worship was confined to the ark and the tabernacle. But in the reign of Solomon, the temple, which was called after his name, was built, and became the place of religious worship. This has been called the prophetic æra, as more than thirty prophets flourished during this period.

The Hebrews were much attached to, and skilful in the practice of agriculture, but are generally supposed to have neglected the liberal arts; architecture and navigation must, however, have been well understood by them, of which their foreign merchandize and the magnificence of Solomon's temple are sufficient proofs.

The *fifth* period of sacred history includes a space of time amounting to three hundred and seventy-two years, commencing from the end of the Babylonish captivity to the times of the Maccabees.

The Babylonish captivity lasted seventy years, at the end of which, Cyrus, King of Persia, permitted them to return to their own country, where they were governed, first, by Zerubbabel, by whom they had been conducted home, and who laid the foundation of the second temple; and afterwards by Nehemiah, who inclosed Jerusalem with walls, and wrote a history of his own times. After the death of Nehemiah the supreme power devolved upon the high priests. To Esdras, a priest, we are indebted for the collection, revision, and transcript of the books of the Old Testament. In this period the Jews were subject to the Persians, and afterwards were under the dominion of the Greeks. Under the Persian monarchs they were treated with the greatest clemency, but endured the most rigorous oppressions while they were under the power of the Greeks, particularly in the reign of Ptolemy Lagus, who carried a hundred thousand Jews into slavery.

The Massorets, a set of grammarians held sacred among the Jews, arose in this period, by whose care and labors the sacred text has been preserved in the state in which we find it. The books of kings, Chron-

icles, Esdras, Nehemiah, and Esther, were written in this æra; also the *septuagint* translation of the Hebrew scriptures, which, as the title denotes, is ascribed to the labors of seventy learned Jews.

The *sixth* period of scripture history begins with the family of the Maccabees, and continues till the reign of Herod the Great, containing one hundred and twenty-four years. In this period the contending sects of the Pharisees and Sadducees rose up; the Pharisees, in general, took the lead in number, and also on account of their supposed piety and austerity of manners, which recommended them to the people; they were the stremuous asserters of Jewish traditions. The Sadducees were inferior in numbers, but supported by the favor of the great, gave much trouble to the Pharisees. In fact, the Sadducees seem to have been quite Latitudinarians in principle, which probably rendered them very acceptable to the heathens. Besides these there was a great variety of other sects, which it is not necessary to notice in this place.

The institution of the Sanhedrim or grand senate, is referred to this period, which consisted of persons venerable for age, and remarkable for wisdom and knowledge, by whose authority the power of the reigning prince was, in a great measure, restrained within certain prescribed limits. This period is likewise celebrated for the encouragement given to literature by the Maccabean princes.

CIRCLE OF THE SCIENCES, WITH SUITABLE REFLECTIONS.

ASTRONOMICAL SKETCHES—NO. II.

Besides the revolution of the Sun round its axis in 25 days, 14 hours, and his irregular motion about the centre of gravity of the solar system, he appears to have a progressive motion in absolute space. As all the bodies of this system naturally partake of this motion, it can only be perceptible from a change in the fixed stars, to which the system is advancing, or from which it recedes. This change of place, or proper motion in

the fixed stars, as it is called, was first observed by Halley, and afterwards by Le Monnier. If the Sun has a motion in absolute space, directed towards any quarter of the heavens, it is obvious that the stars in that quarter must appear to recede from each other, while the distance between those in the opposite region should seem gradually to diminish. The proper motion of the stars, therefore, in those opposite regions as ascertained by a comparison of ancient with modern observations, ought to correspond with this hypothesis. Dr. Herschel has examined this subject with his usual success, and he has certainly discovered the direction in which our system is advancing. He found that the apparent proper motion of about 44 stars out of 56, is very nearly in the direction which should result from a motion of the Sun towards the constellation Hercules,* or, more accurately, to a point whose right ascension is 250° 52′ 30″, and whose north polar distance is 40° 22′.

The Parallax of the Sun is computed, by some astronomers, to be 8″ 8″; by others, to be 8″ 35″. Trifling as this discrepancy may appear, it makes a difference in the Sun's distance from the Earth of 4,653,138 miles: and the difference of 1″, or the 60th part of 1 minute of a degree, makes a difference in the computation of the Earth's distance from the Sun of 10,000,000 of miles.

The Sun is the fountain of light, heat, and animation to all the planets which revolve around him; and God is the Father of Lights to all His rational creatures. From Him all his people derive their light and power; through His influence they grow in grace, and live a life of faith, love, and obedience. The Ministers of his word shine by reflection; from Him they receive their light, spiritual life, and ability to dispense the word of salvation; and their success in promoting his glory depends upon His agency. Without Him they are nothing, and can do nothing. The light and heat of the Sun are not more essential to the production,

* A northern constellation, which lies between the stars Arcturus and Lyra.

growth, and perfection of vegetation, than the light and influence of God are to the spiritual life and usefulness of the Ministers of his word. It is this divine influence which awakens, enlightens, quickens, and purifies the souls of men. He is the Sun of Righteousness, and the beams of his mercy are as free as the beams of that sun which shines upon the evil and upon the good.

The Sun is the common centre of attraction to all the planets. This will appear from their unequal motions at different times. When these immense bodies approach the Sun, their motion is accelerated; but as they recede from the Sun, their motion is retarded. The motion of the Earth is fully proved to be quicker in the winter than in the summer, because the Earth is nearer the Sun in the former than in the latter time of the year. Indeed, all the motions of the heavenly bodies, connected with the solar system, fully prove that the Sun is the great attractive power to all the planets and comets; and that it is his influence which retains them in their respective orbits.

Mercury is the nearest planet to the Sun, and revolves round him in 87 days, 23 hours, 15 minutes, 44 seconds, at the rate of 109,400 miles an hour. The diameter of this planet is 3,130 miles. Its rotation on its axis is performed in 24 hours, 5 minutes, 28 seconds. Its distance from the Sun is 37,000,000 of miles.

Mercury moves in an orbit within the orbits of Venus and the Earth; and changes his phases, like the Moon, according to his positions with regard to the Earth and the Sun. This small planet is seldom seen, being generally hid from our sight in the solar rays.

We are not to suppose that the heat of this planet is in proportion to its short distance from the Sun, when compared with our Earth; for the quantity of heat received by a planet depends entirely on the state of its atmosphere. Some parts of our Earth are covered with perpetual snow and ice, though exposed to the rays of a vertical sun; which fully proves that the light and heat which a planet derives from the sun depends more on the density or rarity of its atmosphere than

on its distance from that luminary. From the same principle we may infer that the light of Saturn and Herschel may be equal to that of our Earth, although the one is ten times, and the other twenty times, further from the Sun than we are.

The planet Venus is the next in order to Mercury. Her orbit is also within the orbit of the Earth, but without the orbit of Mercury; consequently she is never seen in opposition to the Sun. The diameter of Venus is 7,700 miles; very near as great as the diameter of the Earth, though she appears so small to the eye of the observer. Her distance from the Sun is 68,000,000 of miles; from the Earth, when nearest, 27,000,000. Her annual revolution is perfomed in 224 days, 16 hours, 49 minutes, at the rate of 80,000 miles an hour; and her diurnal rotation is perfomed in 23 hours, 15 minutes, 40 seconds.

EXAMPLES FROM HISTORY.

FILIAL LOVE.

The ancient Romans, as well as some other people, gave parents the absolute right of life and death over their children; and the Chinese, at present, are remarkable for the reverence they exact from children to their parents. Their punishment of parricide, if such a thing ever happens, is the most exemplary and severe: the criminal in this case is cut into ten thousand pieces, which are afterwards burned; his houses and lands are destroyed, and even the houses that stand near them; to remain as monuments of so detested a crime: or, rather, that all remembrance of so abominable a villany may be effaced from the earth!

Let their commands be ever sacred in your ears, and implicitly obeyed, where they do not contradict the commands of God: pretend not to be wiser than they who have had so much more experience than yourselves; and despise them not, if happily you should be so blest as to have gained a degree of knowledge or of fortune superior to them. Let your carriage towards

them be always respectful, reverent, and submissive; let your words be always affectionate and humble; and especially beware of pert and ill-seeming replies; of angry, discontented, and peevish looks. Never imagine, if they thwart your wills, or oppose your inclinations, that this arises from any thing but love to you: solicitous as they have ever been for your welfare, always consider the same tender solicitude as exerting itself, even in cases most opposite to your desires; and let the remembrance of what they have done and suffered for you ever preserve you from acts of disobedience, and from paining those good hearts which have already felt so much for you, their children.

Doubtless you have all too much ingenuousness of temper, to think of repaying the fears and bleeding anxieties they have experienced for your welfare by deeds of unkindness, which will pierce them to the soul; which will perhaps break the strings of a heart of which you, and you only, have long had the sole possession! No, my young friends, so far from this, you will think it the greatest happiness of your lives to follow your blessed Saviour's example, and to show the most tender concern for your parents; particularly if, like his, your's should happen to be a widowed parent; a mother deprived of her chief happiness and stay, by the loss of a husband; for which nothing can compensate, but the dutiful and affectionate behaviour of her children; who are bound, in that case, to manifest double kindness, and to alleviate, by all the tenderness and affection imaginable, the many difficulties and sorrows of widowhood.

EXAMPLES.

A beautiful illustration of this virtue will be found in the scriptural story of Naomi and Ruth, in the first chapter of Ruth, which is particularly recommended to the young reader's attention.

Cyrus, King of Persia, having conquered Crœsus, King of Lydia, in battle, the latter fled into Sardis; but Cyrus following, took the city by storm; and a soldier running after Crœsus with a sword, young

Crœsus, his son, who had been born dumb, and had so continued to that hour, from the mere impulse of natural affection, seeing his father in such imminent danger, suddenly cried out, "O man, kill not Crœsus;" and continued to enjoy the faculty of his speech all the rest of his life.

MILTIADES, a famous Athenian commander, died in prison, where he had been cast for debt. His son Cimon, to redeem his father's body for burial, voluntarily submitted himself a prisoner in his room, where he was kept in chains till the debt was paid.

OLYMPIAS, the mother of Alexander the Great, was very morose and severe towards him: yet when Antipater, Alexander's deputy in Europe, wrote letters of great complaint against her to Alexander, the latter sent the following answer: "Knowest thou not, that one little tear of my mother's will blot out a thousand of thy letters of complaint!"

As some Christian captives at Algiers, who had been ransomed, were going to be discharged, the cruisers brought in a Swedish vessel, among the crew of which was the father of one of those ransomed captives. The son made himself known to the old man; but their mutual unhappiness at meeting in such a place may well be conceived. The young man, however, considering that the slavery his father was about to undergo would inevitably put an end to his life, requested that he might be released, and himself detained in his room; which was immediately granted. But when the story was told to the governor, he was so affected with it, that he caused the son likewise to be discharged, as the reward of his filial and exemplary tenderness.

BOLESLAUS the Fourth, King of Poland, had a picture of his father, which he carried about his neck, set in a plate of gold; and when he was going to say or do any thing of importance, he took this pleasing monitor in his hand, and kissing it, used to say, "My dear father, may I do nothing remissly, or unworthy of thy name!"

Among the incredible number of persons who were proscribed under the second triumvirate of Rome, were

the celebrated orator Cicero, and his brother Quintus. When the news of the proscription was brought to them, they endeavoured to make their escape to Brutus in Macedon. They travelled together for some time, mutually condoling their bad fortune: but as their departure had been very precipitate, and they were not furnished with money, and other necessaries for the voyage, it was agreed that Cicero should make what haste he could to the sea-side to secure their passage, and that Quintus should return home to make more ample provision. But, as in most houses there are as many informers as domestics, his return was immediately made known, and the house in consequence filled with soldiers and assassins. Quintus concealed himself so effectually that the soldiers could not find him. Enraged at their disappointment, they put his son to the torture, in order to make him discover the place of his father's concealment: but filial affection was proof in this young Roman against the most exquisite torments. An involuntary sigh, and sometimes a deep groan, was all that could be extorted from the generous youth. His agonies were increased; but, with amazing fortitude, he still persisted in his resolution not to betray his father. Quintus was not far off; and it may better be imagined than it can be expressed, how the heart of a father must have been affected with the sighs and groans of a son expiring in torture to save his life. He could bear it no longer: but, quitting the place of his concealment, he presented himself to the assassins, beseeching them with a flood of tears to put him to death, and dismiss the innocent child, whose generous behaviour the triumvirs themselves, if informed of the fact, would judge worthy of the highest approbation and reward. The inhuman monsters, however, unmoved by the tears of the father or the son, answered that they both must die; the father because he was proscribed, and the son because he had concealed his father. Upon this a new contest of tenderness arose, who should die first; which however, the assassins soon decided, by beheading them both at the same time.

The Emperor of China on certain days of the year pays a visit to his mother, who is seated on a throne to receive him; and four times on his feet, and as often on his knees, he makes her a profound obeisance, bowing his head even to the ground. The same custom is also observed throughout the greatest part of the empire; and if it appears that any one is negligent or deficient in his duty to his parents, he is liable to a complaint before the magistrates, who punish such offenders with much severity. This, however, is seldom the case; no people, in general, expressing more filial respect and duty than they.

Sir Thomas Moore seems to have emulated this beautiful example; for, being Lord Chancellor of England at the same time that his father was a Judge of the King's Bench, he would always on his entering Westminster Hall, go first to the King's Bench, and ask his father's blessing, before he went to sit in the Court of Chancery, as if to secure success in the great decisions of his high and important office.

During an eruption of Mount Ætna, many years since, the danger it occasioned to the inhabitants of the adjacent country became very imminent, and the flames flying about, they were obliged to retire to a greater distance. Amidst the hurry and confusion of such a scene (every one flying and carrying away whatever they deemed most precious) two sons, the one named Anapias, the other Amphinomus, in the height of their solicitude for the preservation of their wealth and goods, recollected their father and mother, who, being both very old, were unable to save themselves by flight. Filial tenderness set aside every other consideration; and, "Where (cried the generous youths) shall we find a more precious treasure than those who begat and gave us being?" Thus said, the one took up his father on his shoulders, the other his mother, and so made their way through the surrounding smoke and flames. The fact struck all beholders with the highest admiration, and they and their posterity ever after called the path they took in their retreat, "The Field of the Pious," in memory of this pleasing incident.

A woman of distinction in Rome had been condemned to a capital punishment. The prætor accordingly delivered her up to the triumvir, who caused her to be carried to prison, in order to be put to death. The gaoler, who had orders to execute her, was moved with compassion, and could not resolve to kill her: he determined therefore to let her die of hunger: besides which, he suffered her daughter to see her in prison, taking care, however, to have her diligently examined, lest she might bring her sustenance. As this continued many days, he was surprised that the prisoner lived so long without eating: and suspecting the daughter, he watched her, and discovered that (like the famous Xantippe, daughter of Cymon) she nourished her parent with the milk of her own breasts. Amazed at so pious, and at the same time so ingenious a device, he ventured to tell the fact to the triumvir, and the triumvir mentioned it to the prætor, who thought the circumstance worthy of being related in the assembly of the people. The criminal was pardoned; a decree passed, that the mother and daughter should be subsisted for the residue of their lives at the expense of the public; and to crown the whole, that a temple, "Sacred to Piety," should be erected near the prison.

Epaminondas, the Thebean general, being asked what was the most pleasing event that had happened to him in his whole life, cheerfully answered, "It was that he had obtained his glorious victory over the Leuctrians at a time when his father and mother were both living to enjoy the news."

While Octavius was at Samos, after the famous battle of Actium, which made him master of the universe, he held a council in order to examine the prisoners who had been engaged in Anthony's party. Among the rest was brought before him Metullus, oppressed with years and infirmities, disfigured by a long beard and dishevelled hair, but especially by his clothes, which, through his ill fortune, were become very ragged. The son of this Metullus sat as one of the judges, and at first could not easy discriminate his father through his deplorable appearance: at length however, after viewing him narrowly, having recollected

his features, instead of being ashamed to own him, he ran to embrace the old man, and cried bitterly. Then returning toward the tribunal, "Cæsar (said he) my father has been your enemy, I your officer; he deserves to be punished, and I to be rewarded. The favour I desire of you is, either to save him on my account, or to order me to be put to death with him." All the judges were touched with commiseration at this affecting scene; and Octavius himself, relenting, granted to old Metullus his life and liberty.

Darius invaded Scythia with all the forces of his empire: the Scythians retreated by little and little, until they came at length to the uttermost deserts of Asia. Here Darius sent his ambassador to them, to demand where it was that they proposed to conclude their retreat, and when they intended to begin fighting. They returned him for answer, with the spirit so peculiar to that nation. "That they had no cities, nor cultivated fields, for the defence of which they should give him battle: but when he was come to the place of their fathers' sepulchral monuments, he should then understand in what manner the Scythians used to fight:" So great a reverence, had even that barbarous nation for the ashes of their ancestors!

The Emperor Decimus, intending and desiring to place the crown on the head of Decius his son, the young prince refused it in the most strenuous manner, saying, "I am afraid lest, being made an emperor, I should forget that I am a son. I had rather be no emperor, and a dutiful son, than an emperor, and such a son as hath forsaken his due obedience. Let then my father bear the rule; and let this only be my empire—to obey with all humility, and to fulfil whatsoever he shall command me." Thus the solemnity was waved, and the young man was not crowned: unless it be thought that this signal piety towards an indulgent parent was a more glorious diadem to the son than that which consisted merely of gold and jewels.

Lamprocles, the eldest son of Socrates, fell into a violent passion with his mother. Socrates was a witness to this shameful behaviour, and attempted the correction of it in the following gentle and rational

manner. "Come hither, son," said he. "Have you never heard of men who are called ungrateful?" "Yes, frequently," answered the youth. "And what is ingratitude," demanded Socrates? "It is to receive a kindness," said Lamprocles, "without making a proper return, when there is a favorable opportunity." "Ingratitude is a species of injustice, therefore," said Socrates. "I should think so," answered Lamprocles. "If then," pursued Socrates, "ingratitude be injustice, does it not follow, that the degree of it must be proportionate to the magnitude of the favors which have been received?" Lamprocles admitted the inference; and Socrates thus pursued the interrogations. "Can there subsist higher obligations than those which children owe to their parents; from whom life is derived, supported, and by whose good offices it is rendered honorable, useful and happy?" "I acknowledge the truth of what you say," replied Lamprocles; "but who could suffer without resentment the ill humours of such a mother as I have?" "What strange thing has she done to you?" said Socrates. "She has a tongue," replied Lamprocles, "that no mortal can bear." "How much more," said Socrates, "has she endured from your wrangling, fretfulness, and incessant cries in the period of infancy? What anxiety has she suffered from the levities, capriciousness, and follies of your childhood and youth? What affliction has she felt, what toil and watching has she sustained in your illness?"

CABINET OF NATURE.

THE MONSOONS.

The setting in of the Monsoon, or tropical sea wind, in the East Indies, is thus described by Forbes in his Oriental Memoirs. The scene was at Baroche, where the British army was encamped. "The shades of evening approached as we reached the ground, and just as the encampment was completed, the atmosphere grew suddenly dark, the heat became oppressive, and an unusual stillness presaged the immediate setting in

of the monsoon. The whole appearance of nature resembled those solemn preludes to earthquakes and hurricanes in the West Indies, from which the east in general is providentially free. We are allowed very little time for conjecture; in a few minutes the heavy clouds burst over us.

"I had witnessed seventeen monsoons in India but this exceeded them all in its awful appearance and dreadful effects. Encamped in a low situation, on the borders of a lake formed to collect the surrounding water, we found ourselves in a few hours in a liquid plain. The tent-pins giving way, in a loose soil, the tents fell down and left the whole army exposed to the contending elements. It requires a lively imagination to conceive the situation of an hundred thousand human beings of every description, with more than two hundred thousand elephants, camels, horses and oxen, suddenly overwhelmed by this dreadful storm in a strange country, without any knowledge of high or low ground, the whole being covered by an immense lake, and surrounded by thick darkness, which prevented our distinguishing a single object, except such as the vivid glare of lightning displayed in horrible forms. No language can describe the wreck of a large encampment, thus instantaneously destroyed, and covered with water; amid the cries of old men and helpless women, terrified by the piercing shrieks of their expiring children, unable to afford them relief. During this dreadful night, more than two hundred persons, and three thousand cattle perished, and the morning dawn exhibited a shocking spectacle."

The south-west monsoon generally sets in very early, in certain parts of India. "At Ajengo," observes the above author, "it commences with great severity, and presents an awful spectacle; the inclement weather continues with more or less violence, from May to October; during that period, the tempestuous ocean rolls from a black horizon, literally of 'darkness visible;' a series of floating mountains heaving under hoary summits, until they approach the shore, when their stupendous accumulations flow in successive surges, and break upon the beach; every ninth wave is observed to be generally

more tremendous than the rest, and threatens to overwhelm the settlement.—The noise of these billows equals that of the loudest cannon, and with the thunder and lightning so frequent in the rainy season, is truly awful. During the tedious monsoon I passed at Ajengo, I often stood upon the trembling sand bank, to contemplate the solemn scene, and derive comfort from that sublime and omnipotent decree. 'Hitherto shalt thou come but no further; and here shall thy proud waves be stayed.'"

LIVES OF CELEBRATED CHILDREN.—NO. II.

LUCRETIA MARIA DAVIDSON.

The following very interesting facts, are found in a Biography of L. M. Davidson, published lately.

LUCRETIA MARIA DAVIDSON, was born at Plattsburg, on Lake Champlain, September 27th, 1808. Her parents were not rich, and as soon as she was old enough to assist her mother, much of her time was devoted to domestic work. She did not love to do household work, but she always did it with cheerful good will, because she knew it was her duty, and she loved to do her duty.

When her work was done, she ran away to her books with the greatest possible delight. Even when very young, she would hide away with books, pen, ink, and paper, rather than play with her schoolmates. Her father and mother used to wonder what she did with so much paper; but she was too bashful to show what she wrote. Her mother, therefore, was much surprised, when searching in a dark closet, she found a number of little books, made of writing paper, evidently done by a child. The writing consisted of little verses, written to the pictures she had drawn on the opposite page. She cried when she found her treasures had been discovered, and when they were given to her, she took an early opportunity to burn them secretly; this shows how natural it is for people of good sense to be bashful about their own productions.

When she was nine years old, she wrote an epitaph on a dead robin, which her friends have kept.

When eleven years old, she wrote some verses on the death of Washington, which her aunt considered so good,

that she thought she must have borrowed them from some book she had read. Lucretia wept at this suspicion, as if her heart would break; for she appears to have been a pure-hearted, noble-spirited child, who would rather have been thought a fool, than be suspected of any deception. As soon as she could dry her tears, she wrote a remonstrance to her aunt in verse; and her aunt no longer doubted that she *could* write poetry.

One little anecdote is told, which shows that she was truly a good child. Her mother was so ill, as to be confined to her bed for many months; and Lucretia, then only twelve years old, not only watched her sick bed devotedly, but actually took her mother's place, in superintending all domestic affairs. At this time, a gentleman, who had seen her verses, and heard how much she loved to read, sent her twenty dollars, to buy books. At first, she was overjoyed at the thought; for she longed to increase her little library, but looking towards her mother's sick bed, the tears came into her eyes, and she said, "Take this money, dear father; it will buy many comforts for mother, I can do very well without books."

Some people who did not know how much a strong mind and a good heart could do, advised her parents not to allow her to read and write; because, they said, it would spoil her for every thing else.

Lucretia happened to hear of this; and so fearful was she of not doing right, that she gave up her books, and her pen entirely, and devoted herself all the time to household work. She did not say any thing about her resolution; but her mother noticed how melancholy she looked, and that she sometimes shed tears, and tried to conceal them.—She said to her one day, "Lucretia, it is a long time since you have written any thing." The poor girl burst into tears. "Oh, mother, I have given that up long ago!"

"But why?" asked her mother.

She dried her tears, and answered, "I am convinced, from what my friends have said, that it is wrong for me to do as I have done. We are not rich, and now my eldest sister is gone, it is my duty to do all I can to assist my parents."

Her mother, on hearing this, gave her some very good

advice: she told her not to give up her writing; nor yet attend to it too much; to work sometimes, and write sometimes. This would have been a healthful course, both for her body and her mind; and perhaps it is a pity that she ever had a chance to study as much as she wanted to. Unlike other children, she could not be persuaded to leave her books; and she made her mind work so much harder than her body, she ruined her health and lost her life.

A gentleman, who thought very highly of her abilities placed her at Mrs. Willard's famous school in Troy. Her incessant study, made her so ill that she was obliged to leave school for a time. When she recovered, she was placed at the school of Miss Gilbert, in Albany; and there a more alarming illness soon brought her to the borders of the grave. She died August 27, 1825, before she was quite 17 years of age, in a peaceful, resigned state of mind, resting her hopes on the Lord Jesus Christ. The last word she uttered was the name of the gentleman who had placed her at school. She is said to have been as beautiful as she was good; but her face had an expression of sadness.

NOTICES OF RECENT PUBLICATIONS.

Memory's Tribute, or, Things profitable for reflection. First Series: The Baptism. By the author of the M'Ellen Family. Gen. Prot. Epis. S. S. Union. 1830. 12mo. pp. 36.

This little work, just published by the General Protestant Episcopal Sunday School Union, is as instructive as it is interesting. It has food for the *head*, and it has food also for the *heart*. It places us amid the attractive scenery, and sublime associations, of our northern inland seas. A clergyman is approaching a small village. And at the bland closing hour of a summer's day, he indulges in reflections on that eternal rest, of which this sweet repose of eventide is emblematic. He passes onward, and ascends to the summit of a neighboring hill; when suddenly his eye rests, in full view, on a transporting prospect. He sees the elevating grandeur and inspiring sublimity of Lake Ontario. He lingers for a moment, to indulge appropriate sentiments. But his official duties call him to another scene. The villagers, assembled in their house of prayer, are anxiously waiting his appearance. He is welcomed; and without delay, he reads the impressive evening service of the Church. On leaving church, the clergyman, invited by Mr. Heyden, one

of the congregation, repaired with him to his house. But he was soon summoned to a neighboring farm-house, to view a touching spectacle. "A message," says he, "arrived from Mr. Northend's, requesting an immediate visit from the Rev. Mr.——. The reason assigned for requesting the visit that night, was, that he feared he should not be alive on the morrow. The request was, of course, immediately complied with." Mr. Northend was found lying on his death-bed: a venerable old man "with locks as white as the snowwhite pillow upon which his head rested." His children and his grand-children are assembled. The clergyman draws near the sick man's couch, and the aged follower of Jesus says, "My desire is to receive once more before I die, if it be the Lord's will, '*the sacrament of the body and blood of Christ.*' The solemn service is performed. And among those who then received the consecrated elements, are two sons and the only surviving daughter of Mr. Northend. "If you will now," said the sick man, "administer the sacrament of baptism to my grand-children, I will withdraw my thoughts from earth and rest them in the bosom of my God.'" The performance of this service acts on the venerable believer's soul, as if by inspiration. He now rises in his bed, and solemnly confers his benediction on his children and his grand-children, in the name of God. The youngest child, bearing his own name, *Henry Northend*, at his request is placed upon his lap. He lays his hand upon the infant, and ejaculates: "The God of my fathers, the great and merciful God, bless you, my child, and all of you my children. With great desire have I desired to see this hour; it has often been the subject of my prayer since lying upon this bed of sickness, and my prayer has been answered. Surely," continued he, addressing himself to the minister, "God has sent you here to baptize these little ones, and to administer to my children the pledges of a Saviour's dying love. *Yea*, and furthermore, to bury me." He then descanted on his past life—the blessed ordinance of baptism—the condescending kindness of God—of the rapid approach of death—of the glorious and exalted appearance of the Saviour, at considerable length; but, the effort, necessary for the utterance of all his glorious thoughts, was overpowering; and the patriarch, as he sunk down upon his pillow, fell asleep in Jesus. After prayer the clergyman and Mr. Heyden left the weeping circle, and went homeward. It was nearly midnight. The sky was cloudless. The moon moved on through the resplendent vault of heaven most gloriously; around it twinkled ten thousand bright stars. The waters of Ontario stretched before us like a sea of glory, beautifully irradiated beneath the soft and mellow rays of the orb of night. Not a sound was heard save the gentle ripple that played over the surface of the lake. We had left the house of death. The scene around us was calculated to perpetuate the deep and solemn feeling that had been already excited. At length as we passed on, Mr. Heyden pointing to the heavens, said, "Henry Northend has gone to yonder bright world, and will shine like one of those stars in the kingdom of his master for ever and ever."

(To be Continued.)

POETRY.

THE RAINBOW.

The evening was glorious, and light through the trees,
Plays the sun-shine and rain drops, the birds and the breeze;
The landscape outstretching in loveliness, lay
On the lap of the year, in the beauty of May.

For the Queen of the Spring, as she pass'd down the vale,
Left her robe on the trees, and her breath on the gale;
And the smile of her promise gave joy to the hours,
And flush in her footsteps sprang herbage and flowers.

The skies, like a banner in sunset unroll'd
O'er the west threw their splendor of azure and gold;
But one cloud at a distance rose dense, and increased,
Till its margin of black touch'd the zenith, and east.

We gazed on the scenes, while around us they glow'd,
When a vision of beauty appear'd on the cloud;—
'Twas not like the Sun, as at mid-day we view,
Nor the moon, that rolls nightly through starlight and blue:

Like a Spirit, it came in the van of a storm!
And the eye, and the heart, hail'd its beautiful form?
For it looked not severe, like an Angel of Wrath,
But its garment of brightness illum'd its dark path.

In the hues of its grandeur, sublimely it stood,
O'er the river, the village, the field, and the wood;
And river, field, village, and woodlands grew bright,
As conscious they gave and afforded delight.

'Twas the bow of Omnipotence; bent in His hand,
Whose grasp at Creation the Universe spann'd
'Twas the presence of God, in a symbol sublime:
His Vow from the flood to the exit of Time!

Not dreadful, as when in the whirlwind he pleads,
When storms are his chariot, and lightnings his steeds;
The black clouds his banner of vengeance unfurl'd,
And thunder his voice to a guilt stricken world;—

In the breath of his presence, when thousands expire,
And seas boil with fury, and rocks burn with fire,
And the sword, and the plague-spot with death strew the plain,
And vultures, and wolves, are the graves of the slain:—

Not such was that Rainbow, that beautiful one!
Whose arch was refraction, its key stone—the Sun;
A pavilion it seem'd which the deity graced,
And Justice and Mercy met there, and embraced.

Awhile and it sweetly bent over the gloom,
Like Love o'er a death-couch, or hope o'er the tomb;
Then left the dark scene, whence it slowly retired,
As love had just vanish'd, or Hope had expired.

I gaz'd not alone but that source of u.to his house. But he was
To all who beheld it these verses belong:se, to view a touching
Its presence to all was the path of the Lord! Mr. Northend's.
Each full heart expanded—grew warm—and adored!

Like a visit—the converse of friends—or a day,
That Bow, from my sight, passed for ever away;
Like that visit, that converse, that day—to my heart,
That bow from remembrance can never depart.

'Tis a picture in memory distinctly defined,
With the strong and unperishing colors of mind;
A part of my being beyond my control,
Beheld on that cloud, and transcribed on my soul.

MORNING.

BY LUCRETIA MARIA DAVIDSON.

[The author of the following elegant and touching lines, died a few years since in Plattsburg, New-York, at the age of seventeen. "She was a rare creature—one whose thoughts went upward as naturally as the incense of the flowers which she nourished—and who united with the very highest capacities of intellect, the affections and the meek love of a child. And she was a child, in years at least,—and yet young as she was—uneducated, and unprepared as she was—she has left a name behind, which few of her prouder cotemporaries will ever attain. She passed away from among us like a bright but unenduring vision. But—here is her poetry—it is a perfect mirror of her soul."]

I come in the breath of the wakened breeze,
I kiss the flowers and I bend the trees—
And I shake the dew which hath fallen by night,
From its throne on the lily's pure bosom of white,
Awake thee, when bright from my couch in the sky;
I beam o'er the mountains and come from on high,
When my gay purple banners are waving afar—
When my herald, gray dawn, hath extinguished each star—
When I smile on the woodlands, and bend o'er the lake,
Then awake thee, O! maiden, I bid thee awake.
Thou may'st slumber when all the wide arches of heaven
Glitter bright with the beautiful fires at even—
When the moon walks in glory, and looks from on high
O'er the clouds floating far through the clear azure sky,
Drifting onward—the beautiful vessels of heaven,
To their far away harbour all silently driven,
Bearing on in their bosom the children of light—
Who have fled from this dark world of sorrow and night;
When the lake lies in calmness and darkness, save where
The bright ripple curls 'neath the smile of the star;
When all is in silence and solitude here,
Then sleep, maiden, sleep, without sorrow or fear!
But when I steal silently over the lake,
Awake thee, then, maiden, awake! Oh awake!

THE GREAT FALL OF FALL RIVER, N. Y.

MONTHLY REPOSITORY,

AND LIBRARY OF

Entertaining Knowledge.

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GREAT FALL OF FALL RIVER.

The accompanying engraving is a very spirited view of the great Fall of Fall River, at the flourishing village of Ithica, Tompkins County, New-York, at which place the river flows into Cayuga Lake. The descent of the third fall is about thirty feet—the fourth rising of fifty feet, and the fifth more than seventy feet. Within the distance of half a mile, the river precipitates itself upwards of four hundred and thirty feet in six beautiful falls, the smallest of which, says an intelligent traveller, in a different part of the country, would be looked upon as a great curiosity. Between each of the falls there are rapids of considerable descent; the water is very deep, and so transparent, that great cakes of stone, cracked in all directions like a pavement of irregular slabs of marble, may be seen at the bottom, presenting a striking resemblance to fabrics of human invention. This adds not a little to the attractions of the place, as the mind enjoys peculiar delight in tracing resemblances in th works of art to those of nature—so in this case it increases our admiration, upon finding among these tremendous objects of nature, some feature, which remind us of the operations of our fellow men.

THE INDIANS—THE TEN LOST TRIBES.

In my travels from place to place, I have frequently met with persons who have impiously called in question the being, majesty, power and justice of the God of the universe. That men have but *finite* conceptions of the *infinite* glory with which the great first cause is

surrounded, is too well established to admit a single doubt—as reason and good sense, the world over, teache us that we cannot fathom a measureless depth with a measured line.

Some, have ever, arraigned the *justice* of God. I have been asked, time and again, whether I did not sincerely believe that God had more respect to the white man, than to the untutored son of the forest? I answer, and always answer such, in the language of scripture, "No: God is no respecter of persons." I might meet a question of this kind by proposing another, viz. Is not the white man as sinful by nature as the red man?—uneducated, and unrenewed by divine grace, is he not a heathen—is he not an enemy to God and righteousness—prone to the commission of every crime, however flagrant in its nature and its tendencies? Does not the white man, however gifted, and eloquent, and learned, and popular, grow up and sicken, and die?

With thinking men, those whose sentiments are worthy of regard, there is but one opinion, and that is that the soul of the Indian is immortal. And, indeed, the conviction rests with great force on the minds of many intelligent men, men of profound reasoning and deep and studious research, that the Indian tribes, now melting away like dew drops in the morning's sun, are no less than the remnant of that people, the records of whose history has been blotted out from among the nations of the earth—whose history, if history they have, is a series of cruelties, and persecutions without a parallel. That nation, peculiarly and emphatically blessed of God—his own highly favoured and chosen people—preserved by the wonderous interposition of divine power—brought up out of Egypt and their cruel bondage, by miraculous means,—inducted into the promised land flowing with milk and honey, but strong in the purposes of rebellion their murmurs rose to heaven, calling loudly for vengeance,—and when the Saviour of sinners made his humble appearance on the earth, to redeem its inhabitants from the thraldom of sin and death, and restore them to the favour of heaven, they received him not, they disdained him, simply because he did not come in princely splendour, swaying the

conqueror's sceptre of blood and carnage, and dominion, over the nations. They cried out, he is not the Christ, crucify him, crucify him, and nailed the Lord of the universe to the cross. They, like Pharaoh, hardened their hearts; suddenly the storm of divine wrath overtook them—their city, over which he who suffered on the cross had shed the tears of sorrow, was rased to the ground, and the once warlike and powerful nation of the Jews melted away before the overwhelming and countless legions of foes that rose up to chastise and crush them.

That the Indians are indeed no other than the descendants of the ten lost tribes, the subscriber has no doubt, and his design in these papers is to show, if possible, that such is the case. He is one of the few remaining descendants of a once powerful tribe of Indians, and he looks forward with a degree of confidence to the day as being not far distant when ample justice shall be done the red man, by his white brother,—when he shall be allowed that station in the scale of being and intelligence, which unerring wisdom designed him to occupy. WILLIAM APES.

(To be continued.)

THE LAST TREE OF BABYLON.

"At the distance of a few paces only to the north east of the mass of walls and piles, the internal spaces of which are still filled with earth and rubbish, is the famous single tree, which the natives call 'Athelo,' and maintain to have been flourishing in ancient Babylon.—This tree is of a kind perfectly unknown to these parts—It is certainly of very great age, as its trunk, which appears to have been of considerable girth, now presents only a bare and decayed half or longitudinal section, which, if found on the ground, would be thought to be rotten and unfit for any use; yet the few branches which still sprout out from its venerable top, are perfectly green; and, as had been already remarked by others, as well as confirmed by our own observation, gave to the passage of the wind a shrill and

melancholy sound, like the whistling of a tempest through a ship's rigging at sea. Though thus thick in the trunk, it is not more than fifteen feet high, and its branches are very few."—*I. P. Buckingham's Travels in Mesopotamia*, vol. ii. p. 293.

THERE stands a lonely tree on Shinar's mount—
No kindred stem the far-spread desert rears;
Scant are its leaves, for spent the juicy fount,
Which fed its being through unnumbered years:
Last of a splendid race that here have stood,
It throws an awful charm o'er ruin's solitude.

Lone tree! thou bear'st a venerable form—
Shrunk, yet majestic in thy late decay,—
For not the havoc of the ruthless storm,
Nor Simoon's blight thus wears thy trunk away;
But time's light wing, through ages long gone past,
Hath gently swept thy side, and wasted thee at last!

Empires have risen—flourished—mouldered down—
And nameless myriads closed life's fleeting dream,
Since thou the peerless garden's height did'st crown,
Which hung in splendor o'er Euphrates' stream:
Fountains, and groves, and palaces, were here,
And fragrance filled the breeze and verdure decked the year.

Here queenly steps in beauty's pride have trod,
Hence Babel's king his boastful survey took,
When to his trembling ear the voice of God
Denouncing woes to come—his spirit shook.—
But all this grace and pomp hath pass'd away,
'Tis now the wondrous story of a distant day.

How wide and far these tracts of chaos spread,
Beyond the circuit of the lab'ring eye!
Where the proud queen of nations raised her head,
But shapeless wrecks and scenes of horror lie;
Glorious and beautiful no more!—her face
Is darkly hid in desolation's stern embrace.

Lorn as the pining widow, who doth bend
In solitary grief o'er some lov'd tomb,
Thy worn and drooping form appears to lend
A mourner's presence, to this scene of doom;
And from thy quivering leaves there breathes a sound,
Of sullen, hopeless wail, for death's wide waste around.

Sole living remnant of Chaldæa's pride!
Reluctant thou dost wear the garb of joy;
Thy heart is withered, strength hath left thy side—
And the green tints time spareth to destroy,
Seem like the hectic flush—which brighter glows,
Upon the sunken cheek, just passing from its woes!

HUGH HUTTON.

FEMALE EDUCATION.

At a time like the present, and in an age of improvement like this, when Christianity is planting its standard on the ruins of paganism and idolatry; when science is throwing open its portals to the entrance of the mighty and the mean—when "man is seeking, through blood and slaughter, his long lost liberty," it is a source of much gratification to perceive the fairer part of creation, whose rights have so long been slumbering in darkness and neglect, beginning to assume to itself the dignity and station in the round of human existence to which nature and reason entitle them.

There are few subjects which draw after them a train of more interesting consequences than *female education;* no matter whether we view it as relating to the welfare of society at large, or with a tendency to individual happiness, it still presents a claim to our consideration which we should not neglect. Upon the distribution of knowledge depends the stability of our liberties, and where can the seeds of this knowledge be better sown than in the nursery, and whose hand is better calculated to direct the tender scion than that of a mother. The situation in which she is placed by the laws of nature and the rules of human society, of being the constant guardian and companion of youth during the hours of infancy, and the subsequent influence she exerts over her offspring, give her the opportunity and power, of moulding in almost any form her judgment may dictate, and impressing on their minds the first rudiments of education. How important, then, is it, that she should possess the capability of performing this office so necessary in spreading the germs of knowledge. I have never myself given the least credence to the opinion, I sometimes hear expressed, that the female mind is not sufficiently strong to receive the improvement necessary to enable her to discharge this office, or when so improved, it tends to render matrimonial life unhappy. I have always thought that when the female mind enjoyed the same sphere of ob-

servation, and the same opportunity of information, it has never yielded supremacy to man. We have something of evidence of this in all orders of society. The influence which she exerts is powerful, though as silent as the feathered footsteps of time. Where ever man goes, whether he climbs the summits of the Andes, whether he scours the sandy desert, or seeks a home on the restless wave, he feels the charm and yields a silent obedience to the supremacy of its power. Woman was not created to be as a hireling or a slave. Nature has thrown around her attractions and qualifications that fit her for a different sphere. Her path through life, though perhaps it may in some measure lead through "flowery meads and verdant dales," yet it requires all the boasted powers ascribed to men to enable her to "preserve the even tenor of her way." In the discharge of her duties, whatever they may be, they are thronged with the same difficulties, and require the same energy to perform, that attend the pathway of men.

If knowledge has unrolled its ample page to her view—if education has regenerated and enlightened her mind, how "happy would she go on rejoicing in her way." Interest and gratitude speaks to man in a voice which cannot be misunderstood, to the great means of acquiring this knowledge which will yield him so abundant a harvest of profit and pleasure.—Their relative dependence, the one upon the other, call for it. The first for *her* protection and support, the latter for that sweet peace which is only in her power to give. It is from her that all man's joys and pleasures emanate. His fireside is the throne of his happiness, and if ignorance, accompained with the grosser feelings of our nature, spreads its mantle there, how gloomy is the scene. The cultivation of the female intellect cannot detract from the power, influence, or pleasure of man. It will bring no "rival in his kingdom"—it will not render her conversation less agreeable—it will not render her judgement less sure and certain in the management of the domestic affairs of a family—it will not render her less capable to discharge

the duties of a mother in rearing and implanting correct sentiments on those over whom nature has ordered her to be the natural guardian and tutor. When man finds his little all swept from him by repeated misfortune, it will not render her less capable to "sooth his melancholy mind." When he finds himself stretched upon a bed of sickness, certainly knowledge and information, added to the tender feelings of her nature, will not incapacitate her to administer the "balm of Gilead" to his fevered mind.

CABINET OF NATURE.

GENERAL FEATURES OF THE EARTH'S SURFACE.

In taking a general survey of the external features of the earth, the most prominent objects that strike the eye, are those huge elevations which rise above the level of its general surface, termed HILLS and MOUNTAINS. These are distributed in various forms and sizes, through every portion of the continents and islands; and, running into immense chains, form a sort of connecting band to the other portions of the earth's surface. The largest mountains are generally formed into immense chains, which extend, in nearly the same direction, for several hundreds, and even thousands of miles. It has been observed, by some philosophers, that the most lofty mountains form two immense ridges, or belts, which, with some interruptions, extend around the whole globe, in nearly the same direction. One of these ridges lies between the 45th and 55th degrees of North Latitude. Beginning on the western shores of France and Spain, it extends eastward, including the Alps and the Pyrenees, in Europe, the Uralian and Altaic mountains, in Asia—extending from thence to the shores of Kamtschatka, and, after a short interruption from the sea, they rise again on the western coast of America, and terminate at Canada, near the eastern shore. It is supposed that the chain is continued completely round the globe, through the space that is covered by the Atlantic ocean,

and that the Azores, and other islands in that direction, are the only summits that are visible, till we come to the British isles. The other ridge runs along the Southern hemisphere, between the 20th and 30th degrees of South latitude, of which detached portions are found in the mountains of Tucuman and of Paraguay, in South America,—of Monomotapa and Caffraria, in Africa; in New Holland, New Caledonia, the New Hebrides, the Friendly, the Society, and other islands in the Pacific ocean. From these ridges flows a variety of ramifications, in both hemispheres, towards the Equator, and the Poles, which altogether present a magnificent scenery, which diversifies and enlivens the surface of our globe.

The highest mountains in the world, according to some late accounts published in the "Transactions of the Asiatic Society," are the *Himalaya* chain, north of Bengal, on the borders of Tibet. The highest mountain in this range is stated to be about 27,000 feet, or a little more than five miles in perpendicular height, and is visible at the distance of 230 miles. Nineteen different mountains in this chain are stated to be above four miles in perpendicular elevation. Next to the Himalayas, are the Andes, in South America, which extend more than 4000 miles in length, from the province of Quito to the straits of Magellan. The highest summit of the Andes, is Chimboracco, which is said to be 20,600 feet, or nearly four miles, above the level of the sea. The highest mountains in Europe, are the Alps, which run through Switzerland and the north of Italy,—the Pyrenees, which separate France from Spain, and the Dofrafeld, which divide Norway from Sweden. The most elevated ridges in Asia, are Mount Taurus, Imaus, Caucausus, Ararat, the Uralian, the Altaian, and the mountains of Japan, —in Africa, Mount Atlas, and the Mountains of the Moon. Some of the mountains in these ranges, are found to contain immense caverns or perforations, of more than two miles in circumference, reaching from their summits to an immeasurable depth into the bowels of the earth. From these dreadful openings,

are frequently thrown up, to an immense height, torrents of fire and smoke, rivers of melted metals, clouds of ashes and cinders, and sometimes red-hot stones and enormous rocks, to the distance of several miles, accompained with thunders, lightnings, darkness, and horrid subterraneous sounds—producing the most terrible devastations through all the surrounding districts. The most noted mountains of this kind in Europe, are mount Hecla, in Iceland; Etna, in Sicily; and Vesuvious, near the city of Naples, in Italy. Numbers of volcanoes are also to be found in South America, in Africa, in the islands of the Indian ocean, and in the empire of Japan.

Those who live where the highest mountain is little more than three quarters of a mile in perpendicular elevation, can form no adequate idea of the magnificence and awful sublimity of the mountain scenery in some of the countries now mentioned; especially when the volcano is belching forth its flames with a raging noise, and spreading terror and desolation around its base. From the tops of the lofty ridges of the Andes, the most grand and novel scenes sometimes burst upon the eye of the astonished traveller. He beholds the upper surface of the clouds far below him, covering the subjacent plain, and surrounding, like a vast sea, the foot of the mountain; while the place on which he stands appears like an island in the midst of the ocean. He sees the lightnings issuing from the clouds, and hears the noise of the tempest, and the thunders rolling far beneath his feet, while all is serene around him, and the blue vault of heaven appears without a cloud. At other times, he contemplates the most sublime and extensive prospects—mountains ranged around him, covered with eternal snows, and surrounding, like a vast amphitheatre, the plains below—rivers winding from their sources towards the ocean—cataracts dashing headlong over tremendous cliffs—enormous rocks detached from their bases, and rolling down the declivity of the mountains with a noise louder than thunder—frightful precipices impending over his

head—unfathomable caverns yawning from below—and the distant volcano sending forth its bellowings, with its top enveloped in fire and smoke. Those who have studied nature on a grand scale, have always been struck with admiration and astonishment, at the sublime and awful exibition of wonders which mountainous regions exhibit; and perhaps, there is no *terrestrial* scene which presents, at one view, so many objects of overpowering magnitude and grandeur, and which inspires the mind with so impressive an idea of the power of that Almighty Being, who "weigheth the mountains in scales, and taketh up the isles as a very little thing."

POPULAR AND INSTRUCTIVE TALES.

THE LILY OF THE MOUNTAIN.

A SUPERFICIAL observer of the inequalities of life might suppose that there is a greater variety of human happiness than corresponds with facts. The parade of power, the pride of birth, and the magnificence of wealth, seem to indicate an enjoyment far greater than can subsist with the plain attire, the frugal repast, and the humble seclusion of the cottage. This would be a correct inference if the mind could be rendered happy by the parade of external circumstances. But a contented mind is the only source of happiness, and consequently, if "one flutters in brocade," and moves amid the refinements of society, and another is clad in homely attire and occupies the sequestered valley, or the recesses of the forest, it is not certain that this variety of external circumstances furnishes an equal variety of happiness. If God has given to one the luxuries and the honors of life, he has given to another the ornaments of a meek and quiet spirit. Hath not God chosen the poor of this world, rich in faith, and heirs of the kingdom which he hath prepared for them that love him? And is not that peace which flows from a little to the heavenly inheritance superior to all the pa-

geantry of an ungodly world? So I thought when, in the bosom of one of those western wilds with which our infant country yet abounds, I was prompted by humanity as well as by duty to visit the lonely dwelling of a poor, afflicted widow. The path that leads to this cottage is over a mountain and through a forest which has never echoed to the axe of the husbandman. As I climbed the toilsome solitary way, I asked myself, what unhappy beings, rent from the bosom of society, have chosen to bury their sorrows in this noiseless retreat. I had not imagined that I should find so lovely a being as I have named the *Lily of the Mountain.* As I advanced, a little opening presented the cottage sending up its solitary wreaths of smoke. There is a charm when one first emerges from the bosom of the wilderness, and catches the smoke of a dwelling, and hears the barking of the jealous watch dog, which cannot be described, and which can be realized only by experience.

I had now reached the cottage, and stooped to gain admission through the humble door. The building consisted of a pile of logs unceremoniously rolled together in the form of a dwelling, and supporting with more than the strength of Gothic architecture the half thatched roof. There was no chimney, and the smoke was permitted to struggle through the large aperture or to yield to the repulse of an adverse wind and circulate about the interior till it could escape through the interstices of the mansion. The fire necessary to expel the cold from this comfortless habitation, had turned to the semblance of ebony, and to the reality of charcoal, the adjacent logs, which were made to do the half office of a chimney; and the floor was of native earth, except some pieces of refuse boards, and some flat stones which served chiefly for a hearth.

There were no apartments in the dwelling, but a blanket venerable from age was suspended, as it seemed, for the purpose of half concealing the necessary domestic business from the couch of sickness and languishing. Some pieces of broken shingles fixed in the opening of the logs served for a shelf, and here were de-

posited some dusty tracts and an ancient family Bible.

On a mat near the fire lay a son, the support of declining age, with a foot half amputated by an unfortunate blow from the axe. The wound had been dressed by an empyric of the neighbouring settlement; and the patient, left to the care of his widowed mother, was perusing a much worn tract. Near by, upon the only couch, lay the interesting form which constitutes the subject of my narrative. The victim of consumption, she resembled indeed the beautiful, but fading lily. Confined from the sun and air, her complexion had assumed a delicate whiteness, and the slow wasting fever had tinged her cheeks with a most beautiful color. Her disease had reached that stage in its progress, which gives a transparency to the skin, and throws around the female form the loveliness of an angel, awaking those mingled emotions which I shall not attempt to describe, and which excite the earnest prayer that death, having rendered his victim so pensively beautiful, may relinquish his purpose. With indescribable feelings I drew near the couch of this interesting sufferer. Her expressive eye spoke of happier days, and the raven tresses that lay dishevelled on her pillow, seemed to whisper that had this flower, thus

> ———born to blush unseen,
> And waste its sweetness on the desert air.

been transplanted to the parterre, it might have surpassed in beauty and fragrance its sister flowers. But I was anxious to learn the approaching destiny of the *spirit* that animated this form of loveliness.

(To be continued.)

EXAMPLES FROM HISTORY.

ON ENVY.—SENTIMENTS.

"He who filches from me my good name, enriches not himself, but makes me poor indeed."

ENVY is almost the only vice which is practicable at all times, and in every place; the only passion which can

never lie quiet for want of irritation: its effects are therefore every way discoverable, and its attempts always to be dreaded.

It is impossible to mention a name which any advantageous distinction has made eminent but some latent animosity will burst out. The wealthy trader will want those who hint with Shylock, that ships are but boards, and that no man can properly be termed rich whose fortune is at the mercy of the winds. The beauty provokes, whenever she appears, a thousand murmurs of detraction and whispers of suspicion. The genius suffers persecution from innumerable critics, whose acrimony is excited merely by the pain of seeing others pleased, of hearing applauses which another enjoys.

The frequency of envy makes it so familiar, that it escapes our notice; nor do we often reflect upon its turpitude or malignity, until we happen to feel its influence. When he that has given no provocation to malice, but by attempting to excel in some useful art, finds himself pursued by multitudes whom he never saw, with implacability of personal resentment; when he perceives clamour and malice let loose upon him as a public enemy, and incited by every stratagem of defamation; when he hears the misfortunes of his family, or the follies of his youth, exposed to the world; and every failure of conduct, or defect of nature, aggravated and ridiculed; he then learns to abhor those artifices at which he only laughed before; and discovers how much the happiness of life would be advanced by the eradication of envy from the human heart.

It is, above all other vices, inconsistent with the character of a social being, because it sacrifices truth and kindness to very weak temptations. He that plunders a wealthy neighbour, gains as much as he takes away, and improves his own condition in the same proportion as he impairs another's; but he that blasts a flourishing reputation, must be content with a small dividend of additional fame; so small as can afford very little consolation to balance the guilt by which it is obtained.

Plutarch compares envious persons to cupping-glasses, which ever draw the worst humours of the body to them: they are like flies, which resort only to the raw and corrupt parts of the body; or, if they light on a sound part, never leave blowing upon it until they have disposed it to putrefaction. When Momus could find no fault with the face in the picture of Venus, he picked a quarrel with her slippers; and so these malevolent persons, when they cannot blame the substance, will yet represent the circumstance of men's best actions with prejudice. This black shadow is still observed to wait upon those that have been the most illustrious for virtue, or remarkable for some kind of perfection: and to excel in either has been made an unpardonable crime.

EXAMPLES.

Mutius, a citizen of Rome, was noted to be of such an envious and malevolent disposition, that Publius one day, observing him to be very sad, said, "Either some great evil has happened to Mutius, or some great good to another."

Dionysius the tyrant (says Plutarch) out of envy punished Philoxenus the musician, because he could sing; and Plato the philosopher, because he could dispute better than himself.

In the reign of Tiberius Cæsar there was a portico at Rome that bowed outwards on one side very much. A certain architect undertook to set it right and straight; he underpropped it every way on the upper part, and bound it about with thick cloths, and the skins and fleeces of sheep, and then, with the help of many engines, and a multitude of hands, he restored it to its former uprightness, contrary to the opinion of all men. Tiberius admired the fact, and envied the man; so that though he gave him money, he forbade his name to be inserted in the annals, and afterwards banished him from the city. This famous artificer afterwards presented himself in the presence of Tiberius, with a glass he had privily about him; and, while he implored the pardon of Tiberius, he threw the glass against the

ground; which was bruised and crushed together, but not broke, and which he readily put into its first form; hoping by this act to have gained his good favour and grace. But Tiberius's envy still increased; so that he caused him to be slain; adding, "That if this art of malleable glass should be practised, it would make gold and silver but cheap and inconsiderable things;" nor would he suffer his name to be put in the records.

Maximianus, the tyrant, through envy of the honours conferred on Constantine, and the virtues attributed to him by the people, contrived all that a desperate envy could invent, and a great virtue surmount. He first made him general of an army which he sent against the Sarmatians, supposing he would there lose his life. The young prince went thither, returned victorious, leading along with him the barbarian king in chains. On his return from this battle, the tyrant engaged him in a perilous encounter with a lion, which he purposely had caused to be let loose upon him. But Constantine, victorious over lions as well as men, slew him with his own hand, and impressed an incomparable opinion in the minds of his soldiers, which, easily gave him a passage to the throne, by the same degrees and means which were prepared for his ruin.

Narses, the eunuch, was of the bed-chamber to Justinus the Emperor; and, from a seller of paper and books, arrived to the honour of succeeding the famous Belisarius in the place of generalissimo. After he had distinguished himself by a thousand gallant actions, at last, through envy or his ill-fortune, or the accusation of the people, he fell under the hatred of the Emperor Justinus and his Empress, insomuch that the Emperor sent him letters full of disgrace and reproach, advising him to return to the spindle and distaff. Narses was so incensed at this, that he swore he would weave them such a web as they should not easily undo again: and thereupon, to revenge the injury he conceived to be done him, he called in the Lombards to the invasion of the Roman territories, (which they had been long desirous of, but had hitherto been restrained by himself,) and was the occasion of many miseries.

Alexander the Great, being recovered of a wound he had received, made a great feast for his friends; amongst whom was Coragus, a Macedonian, a man of great strength, and renowned for his valour; who, being heated with wine, challenged Dioxippus the Athenian, a wrestler, and who had been crowned for many victories. It was accepted, and the king himself appointed the day. Many thousands were met; and the two champions came to the place; Alexander himself, and the Macedonians, with their countryman; and the Grecians, with their Dioxippus, naked, and armed only with a club. Coragus, armed at all points, being at some distance from his enemy, threw a javelin at him; which the other nimbly declined: then he sought to wound him with a long spear; which the other broke in pieces with his club: hereupon he drew his sword; but his nimble and strong adversary leaped upon him, threw him to the ground, set his foot upon his neck, advanced his club, and looked on the spectators as inquiring if he should strike; when Alexander commanded to spare him: so the day ended with great glory to Dioxippus. But the king departed, and from that day forward his mind was alienated from the victor: he fell also into the envy of the court, and all the Macedonians; who at a feast privily put a gold cup under his seat, made a feigned and public inquiry after it, and then pretended to find it with him; a concourse was about him, and the man, afflicted with shame, departed. When he came to his inn, he sent a letter to Alexander by his friends; wherein he related his innocence, and showed the envious villany that had been used to him: and that done, he slew himself. Alexander, upon notice of it, lamented him dead, whom he himself, as well as others, had envied while alive.

When Richard the First, and Philip of France, were fellow-soldiers together in the siege of Acon in the Holy Land, and Richard had approved himself to be the more valiant man, insomuch that all men's eyes were fixed upon him, it so galled the heart of King Philip, that he was scarcely able to bear the glory of Richard, but cavilled at all his proceedings, and fell at

length to open defiance; nor could he contain any longer; but out of very envy, hasting home, he invaded his territories, and proclaimed open war.

When Aristides, so remarkable for his inviolable attachment to Justice, was tried by the people at Athens, and condemned to banishment, a peasant, who was unacquainted with the person of Aristides, applied to him to vote against Aristides. "Has he done you any wrong," said Aristides, "that you are for punishing him in this manner?" "No," replied the countryman: I don't even know him; but I am tired and angry with hearing every one call him *the Just.*"

LIVES OF CELEBRATED CHILDREN.—NO. III.

The following interesting sketch was prepared by Mrs. Sigourney, for the March number of the Juvenile Miscellany. It is not often that the character and habits of an infant whose existence is comprised in a circle of less than two and a half years, furnish materials for the biographer. Yet we are persuaded that our readers will be interested in the statement here presented to them, "on the truth of which," says Mrs. Sigourney, "they may implicitly rely."

Porter Briusmade was born at Hartford, Conn. Feb. 28, 1827. His mother was impressed with the belief that the mind is susceptible of culture at an earlier period than is generally imagined. Thus at an age when infants are generally considered but little more than pleasing objects to the eye, or toys for a leisure hour, he was the subject of instruction and discipline. From the age of four months, his attention was directed at fitting intervals to surrounding objects, until the names of the articles of furniture, of his own dress, and parts of his body had become familiar. At ten months he commenced learning the alphabet, by the aid of small blocks of wood on which each letter was separately marked. This task was soon completed. Not that he was able at this infantine period to utter the correspondent sound; but when a letter was inquired for, he would produce it without mistake; and

if one was placed in an inverted position by any other hand, would immediately restore it to its proper attitude. By the assistance of prints, pasted on cards, he was next taught the names of animals and birds, and a comprehensive system of natural history was judiciously unfolded to his view. He was encouraged to make himself completely master of one print, ere he was permitted to take another. Thus a basis was laid for habits of application, and the idle curiosity restrained, with which children are wont to wander from picture to picture. His parents, in showing him a landscape, of historical painting, enabled him to regard every object, however minute, with an accurate eye; and so retentive was his memory that what had been thoroughly impressed, he seldom forgot. There were few toys from which he derived satisfaction, but seemed to find pictures and books with the explanations with which they elicited, his principal delight. His careful treatment of the books was remarkable, and a little circumstance which occurred when he was quite young, undoubtedly contributed to produce it. He had torn the paper cover of a small volume. His mother remarked upon it with a serious countenance, and the members of the family, as they entered, mentioned what had been done in a tone of sadness.—Presently his lip quivered, and the tear glistened in his eye. The lesson had been sufficiently strong, and it was necessary to comfort him. Afterwards expensive volumes were fearlessly submitted to him, and the most splendid English annuals sustained no injury from his repeated examinations.

Geography, as exhibited on maps, became a favourite study, and ere he had numbered his second birthday, I saw him, with surprise and admiration, point out upon an atlas, seas, rivers, lakes and countries, without hesitation or error.

A short time after, I found that he had made acquaintance with the rudiments of Geometry, and was continually increasing his knowledge of printed works, which, with their definitions and combinations, in simple words and phrases, were rapidly initiating him into his native language. It may possibly be imagined

that he was a mere book-worm, or might have been naturally deficient in animal spirits. On the contrary, nothing was taught him by compulsion, and no child could be more full of happiness. His sports, his rambles in the garden, and the demonstrations of infantile pleasure were sweet to him. His mother was his companion, his play-mate and his instructress. Deeming her child's mind of more value than any other feminine pursuit or enjoyment, she devoted her time to its cultivation; and to her perseverance, and the entire concurrence of his father, in the intellectual system, devised for him, his uncommon attainments may be imputed, more than to any peculiar gift of nature. Still, I am not prepared to say that there was not something originally extraordinary in his capacity; at least I have never seen his docility, application and retentive power equalled in the early stages of existence. There seemed no undue prominence of one department of intellect, to the injury of another. Perception, understanding, and memory, advanced together, and seemed equally healthful.

It might possibly have been feared that the mind, by starting into such sudden expansion, would have left the heart at a distance; but the germs of gentleness and virtue kept pace with the growth of intellect. There was also preserved a fine and fortunate balance between the mind and body; for his physical education had been considered an important department of paternal care and responsibility. His erect form and expanded chest revealed the rudiments of a good constitution, while his fair brow, bright black eyes, and playful smile, bespoke the union of health, beauty, and cheerfulness, which never failed of attracting attention.—There was less of light and boisterous mirth about him than is common to children of his age. His features expressed rather a mild and rational happiness, than any exuberance of joy. This might have arisen partly from the circumstance of his having no young companion to encourage wild or extravagant sports; but principally that the pleasures of thought were so continually resorted to, as to modify and elevate the

countenance. His whole appearance was that of a healthful, happy and beautiful infant, in the possession of a degree of learning and intelligence, to which infancy has usually no pretension.

But it was forbidden us to witness the result of this interesting experiment upon mind; or to trace the full developement of a bud whose unfolding was so wonderful. An acute dysentery that prevailed in the neighbourhood, numbered him among its victims, and after a fortnight's painful languishing, he died on the 11th of August, 1829, at the age of two years and five months.

I saw him after the breath had forsaken him. He was emaciated, but still lovely. Fresh roses and orange flowers were around his head, and on his bosom, and a bud clasped in his snowy hand. He seemed like one who had suffered, and fallen asleep, and there lingered a peaceful and patient spirit around his silent, wasted lip. His mother was seated by the side of her dead son, pale, but resigned. She had never been separated from him since his birth, and she wished to continue near him till the grave should claim its own. The parents were strengthened as true christians, to yield their only, their idolized one, to the will of his Father in heaven. And the anguish of their affliction was undoubtedly mitigated by the recollection that nothing in their power had been omitted to promote his improvement and heighten his felicity; and that his dwelling was now to be where knowledge is now no longer gained by slow and laborious effort; but where light is without cloud, and the pure soul freed from the fetters of clay.

This sketch, which was commenced for the entertainment of youthful readers, seems to bear a moral for parents. Did they always estimate the extent of their influence over the infants entrusted to their care, and bestow the same zealous attention on their intellectual and moral culture which they lavish on their physical comfort, their importance in the scale of being would be sooner evident, and their capacity for wisdom and true happiness, earlier awakened and nourished. Especially, would mothers, to whose eye the fountains

of the head and heart are first unsealed, but enter the field of education, while the dews of the morning are fresh, and amid their persevering toil, look over to the God of harvest, might they not hope to rear flowers such as angels wear, and fruits that ripen in heaven's unwithering clime?

Hartford, January, 1830. L. H. S.

THE ANCIENT AND MODERN HISTORY OF NATIONS.

ANCIENT SACRED HISTORY.

The *seventh* and last period of this history begins with Herod, who is usually denominated the Great, and reaches down to the destruction of Jerusalem, the seventieth year of the Christian æra, containing one hundred and six years.

Herod is celebrated in history for his infamous cruelties. He however restored the temple, or adorned it in so magnificent a manner, as to render it one of the most stupendous works of the age. After his death the government was divided between Herod Antipas, and his brothers Archelaus and Philip. Each division was called a tetrarchy, or fourth part, and the brothers reigned under the title of tetrarchs. The wife of Herod Antipas was the famous Herodias, by whose persuasion John the Baptist was beheaded. The third Herod was a prudent and excellent governor; he is the Agrippa to whom St. Paul addressed his celebrated oration. He was succeeded by Herod the Fourth, who annexed Judea once more to Syria. And in the next reign, under Herod Agrippa, Jerusalem was besieged, taken, and, together with the temple, was utterly destroyed.

During this period frequent mention is made of the Pharisees, Sadducees, and Herodians; and as these different sects are continualy referred to in the New-Testament, it may be proper to give a brief account of them here. The Pharisees were so called from their mode of separating themselves from the rest of the people. The Sadducees derive their name from Sadock, the chief of their sect. The Herodians are sup-

posed to have been the flatterers of Herod, to have embraced his religion, and to have accommodated themselves to the fashion of the times in which they lived. They were also distinguished from the Pharisees and other Jews, by their falling in with Herod's scheme of subjecting himself and his dominions to the Romans, and introducing among his own nation the manners and customs of heathen countries. In their zeal for the Roman authority they complied with a variety of idolatrous practices introduced by Herod, who, we are informed by Josephus, built a temple to Cæsar, erected a magnificent theatre at Jerusalem, instituted pagan games, and placed the Roman Eagle over the gate of the temple.

(To be continued).

INTERESTING AND INTSRUCTIVE EXTRACTS.

ANECDOTE OF THE FRENCH REVOLUTION,

(From an eye-witness.)

That the crimes of the French Revolution were mainly to be attributed to the infidel and irreligious opinions, which had been industriously propagated by Voltaire, and other writers of the same school, is now a matter of history. It were in vain to attempt to trace to the pure love of civil liberty, the unheard of cruelties and massacres which were committed under her name. These can only be referred to the deistical and atheistical notions, which denied Revelation, set up the goddess of reason as the idol of popular worship, declared death an everlasting sleep, and stripped man at once of immortality and future accountability.

It will be remembered, that in 1792, when the approach of the Prussians had spread an alarm in Paris, a meeting of the populace was called by Robespierre, Danton, Marat, and others of the most sanguinary and atrocious characters, in the Camp de Mars. Here it was resolved, that "the domestic foes of the nation ought to be destroyed before its foreign enemies were attacked." Accordingly, parties of armed men, infuriate and thirsty for blood, proceeded to the prisons, where the non-juring clergy, the Swiss officers and

other state prisoners, confined since the 10th of August, were in custody. They were taken out, one by one, and, after a kind of mock trial, some few being acquitted, the rest were murdered. The massacre lasted for two days, and more than 1000 persons were put to death. Among these was the beautiful and accomplished *Princess Lamballe.* She was taken from her bed, and carried before this bloody tribunal, massacred, and her head carried by the populace to the Temple, to be seen by the Queen, whose friend she was!

It was on the evening of the second day which had witnessed this dreadful carnage, that a number of the Royalists, male and female, sought an asylum in a mansion, once the scene of revelry and gaiety—now of sadness and terror.—There were assembled many of the soi-disant philosophers, and many who had been deluded by them. Among the former, was Monsieur A***, distinguished not less by his learning and talents, than by his licentious, yet sprightly sallies, at the expense of every thing sacred. But now, even the facetious Monsieur A. was mute. All was silence and despair. At length, Mademoiselle C., a young lady celebrated at Court for her personal charms and general amiableness of character—who had been seduced from the religious principles which at an earlier age had been too faintly impressed on her mind—advancing towards Monsieur A., and throwing herself upon the floor, exclaimed, with a piercing shriek, "*O give me back my God!*" The company immediately dispersed. What a theme is here for meditation!

RELIGION.

We pity the man who has no religion in his heart—no high and irresistible yearning after a better and holier existence—who is contented with the sensuality and grossness of earth—whose spirit never revolts at the darkness of his prison house, nor exults at the thought of its final emancipation. We pity him, for he affords no evidence of his high origin—no manifes-

tation of that intellectual prerogative, which renders him delegated Lord of the visible creation. He can rank no higher than animal nature; the *spiritual* could never stoop so lowly. To seek for beastly excitements —to minister with a bountiful hand to depraved and strange appetites—are the attributes of the animal alone. To limit our hopes and aspirations to this life and this world, is like remaining forever in the place of our birth, without ever lifting the veil of the visible horizon, which bent over infancy.

There is religion in every thing around us—a calm and holy religion in the unbreathing things of Nature, which man would do well to imitate. It is a meek and blessed influence, stealing in, as it were, unawares upon the heart. It comes quietly, and without excitement. It has no terror, no gloom in its approaches. It does not rouse up the passions; it is untrammelled by the creeds and unshadowed by the superstitions of man. It is fresh from the hands of its author—and glowing from the immediate presence of the Great Spirit which pervades and quickens it. It is written on the arched sky. It looks out from every star. It is on the sailing cloud, in the invisible wind. It is among the hills and valleys of Earth; where the shrubless mountain top pierces the thin atmosphere of eternal winter, or where the mighty forest fluctuates before the strong wind, with its dark waves of green foliage. It is spread out like a legible language upon the broad face of the unsleeping ocean. It is the poetry of nature. It is this uplifts the spirit within us, until it is tall enough to overlook the shadows of our place of probation—which breaks, link after link, the chains which binds us to materiality—and which opens to imagination a world of spiritual beauty and holiness.

Lord Craven lived in London when the plague raged. His house was in that part of the town since called Craven Buildings. On the plague growing epidemic, his lordship, to avoid the danger, resolved to go to his seat in the country.—As he was walking through

his hall, with his hat on, and putting on his gloves in order to step into his carriage, he overheard his negro postillion saying to another servant, 'I suppose, by my lord's quitting London to avoid the plague, that his God lives in the country, and not in town.' The poor black said this in the simplicity of his heart, as really believing a plurality of gods. The speech, however, struck Lord Craven very sensibly, and made him stop in London.

CIRCLE OF THE SCIENCES, WITH SUITABLE REFLECTIONS.

ASTRONOMICAL SKETCHES.—NO. III.

Venus appears the most beautiful and the most brilliant of all the planets. Her greatest brightness, according to Dr. Halley, is when she is between her inferior conjunction and greatest elongation, at about 39° 44′ from the Sun.

The transits of Venus over the Sun's disk are much more rare than those of Mercury. The last transit of Venus was on June 3, 1769, and the next will be Dec. 8, 1874. These phenomena have been of the greatest use to astronomy, in ascertaining the true parallax of the Sun, and thereby the distance of the Earth from that body, together with those of the other planets.

When Venus appears west of the Sun, she rises before him in the morning, and is called the morning star: when she appears east of the Sun, she shines in the evening, after he sets, and is called the evening star. She continues in each of these characters for the space of 290 days. Venus, in the form of a crescent, and at her brightest times, affords a more pleasing telescopic view than any other of the heavenly bodies. Her surface is diversified with spots like those of the Moon; and by the motion of these we ascertain the time which she occupies in revolving upon her axis. With Dr. Herschel's telescope, mountains, like those of the Moon, may be seen on her disk. The planet Venus presents the same phenomena as those of Mercury; but her

different phases are more sensible, her oscillations wider, and of longer duration. Her greatest distance from the Sun varies from 45° to nearly 48°; and the mean duration of a complete oscillation is 584 days. Venus has been sometimes seen moving across the Sun's disk in the form of a round black spot, with an apparent diameter of about 59″. A few days after this has been observed, she is seen, in the morning, west of the Sun, in the form of a fine crescent, with the convexity turned towards the Sun. She moves gradually forward, with a retarded motion, and the crescent becomes more full. In about ten weeks she has moved 46° west of the Sun, and is now a semicircle, and her diameter is 26″. She is now stationary. She then moves eastward, with a motion gradually accelerating, and overtakes the Sun about 9½ months after having been seen on his disk. Some time after she is seen, in the evening, east of the Sun, nearly round, but very small. She moves eastward, and increases in diameter, but gradually loses her roundness till she arrives about 46° east of the Sun, when she is again a semicircle. She now moves westwards, increasing in diameter, but becoming a crescent, like the waning Moon; and at last, after a period of nearly 584 days, comes again into conjunction with the Sun, with an apparent diameter of 59″.

It may perhaps be surprising at first, that Venus should continue longer on the east and west of the Sun than the whole time of her period round him. But the difficulty vanishes when we consider that the Earth is all the while going round the Sun in the same way, though not so quick in its motion as Venus; and therefore her relative motion to the Earth must in every period be as much slower as her absolute motion in her orbit; since the Earth, during that time, advances forward in the ecliptic, which is 220°

Bright and dark spots have been discovered on the disk of Venus; but they can only be observed with a very good telescope, and when the atmosphere is very clear. Dr. Herschel, who made many observations on this planet, between the years 1777 and 1793, says that

the planet has, probably, hills and inequalities on its surface; but he has not been able to see much of them, owing, perhaps, to the great density of its atmosphere. In regard to the mountains in the planet Venus, no eye, he says, which is not considerably better than his, or assisted by much better instruments, will ever get a sight of them.

PHILIP GARRETT.

TIME.—THE PERISHING NATIONS.

Roll back the billowy tide of time;—unroll the mouldering record of ages! What scenes are presented to the startled imagination of many. O Time, mighty is the strength of thy arm! The wonders of the world have fallen before thee. The most celebrated cities of antiquities have been buried beneath the irresistible waves of time. Go read an example in the fate of Syracuse, the city of Archimedes, whose single arm repelled the hosts of Rome, and dared to move the world that he might have foundation for his feet. That splendid city is in ruins—her philosopher sleeps in the dust:—and where are his mighty engines of war? They are swept from the recollection of men. Go read another example in the fate of far famed Troy. Seek there for the palaces of Priam, once illumined with the smiles of the fickle, though beautiful Helen, for whom Sparta fought and Troy fell. Alas! those palace halls are silent, and the towers of Ilium lie level with the dust. Old Priam hath long since departed from the earth, and the graves of Paris and his paramour are unknown.—The mighty Hector, too, the brave antagonist of Achilles, is no more, The glory of the house of Priam hath departed for ever. The invaders and the invaded sleep together in the common mausoleum of time, and their deeds live only in the tide of Homer's song.

Such are a few instances of the ravages of time; nor less has our own loved land been doomed to be the scene of desolation. Here will be seen the ruins of an Indian empire as extended as the empires of the

east; and though they were children of the forest, and though they left no monuments of sculpture, painting or poesy, yet great were they in their fall, and sorrowful is the story of their wrongs. They once had cities—but where are they? They are swept from the face of the earth. They had their temple of the sun—but the sanctuary is broken down, and the beams of the defied luminary extinguished. It is true they worshipped the Great Spirit, and the genius of storms and darkness; the sacred pages of revelation had never been unrolled to them; the gospel of the Saviour had never sounded in the ears of the poor children of the forest. They heard the voice of their God in the morning breeze; they saw him in the dark cloud that rose in wrath from the west; they acknowledged his universal beneficence in the setting sun, as he sunk to his burning bed. Here another race once lived and loved. Here, along these shores the council fire blazed, and the warhoop echoed among their native hills.—Here the dark browed Indian once bathed his manly limbs in the river, and his light canoe was seen to glance over his own loved lakes.

Centuries passed away, and they still roved the undisputed masters of the western world. But at length a pilgrim bark, deep freighted from the east, came darkening on their shores. They yielded not their empire tamely, but they could not stand against the sons of light—they fled. With slow and solitary steps they took up their mournful march to the west, and yielded with a broken heart, their native hills to another race. They left their homes and the graves of their fathers to explore the western woods; where no human foot had ever trod, and no human eye ever penetrated. From time to time they have been driven back, and now the next and last remove will be to the bosom of the stormy Pacific. Unhappy children! the tear of pity is shed over your wrongs and your sufferings. What bosom but beats with sympathy over the mournful story of your woes? Ere long the last wave of the west will roll over them, and their deeds only live in traditions they shall have left behind them. The

march of mind hath been to them the march to the grave; a lingering remnant is all that is now left to sigh over the ruins of their empire. How must the poor child of the forest weep with the grief of years in his soul? And how must his heart throb with anguish when he muses on the ruins of his race, and the melancholy destiny of his children? For, after all their toil and industry—with every claim of esteem and friendship—with all the sacredness of treaty—the children of nature to be driven from a home they have made a garden, to satisfy an unjust and unprincipled usurpation.

And can we be astonished if the indignant son of the forest should assert his right to the possession of his native soil—the wild given him by the Great Spirit—and his determination to defend it to the last? Theirs is not the spirit that would tamely brook the insults, or bow in meek submission to the oppressors of their nation. Their gigantic souls will never yield till their last foothold shall slide from beneath their feet, and the last lightning of their power sunk harmless on their enemies, and the thunders of their vengeance failed. And could we be astonished at the result, all precedent cries out in the negative. The Genius of Empire, as she lives couched and groaning beneath the magnificent ruins of old Rome, cries out, No! and echo proclaims it again from the towers of Troy—from the Acropolis of Athens, and from the walls of Carthage.

NOTICES OF RECENT PUBLICATIONS.

REVIEW.

Memory's Tribute, or, Things profitable for reflection. First Series. The Baptism. By the author of the M'Ellen Family. 1830. 18mo. pp. 36.

(*Concluded from page* 58.)

We left the clergyman and Mr. Heyden in an interesting scene. The blue vault above was brilliant with innumerable worlds of glory; and the watery expanse of the Ontario, reflecting from its surface the mild radiance of the silver moon, shone like the crystal stream that is among the symbols of the heavenly Jerusalem. "Mr. Heyden, pointing to the heavens, said, 'Henry Northend has gone to

yonder bright world, and will shine like one of those stars in the kingdom of his master for ever and ever.' " As they continue on their way, under the influence of this thought, a neighbouring graveyard attracts the notice of the Clergyman and Mr. H. They read there an epitaph. It points out the spot where rest the ashes of the Rev. M. P——. His history, Mr. H. says, will interpret the full meaning of Mr. Northend's words, when he so particularly dwelt upon *the baptism*. This naturally awakens a deep interest in his companion; and repairing to a rude seat between two elms, Mr. H begins his narrative, of which the following is a brief outline.

The Rev. Mr. P. visited this region twenty years before. The subject of religion and its ordinances was the general theme of conversation. Several families expressed a wish to have their children then baptized. Among the rest were Mr. Northend's family. The Missionary introduced by Mr. Heyden, entered Mr. Northend's humble dwelling, and proposed the subject. "Mrs. Northend regretted that she had not had some previous notice, so that she might have prepared better clothes for the children." The Missionary remarks, "that this, he hoped, would not prevent her embracing the present opportunity of having her offspring *grafted into the body of Christ's Church;* and he trusted it would hereafter be her constant aim and unceasing effort, to see that her children were clothed in the garments of righteousness. 'Go,' said her husband, 'and get the children together, we must not miss this opportunity of having them christened.' Mrs. N. retired to collect the group. Mr P. asked Mr. Northend if he had a Prayer Book. He answered, 'He believed that his father used to have one.' " After much search, an old English Prayer Book was found. The Missionary then "took occasion to speak upon the important and exalted privilege of Christian baptism. 'Yes,' said Mr. Northend, not understanding the spiritual sense in which Mr. P. spoke, any more than the woman of Samaria understood the meaning of the Saviour, when he discoursed about the '*living water*,' at Jacob's well; 'Yes, I have always thought I would have my children christened. I have known persons to lose a fortune on account of their not having been christened, or their not having had their names properly registered at the time.' "

The children were all assembled, except "the oldest son, a boy about twelve, who was nowhere to be found." The service was commenced; and as the Missionary proceeded, its solemnity took more and more effect. Both the parents were impressed. And after an appropriate concluding prayer, the Missionary spoke to them, on *the importance of family religion*. The exhortation is here extracted, and commended to the serious perusal of all fathers and mothers.

"You have been making very solemn promises for your children. Let me tell you, that you cannot keep those promises, unless you have *an altar to the Lord in your dwelling;* unless you gather these children together morning and night, and pray with them. For them you have promised to renounce the devil, to exercise Christian faith, and to lead a godly life. You cannot do this for them, unless you are in earnest to do it for yourselves. You can never do this, either for them or yourselves, unless you look up continually to God in prayer. See what a group of young immortals are com-

mitted to your trust! These children, in all probability, will be happy or miserable in eternity, according to the course you pursue with them. They have this day been admitted *into the congregation of Christ's flock;* they have been invested with great and glorious privileges: but whether those privileges will ever be of any service to *them*, depends, in a very considerable degree, upon *you*. I do entreat you, therefore, for your children's sake, and for your own sakes, seek with all diligence and earnestness 'the kingdom of God and his righteousness.'"

This was *the baptism*. And it awakened in the mind of Mr. N. a lively interest in the word of God, and the salvation of his soul. His whole heart was gradually changed. He became a new man; and the affections of his soul, his mental powers, all his temporal affairs, all his domestic duties, felt the change. His children soon became partakers of his heavenly blessing. He diligently and prayerfully trained them for the skies. And though in one short year he was called upon to part with three out of their number, he bowed in meek submission to the supreme will of the Lord.

But he was visited of God, by a severer trial of his faith. His eldest son, who was not present at *the baptism*, and who declared that he would not submit to it except *by force*, matured his feelings of depravity with vile associates. He forsook his father's house, and he despised his father's tears and prayers. His mother on her death-bed, knew no pang but one. It was the thought of her James, her prodigal. He came to her apartment, and she appealed to him in the most touching language, but in vain. He soon returned to his associates and to his sins. And on the waters of the lake, without regard to the statutes and ordinance of the Almighty, whose wonders were around him, he lived without God and without hope. But in a storm, which spread its awful terrors over his frail bark, he at last experienced the severity of judgment. He was in sight of shore, and near his father's house. But on a wreck, he was at the mercy of the furious gale. Upon the beach his friends assembled. And there too was his distracted father. Without thinking of himself so much as to protect his head from the chill blast, the venerable man had risen from his seat, and hastened to the agonizing spectacle. And as his long white locks were flowing in the wind, that was about to sweep his "James" into destruction, he implored, "O save my child, I will give all that I possess if any one will make the effort." But all attempts would have been vain. A gloomy night soon mingled its thick darkness with the frowning storm. The weeping father now reluctantly withdraws, yet earnestly ejaculates, "O God, help me to bow in humble submission to this dispensation, and say *thy will be done*."

From that time, he became entirely absorbed in heavenly things. He lived and died a Christian. "Peace," said Mr. Heyden, as he concluded the narrative, "Peace be to his memory."

The sacrament of baptism, blessed to the spiritual good of Mr. Northend and all his family, except the one profligate companion of the ungodly, is an interesting and instructive theme, profitable for reflection. The incidents are well disclosed; and the narrative is such, as to awaken a concern on this important subject.

POETRY.

(COMMUNICATED.)

HOME OF THE CHRISTIAN.

By Rev. Joseph Rusling.

On the high clifts of Jordan with pleasure I stand,
And view in bright prospect the fair promised land;
The land where "the ransomed with singing shall come,"
To dwell in the kingdom prepared as their *Home*.

There, rivers most graceful eternally glide,
And groves, rich with verdure, grow up by their side;
There, hosts of bright spirits angelic become,
In that heavenly kingdom of Glory, their *Home*.

'Tis there, all the nations redeemed by the Lamb,
In circles most lovely his praises proclaim;
Thro' scenes of affliction those worthies have come,
To rest in the kingdom of Glory, their *Home*.

All over those peaceful, delectable plains
The Lord our Redeemer triumphantly reigns;
His sceptre of empire with grandeur resumes,
And kindly he welcomes his followers Home.

How happy those beautiful realms of repose,
Whence splendid and pure immortality arose;
The regions ambrosial in infinite bloom,
"The kingdom of heaven," the christian's *Home*.

The pleasures of Glory O! when shall I share,
And crowns of celestial felicity wear;
Those landscapes to range undisturbed with a sigh,
The *Home* of my *Father's*, *God's Palace* on high.

HOME.

Seest thou my home? 'Tis where yon woods are waving
In their dark richness to the sunny air;
Where yon blue stream a thousand flower-banks laving,
Leads down the hill a vein of light—'tis there.

'Midst these green haunts how many a spring lies gleaming,
Fringed with the violet, coloured with the skies—
My boyhood's haunts, through days of summers dreaming,
Under young leaves that shook with melodies!

My home—the spirit of its love is breathing
In every wind that plays across my track;
From its white walls the very tendrils wreathing,
Seem with soft links to draw the wanderer back.

There am I loved! There prayed for! There my mother
Sits by the hearth, with meekly thoughtful eye!
There my young sisters watch to greet their brother—
Soon their glad footsteps down the lane would fly!

There, in sweet strains of kindred music blending,
All the home voices meet at day's decline;
One are those tones, as from one heart ascending—
There lies my home—and, stranger where is thine?

Ask where the earth's departed have their dwelling,
Ask of the clouds, the stars, the trackless air?
I know it not, yet trust the whisper telling
My lonely heart, that love unchang'd is there.

And what is home? and where, but with the living?
Happy thou art that so canst gaze on thine!
My spirit feels, but in its weary roving,
That with the dead, where'er they be—is mine.

Go to thy home, rejoicing son and brother!
Bear in fresh gladness to the household scene!
For me, too, watch the sister and the mother,
I will believe—but dark seas roll between.

J. Holfast.

TO THE IVY.

Lone tenant of the wasted spot,
Where softened Desolation smiles,
And weeds are spread o'er graves forgot,
And Ruin sighs from grass grown aisles;
Still present round each withered trunk,
Like youth which cheers the path of age;
Or where the river wall has sunk
Beneath Destruction's leaguering rage.

Child of decay! No blushing flower,
Or cup of treasured sweets, is thine.
To breathe in Beauty's fragrant bower,
Or charm where statelier rivals shine.
The column of the desert place,
The Warrior 's cross, the nameless stone,
Receive thy clasping boughs' embrace,
And show thy clustering wreaths alone.

Yet, type of Truth when Fortune wanes;
And Grief, that haunts the mouldering tomb;
And Love, that "strong as death" sustains
The whirlwind's shock and tempest's gloom:

To me thy mournful leaf excels
  The fairest buds, whose petals fling
Their odors where the Summer dwells,
  Or gem the verdant robe of Spring.

The violet and the queen-like rose,
  Frail minions of a passing day,
Brief as the faith which Falsehood shows,
  But bloom while lasts their worshipped ray;
Yet thou—beneath the howling blast,
  When all is drear, art smiling on,
Unchanged, unshrinking, to the last,
  And green when even Hope is gone.

MORAL BEAUTY.

'Tis not alone in the flush of morn,
In the cowslip bell or the blossom thorn,
In noon's high hour, or twilight's hush,
In the shadowy stream, on the rose's blush,
Or in aught that nature's pencil gives,
That the spirit of beauty serenely lives.

Oh no! it lives, and breathes, and lies,
In a home more pure than the morning skies;
In the innocent heart it loves to dwell,
When it comes, with a sigh or tear, to tell
Sweet dreams that flow from a fount of love,
To mingle with all that is pure above.

It lives in the heart where Mercy's eye
Looks out on the world with charity;
Whose generous hand delights to heal
The wounds that sorrowing mourners feel,
Without a wish, or a hope or thought,
That light shall shine on the deeds it wrought.

It lives, in the breast that nought inspires
But manly feelings and high desires,
Where nothing can come like a selfish dream,
When visions of glory around it gleam—

Proud visions, that show a lifted mind,
The boundless sphere of the human kind.
Sweet spirit of beauty! my visions are thine,
But I lose thee not when the day-beams shine;

Thy image is still my constant gaze,
In the mid-night hour or noon-tide blaze,
And none can tell but a heart unsold,
The fervor of joy which thy lovers hold.

RUINS OF PALMYRA.

MONTHLY REPOSITORY,

AND LIBRARY OF

Entertaining Knowledge.

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RUINS OF PALMYRA.

"Look *behind* thee—cities hid
In the night of treacherous story,
Many a crumbling pyramid,
Many a pile of senseless glory,
Temples into ruin hurl'd,
(Fragments of an earlier world,)
Broken fanes, and altars hoary."

PALMYRA, a splendid and noble city of ancient Syria, was situated about 15 miles east of Damascus, and 120 from Tarabolos or Tripoli. It was the metropolis of Palmyrene, a once fertile province of Syria, but surrounded on all sides by frightful deserts. This province was noted for its large and splendid cities—for its gorgeous palaces, its numerous temples, and the accomplishment and suavity of its inhabitants, insomuch that its fame spread throughout all the regions round about. But those cities, and palaces, and temples, have yielded to the "crumbling tooth of time"—they have perished from among the cities of the earth, and scarcely a vestige of their former greatness and grandeur is left for the contemplation of the inquiring traveller.

The capital of this once fertile province was called *Palmara* by the Greeks and Romans, *Tadmor in the Wilderness* in the Scriptures, *Palmyra* and *Thadamor* by Josephus. Of its origin we know but little; some learned historians suppose that it was founded by Solomon. It flourished for many years, and was unfortunately the cause of frequent and bloody conflicts and contentions between the Romans and Parthians. It

was destroyed by Antiochus, rebuilt and beautifully adorned by Aurelian; but when the barbarous and ignorant and bigoted Turks acquired the mastery of the country, it was most shamefully destroyed. According to the statements of travellers, the ruins of this once fair and celebrated place, are of the most interesting character, consisting of palaces, temples, and porticoes, of Grecian architecture. They now cover an extent of several square miles, and present a melancholy spectacle. Ruin and desolation are stampt on every object. The Temple of the Sun, (or rather its ruins,) which attracts particular notice, covers a square of 220 yards, with a high and massive wall, adorned within and without with pilasters, 124 of which are remaining. The Turks, by beating down the cornishes, have deprived the world of the finest works of the kind. In this square 58 pillars are entire, 37 feet high, with capitals of the finest carving. In the middle of this inclosure stood the temple, encompassed with another row of pillars, 50 feet high. The Temple was one of the most splendid and glorious edifices in the world. To the north of the temple is a stately obelisk, 50 feet high, or wreathed work, the sculpture of which is extremely fine; to the west of which is a spacious entrance to a noble piazza, about a quarter of a mile in length, and 40 feet broad, formed by two rows of marble pillars 26 feet high, and 9 feet in circumference. There were originally 560 of these pillars, 129 of which are now standing. But among the venerable ruins which attract attention, none are so interesting as the costly sepulchres, which are square towers, 4, 5, and 6 stories high, on each side of a hollow way, towards the north end of the city. They are beautified with lively carvings and paintings. In the middle is a walk crossing from north to south; each vault was divided in like manner, and the division on either hand subdivided into six apartments. Such was the magnificent abodes, and such the sepulchres of the Palmyrenians, a city not more noted for the beauty of her buildings than for the extraordinary personages whom she produced.

Aug. 1830. N. M. T.

THE ANCIENT AND MODERN HISTORY OF NATIONS

OF THE ASSYRIAN MONARCHY.

As we intend to give a complete illustration of universal history, we shall now proceed to describe the four great empires, viz. the Assyrian, the Persian, the Grecian, and the Roman. These, on account of their including so large and important a part of history in general, have usually been denominated *the four monarchies;* and it will be seen, that from one or the other of these we shall be able to trace the rise and foundation of those histories which we shall describe in the subsequent numbers of this work.

The Assyrian monarchy is the most ancient. Of its government and constitution we know but little. In the most flourishing period of the history, their princes appear to have been purely despotic and the succession hereditary.

Belus is placed at the head of the series of Assyrian kings, and is supposed to have been the founder of the city of Babylon. He afterwards made himself master of Assyria, and, by the moderation of his government, became very popular among his new subjects; he built several considerable cities, of which the most magnificent was the celebrated Nineveh, where he founded the monarchy in the year 790 before Christ.*

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* M. Rollin and many other writers suppose Belus to be the same with Nimrod, the great-grand-son of Noah. M. Rollin, however, was aware that the exploits of Ninus and Semiramis, the immediate successors of Belus, but ill accorded with times so near the flood. He, however, willing to defend his own theory, supposed that the Greek historians had, through ignorance of, or inattention to chronolgoy, ascribed to these ancient kings enterprises and exploits which, in fact, had been achieved by those who flourished in latter times. *See Rollin's Anc. Hist. vol. II.* Sir Isaac Newton, however, admitting that Nimrod did found a kingdom at Babylon which might extend into Assyria, supposes that it was not very large, nor enjoyed a long duration, it being the custom in those early days for every father to divide his territories amongst his sons. Thus Noah was monarch of the world: Cham was king of Africa, and Japhet of all Europe and Asia minor; but they left no

Belus was succeeded by his son Ninus, in honour of whom Nineveh had received its name; and he, in gratitude to his father, obliged his subjects to pay divine honours to the memory of Belus, who was probably the first king that the people deified on account of his great actions. Nineveh, which was finished during this reign, has been greatly celebrated for its extent and magnificence. The wall which surrounded the city was sixty miles in length, an hundred feet high, and of a thickness sufficient for three chariots to go upon it abreast. This wall was fortified and adorned with fifteen hundred towers.

Ninus made war upon many other nations, for the sake of extending his empire; he reduced the greater part of Asia, and totally subdued Bactria, the northern province of Persia, now known by the name of Choraffan. After this he returned to Nineveh, and married Semiramis, by whom he had a son named Ninyas. Ninus appears to have been the first prince who united the spirit of conquest with political science. He divided the Assyrian empire into provinces;—instituted three councils and three tribunals, by which the government was administered, and justice distributed. He died about the year 760, B. C.

Semiramis assumed the sovereign power during the minority of her son, and swayed the sceptre with great dignity for the space of forty years. She enlarged her empire, and visited every part of her vast domains; built cities in various districts of the Assyrian kingdom; cut roads through mountains, in order to facilitate the intercourse between contiguous provinces. Encouraged by her various successes, she attacked India with an armed force. On this occasion her army consisted of three hundred thousand foot and fifty thousand horse, besides camels and chariots. The Indian monarch having notice of her approach, sent ambassadors to inquire who she was, and by what right she came to at-

standing kingdoms. And after the days of Nimrod we hear no more of an Assyrian empire till the reign of Pul or Belus.——*See Newton's Chronology of Ancient Kingdoms amended.*

tack his domains, adding, that her audacity should meet the punishment it deserved. "Tell your master," replied the queen, "that in a little time I myself will let him know who I am." She immediately advanced to the river *Idus*, and attempted to pass it with her whole army. The passage was a long time disputed, but, after a bloody battle, she put her enemies to flight, and advanced into the heart of the country, where a second engagement ensued, in which her army was routed, and herself wounded; she, however, with the remains of her shattered army re-passed the river, and returned to her own country. Semiramis and Alexander were the only persons that ever ventured to carry war beyond the Indus.

Ninyas, who succeeded his mother, being in no respect like his parents, devoted himself to his pleasures, leaving the care and conduct of his government to approved and experienced officers. Of him, it may be said, that he ascended the throne of his ancestors, lived in indolence, and died in their palace at Nineveh.

Sardanapulus, the last of the Assyrian monarchs, led a most effeminate and voluptuous course of life. His conduct excited the general indignation of the officers employed under him. Arbaces, governor of Media, enraged at beholding the monarch spinning among his women, withdrew his allegiance, and excited a rebellion against him. In this revolt he was encouraged by the advice and assistance of a Chaldean priest, who engaged the Babylonians to follow the example of the Medes. These powerful provinces, aided by the Persians, and other allies, who despised the effeminacy, or dreaded the tyranny of their Assyrian masters, attacked the empire on all sides. Their most vigorous efforts were, in the beginning, unsuccessful. Firm and determined, however, in their opposition, they at length prevailed, defeated the Assyrian army, besieged Sardanapulus in his capital, which they demolished, and became masters of the empire about the year 711, B.C.

After the death of Sardanapulus the Assyrian empire was split into three kingdoms, viz. the Median Assyrian, and Babylonian: the first king of the Median

empire was Arbaces, who reigned at Acbatana, the metropolis of Media. This kingdom lasted till the time of Assyages, who was subdued, and divested of his kingdom by Cyrus. The metropolis of the second Assyrian kingdom was Nineveh; of which the fisrt monarch was Phul, who was succeeded by Tiglathpilefer, Salmanassar, Sennacherib, and at last by Assarhadon, who took possession of the kingdom of Babylon. After the death of Assarhadon the Assyrian kingdom became subject to the Medes and Babylonians, who destroyed the city of Nineveh, in the year 660, B. C. The most celebrated of the kings of Babylon was Nebuchadnezzar, who subdued all the east. Darius, the Mede, was the last king, who being conquered by Cyrus, king of Persia, the Babylonians, as well as the Medes, and with them the Assyrians, submitted to the Persians. Thus, in the reign of Cyrus, there arose a second monarchy, generally known by the name of the Persian monarchy.

During the first monarchy, Egypt flourished, and claims the admiration of posterity on various accounts.

Next to the Egyptians, the Phœnicians were the most celebrated. Their skill in maritime affairs; their address and excellent policy in commercial concerns, have ever excited applause. Tyre was their chief city, which was taken by Nebuchadnezzar, about the year 570, B. C. Pygmalion is well known as a Phœnician monarch; whose sister, Dido, built Carthage.

The kingdom of the Lydians flourished under the first monarchy, chiefly during the reign of Crœsus, whose dominions was far extended over the regions of Asia, and who was considered the richest king of his time.

This age produced Homer, Hesiod, Æsop, and the seven wise men of Greece. To this period must be referred the Sibyls, women famous for their prophecies, but of whom we have no very certain or accurate accounts, though there is no doubt but that the Romans had books denominated Sibylline, which they consulted as divine oracles upon particular emergencies.

The office of consulting these sacred writings was

first committed to two persons, called *duumviri ;* afterwards to ten called the *decemviri*, then to fifteen, and at last to forty. The punishment for improperly divulging these answers was very severe, the criminal being sentenced to be put into a sack with a venomous serpent, and then thrown together into the sea.

During the first monarchy philosophy flourished in Egypt, and astronomy in Chaldea ; and the celebrated cities of Nineveh and Babylon are the most decided proofs that the Assyrians and Chaldeans were well skilled in works of architecture and mechanics.

Of Nineveh we have already spoken ; Babylon was built by Semiramis, with a view of emulating, or even exceeding in glory that city. The circumference of both cities was the same. The wall which surrounded Babylon was three hundred and fifty feet high, double the breadth of that of Nineveh. It is supposed to have been situated on the river Euphrates, that divided it into two parts, which were united by means of a bridge made of cedar. Quays of beautiful marble adorned the banks of the river. On one bank stood the magnificent temple of *Bel*, and on the other the palace of the queen. These two edifices communicated by a passage under the bed of the river. Near the citadel were the *borti pensiles*, or hanging gardens, made by one of the kings to please his lady, who was a Persian by birth, and who, desirous of seeing meadows on mountains, as in her own country, prevailed on him to raise artificial gardens, which, with trees and meadows, might resemble those of Persia. Vaulted arches were, for this purpose, raised from the ground one above another, to an almost inconceivable height, and of a magnitude and strength sufficient to support the vast weight of the whole garden.

Contemplation.—What is there in man so worthy of honor and reverence as this—that he is capable of contemplating something higher than his own reason ; more sublime than the whole universe ; that spirit which alone is self-subsistent ;—from which all truth proceeds—without which is no truth.

CIRCLE OF THE SCIENCES, WITH SUITABLE REFLECTIONS.

ASTRONOMICAL SKETCHES.—NO. IV.

The orbit of the Earth is situated between the orbits of Venus and Mars; at the mean distance of 26,183,000 miles from the former planet, and 49,769,000 from the latter; and 95,000,000 from the Sun.

The diameter of the Earth is 7,928 miles; the circumference is 24,907. It contains upwards of 197,000,000 square miles upon its surface, and 270,000,000 cubic miles.

The Earth goes round the Sun in 365 days, 5 hours, 59 minutes, from any equinox, or solstice, to the same again: but from any fixed star, to the same again, in 365 days, 6 hours, 9 minutes, 12 seconds; the former being the length of the tropical year, and the latter the length of the sidereal.

The Earth completes one absolute revolution on its axis in 23 hours, 56 minutes, 4 seconds. Any given meridian revolves from a fixed star to the same star again in the same time; but from the Sun to the Sun again in 24 hours; so that the stars gain upon the Sun 3 minutes and 56 seconds every day; and, therefore, in 365 days, as measured by the returns of the Sun to the meridian, there are 366 days, as measured by the stars returning to it. The former are called solar days, and the latter sidereal.

The diameter of the Earth's orbit is but a point, in proportion to the distance of the stars; for which reason, and the Earth's uniform motion on its axis, any given meridian will revolve from any star to the same star again in every absolute turn of the Earth's axis, without the least perceptible difference of time shown by a clock which goes correctly. The difference between a solar and a sidereal day is 3 minutes and 56 seconds. This amounts, in a year, to one day; so that there must be one sidereal day more in a year than the number of solar days, be the number what it may, on the Earth, or on any other planet; one turn being

lost, with respect to the number of solar days in the year, by the planet's going *round* the Sun; just as it would be lost to a traveller, who, in going round the Earth, would lose one day, by following the apparent diurnal motion of the Sun; and consequently would reckon one day less at his return, (let him take what time he might to go round the Earth,) than those who remained all the while at the place from which he set out. If the Earth had no annual motion, any given meridian would revolve from the Sun to the Sun again in the same quantity of time, as from any star to the same star again; because the sun would never change his place with respect to the fixed stars. But as the Earth advances almost a degree eastward in its orbit, in the time that it turns eastward round its axis, whatever star passes over the meridian on any day with the Sun, will pass over the same meridian on the next day, when the sun is almost a degree short of it; that is, 3 minutes and 56 seconds sooner.

The Earth, by turning round its axis every 24 hours from west to east, causes an apparent diurnal motion of all the heavenly bodies from east to west. By this rapid motion of the earth on its axis, the inhabitants about the equator are carried 1000 miles every hour; the inhabitants at Madrid, 702; of London, 644; of Edinburgh, 578; of Lerwick, in Shetland, 508; of Archangel, 420.

Should any youthful reader wish to know how these calculations are made, the easiest method is to multiply the natural sine of the complement of the latitude of any given place by 360, the number of degrees contained in the equator; and divide the product by 10,000; the result is, the number of equatorial degrees contained in that parallel of latitude: these degrees must be multiplied by 69, the number of geographical miles in a degree of the Equator, and divided by 24, the number of hours in one solar revolution of the Earth on its axis.

By the same easy rule, the number of equatorial degrees contained in any parallel of latitude may be readily found. PHILIP GARRETT.

THE CABINET OF NATURE.

THE OCEAN.

The ocean surrounds the earth on all sides, and penetrates into the interior parts of the different countries, sometimes by large openings, and frequently by small straits. Could the eye take in this immense sheet of water at one view, it would appear the most august object under the whole heavens. It occupies a space on the surface of the globe at least three times greater than that which is occupied by the land; comprehending an extent of 148 millions of square miles. Though the ocean, strictly speaking, is but one immense body of waters, extending in different directions, yet different names have been appropriated to different portions of its surface. That portion of its waters which rolls between the western coast of America, and the eastern shores of Asia, is called the *Pacific* ocean; and that portion which separates Europe and Africa from America, the *Atlantic* ocean. Other portions are termed the *Northern*, *Southern*, and *Indian* oceans. When its waters penetrate into the land, they form what are called gulphs, and mediterranean seas. But without following it through all its windings and divisions, I shall simply state a few general facts.

With regard to the Depth of this body of water, no certain conclusions have yet been formed. Beyond a certain depth, it has hitherto been found unfathomable. We know, in general, that the depth of the sea increases gradually as we leave the shore; but we have reason to believe that this increase of depth continues only to a certain distance. The numerous islands scattered every where through the ocean, demonstrate, that the bottom of the waters, so far from uniformly sinking, sometimes rises into lofty mountains. It is highly probable that the depth of the sea is somewhat in proportion to the elevation of the land; for there is some reason to conclude, that the present bed of the ocean formed the inhabited part of the ancient world, previous to the general Deluge, and that we are now oc-

cupying the bed of the former ocean; and, if so, its greatest depth will not exceed four or five miles; for there is no mountain that rises higher above the level of the sea. But the sea has never been actually sounded to a greater depth than a mile and 66 feet. Along the coast its depth has always been found proportioned to the height of the shore: where the coast is high and mountainous, the sea that washes it is deep; but where the coast is low, the water is shallow. To calculate the *quantity of water* it contains, we must therefore suppose a medium depth. If we reckon its average depth at two miles, it will contain 296 million of cubical miles of water. We shall have a more specific idea of this enormous mass of water, if we consider, that it is sufficient to cover the whole globe, to the height of more than eight thousand feet; and if this water were reduced to one spherical mass, it would form a globe of more than 800 miles in diameter.

With regard to its Bottom—As the sea covers so great a portion of the globe, we should, no doubt, by exploring its interior recesses, discover a vast number of interesting objects. So far as the bed of the ocean has been explored, it is found to bear a great resemblance to the surface of the dry land; being, like it full of plains, caverns, rocks, and mountains, some of which are abrupt and almost prependicular, while others rise with a gentle acclivity, and sometimes tower above the water, and form islands. The materials, too, which compose the bottom of the sea, are the same which forms the bases of the dry land. It also resembles the land in another remarkable particular; —many fresh springs, and even rivers rise out of it; an instance of which occurs near Goa, on the western coast of Hindostan, and in the Mediterranean sea, not far from Marseilles. The sea sometimes assumes *different colours.* The materials which compose its bottom, cause it to reflect different hues in different places; and its appearance is also affected by the winds and by the sun, while the clouds that pass over it communicate all their varied and fleeting colours. When the sun shines, it is green; when he gleams through a

fog, it is yellow; near the poles, it is black; while in the torrid zone, its colour is often brown; and on certain occasions, it assumes a luminous appearance, as if sparkling with fire.

The ocean has *three kinds of motions.* The first is that undulation which is produced by the wind, and which is entirely confined to its surface. It is now ascertained that this motion can be destroyed, and its surface rendered smooth by throwing oil upon its waves. The second motion is that continual tendency which the whole water in the sea has towards the west, which is greater near the equator than towards the poles. It begins on the west side of America, where it is moderate; but as the waters advance westward, their motion is accelerated; and after having travelled the globe they return, and strike with great violence on the *eastern* shore of America. Being stopped by that continent, they rush, with impetuosity, into the Gulf of Mexico, thence they proceed along the coast of North America, till they come to the south side of the great bank of Newfoundland, when they turn off and run down through the Western Isles. This motion is most probably owing to the diurnal revolution of the earth on its axis, which is in a direction contrary to the motion of the sea. The third motion of the sea is the *tide*, which is a regular swell of the ocean every 12½ hours. This motion is now ascertained to be owing to the attractive influence of the moon, and also partly to that of the sun. There is always a flux and reflux at the same time, in two parts of the globe, and these are opposite to each other; so that when our Antipodes have high water, we have the same. When the attractive powers of the sun and moon act in the same direction, which happens at the time of new and full moon, we have the highest, or *spring tides;* but when their attraction is opposed to each other, which happens at the quarters, we have the lowest, or *neap tides.*

Such is the ocean, a most stupendous scene of Omnipotence, which forms the most magnificent feature in the globe we inhabit. When we stand on the sea

shore, and cast our eyes over the expanse of its waters, till the sky and the waves seem to mingle, all that the eye can take in *one* survey, is but an inconsiderable *speck*, less than the hundred thousandth part of the whole of this vast abyss. If every drop of water can be divided into 26 millions of distinct parts, as some philosophers have demonstrated, what an immense assemblage of watery particles must be contained in the unfathomable caverns of the ocean! Here the powers of calculation are completely set at defiance; and an image of infinity, immensity, and endless duration, is presented to the mind. This mighty expanse of waters is the grand reservoir of Nature, and the source of evaporation, which enriches the earth with fertility and verdure. Every cloud which floats in the atmosphere, and every fountain and rivulet, and flowing stream, are indebted to this inexhaustible source for those watery treasures which they distribute through every region of the land. In fine, whether we consider the ocean as rearing its tremendous billows in the midst of the tempest, or as stretched out into a smooth expanse—whether we consider its immeasurable extent, its mighty movements, or the innumerable beings which glide through its rolling waves—we cannot but be struck with astonishment at the grandeur of that Omnipotent Being who holds its waters "in the hollow of his hand," and who has said to its foaming surges, "Hitherto shalt thou come, and no further, and here shall thy proud waves be stayed."

BIOGRAPHICAL SKETCHES.

HENRY KIRKE WHITE.

There are few men with names inscribed on the imperishable records of genius, whose lives present a more melancholy subject for reflection, than that of Henry Kirke White. Endowed with poetical talents of the first description, and possessing that shrinking modesty and over-refinement of feeling which so frequently are the result of a poetical temperament, he had to

struggle with poverty and obscurity until, in the language of Byron's beautiful description of him,

> "Keen were his pangs, but keener far to feel,
> He cursed the pinion which impelled the steel;
> While the same plumage that had warmed his nest,
> Drank the last life-drop of his bleeding breast."

This delightful poet was born in Nottingham, March 21, 1785. His father was a tradesman in that city. He early discoverd a great desire for reading; and, it is said by his biographers, that when he was about seven years of age he would creep unperceived into the kitchen, to teach the servant to read and write; a practice he continued for some time before it was discovered that he had been so laudably employed. It was the intention of his father, to bring him up to his own business; but his mother, who was a woman of respectable family and superior acquirements, overcame her husband's desire, and made every effort to procure him a good education, and with this intention and by the request of her friends, she opened a lady's boarding and day school at Nottingham, in which she succeeded beyond her most sanguine expectations; and by these means accomplished her wishes.

It was, however, at length determined to make him acquainted with some trade: and as hosiery is the staple manufacture of his native place, he was placed in a stocking loom, at the age of fourteen. This employment was entirely uncongenial to his taste, and rendered him truly unhappy: his feelings at this period are portrayed in his address to Contemplation.

His mother, who was the repository of all his boyish sorrows, was extremely anxious to have him removed to some other business; and on his attaining his fifteenth year, had him placed in an attorney's office: but as no premium could be given with him, he was not articled until two years afterwards.

The law was now the chief object of his attention; but during his leisure hours he acquired a knowledge of Greek and Latin, and also made himself master of many of the modern languages. These employments, with the study of chemistry, astronomy, drawing, and

music, of which he was passionately fond, served as relaxations from the dry study of the law.

He now became a member of a literary society in Nottingham, where his superior abilities procured him to be elected a professor of literature. He wrote occasionally for the Monthly Preceptor, (a miscellany of prose and poetical compositions,) and gained a silver medal for a translation from Horace; and, the following year, a pair of twelve-inch globes, for an imaginary tour from London to Edinburgh.

These little testimonies of his talents were grateful to his feelings, and urged him to further efforts, accordingly, we find him contributing to the Monthly Mirror, which fortunately procured him the friendship of Mr. Capel Lloft, and Mr. Hill, the proprietor of the work. An anecdote is related of him, during his connexion with this work, which is highly interesting. His modesty prevented him from confiding the efforts of his muse to any other criticism than that of his own family. They, however, were proud of the young poet's talents, and would occasionally show portions of his works to their friends. The natural envy which genius is sure to excite, prevented these pieces from being justly appreciated, and Henry was subjected to some ridicule on their account. One friend, in particular, was extremely sarcastic on the occasion, and calling on the family one day, while the poet was present, he produced a number of the Monthly Mirror, and directed Henry's attention to a poem, which it contained, saying, "when you can write like this, you may set up for a poet." White cast his eyes over the article, and found it was one of his own performances. He informed his friend of the fact; and it may well be imagined experienced no small gratification in thus disarming the satire of his ungenerous antagonist.

At the request of Mr. Hill, he was induced, at the close of 1802, to publish a small volume of poems, with the hope that the profits might enable him to prosecute his studies at College, and qualify him to take holy orders, for which he had a strong inclination. He was persuaded to dedicate the work to the Countess of

Derby, the once fascinating actress, Miss Farren, to whom he applied; but she returned a refusal, on the ground that she never accepted such compliments. Her refusal was, however, couched in kind and complimentary language, and enclosed two pounds as her subscription. The Duchess of Devonshire was next applied to, who, after a deal of trouble, consented, but took no further notice of the author.

He enclosed a copy of his little work to each of the then existing Reviews, stating, in a feeling manner, the disadvantage under which he was struggling, and requesting a favourable and indulgent criticism. The Monthly Review, then a leading journal, affected to sympathize with the penury and misfortune of the author, but spoke in such illiberal and acrimonious terms of the production as to inflict a wound on his mind which was never wholly cured. Ample justice was subsequently done to his memory, through this very review, by the laureate Southey, whose "Life and remains of White" is justly considered an ornament to British biography.

He now determined to devote himself to the church. His employers agreed to cancel the articles of his apprenticeship, and freely gave up the portion of the time that remained unexpired, and further exerted themselves in his behalf. The difficulties that presented themselves were numerous. At length, with the aid of a few friends, he was enabled to enter the University of Cambridge; where his intense application to study speedily brought on an alarming disease, which at length terminated in his death, on Sunday, October 19, 1806.

A generous tribute to his worth and talents has been paid to his memory by Francis Boot, Esq. of Boston, who, on a visit to Cambridge, caused a splendid monument, executed by Chantry, to be erected in All-Saint's church, Cambridge; and which remains as a striking contrast to the apathy and neglect with which the unfortunate poet was treated during his life.

THE INDIANS—THE TEN LOST TRIBES.

(*Continued from page 65.*)

It is matter of deep and lasting regret, that the character of the Indians, who occupied this wide-spread and goodly heritage, when men of pale faces came over the pierceless solitudes of the mighty ocean, with their large canoes, and were received with all the kindly feelings of native innocence—I say that it is deeply to be regretted, that their character should be so grossly misrepresented and misunderstood. They have been accused of cruelty and perfidy of the basest nature—of crimes and vices of the most degrading cast. Again and again are the people of this happy land referred back to the period of its early settlement, and their attention directed to the smoking ruins of villages, and the cries of suffering and distress. Scenes like these, I grant, are sufficient to harrow up the mind; but in contemplating the sufferings of their early brethren, the whites seem almost to forget the corroding sorrows of the poor Indians—the wrongs and calamities which were heaped upon them. Follow them into the deep recesses of their wilderness solitudes—hear their long and loud complaints, when driven by the pale faces whom they had kindly received, and cheerfully, in the fulness of their friendship sustained through days, and months of sorrow, and want, and affliction,—from their happy homes, the resting place of their fathers. Can you wonder, friends, that they should have resisted, manfully, against the encroachment of their white neighbours?

But I think that history declares, that when this continent was first discovered, that its inhabitants were a harmless, inoffensive, obliging people. They were alike free from the blandishments and vices of civilized life. They received the strangers from the "world beyond the waters," with every token of esteem; high-minded, noble, generous, and confident to a fault, they placed implicit confidence in the professions of their visiters; they saw not the aim and design of the white

man, and the chains of a cruel bondage were firmly entwined around them before the illusion was dispelled; and when their eyes were opened, they beheld nought as the portion of their cup but servitude and sorrow. Hundreds of thousands perished before the face of the white man. Suffice it to say, what is already known, that the white man came upon our shores—he grew taller and taller until his shadow was cast over all the land—in its shade the mighty tribes of olden time wilted away—a few, the remnant of multitudes long since gathered to their fathers, are all that remain; and they are on their march to eternity. WM. APES.

(To be continued.)

POPULAR AND INSTRUCTIVE TALES.

THE LILY OF THE MOUNTAIN.

(Concluded.)

Do you feel that God is just in bringing upon you such great afflictions? "I am not afflicted, and if I were, God is just." But you are unhappy, to lie in this wretched condition? "I am not unhappy; it is better to be as I am now than as I was once, for then I thought too much of the world." If then you are happy, and reconciled to your condition, you must have found something more than the happiness of this world. "I have—that which the world cannot give." Have you no hope of recovery? "I have no wish to recover." Have you no fear of death? "I am not afraid to die, God is so good that I am safe with him." Yes, God is good, but we are wicked. "Oh yes (clasping her emaciated hands) I have been so wicked that I do not suffer half so much as I deserve, but Christ is merciful." Have you no fears that you may be deceived? "No fears now—perfect love casteth out fear." Are you not sometimes in darkness when you are in great pain? "I do not think of pain, I am happy, and shall soon go home." There was an affecting artlessness in all she said which I cannot describe, and a promptness which beautifully illustrated

the inspired truth, that out of the abundance of the heart the mouth speaketh. I found myself in the presence of one who had learned much in the school of Christ, and who seemed just spreading her wings for the mansions of rest. Consolation, instruction, sympathy—she needed none, for she had already passed within the veil. I remained silently admiring the pure influence of Christianity, while religion herself seemed to stand bending over her child in all the loveliness with which inspiration has arrayed her. This child of affliction, for such without her permission I must call her, had for two years indulged the Christian hope. No ambassador of Christ had been here to lead her within the inclosure of the church—no pious visitant had entered the humble dwelling to impart the bliss of Christian fellowship. But ministering angels had descended, and she had learned of the Father. Resigned to the lot of humanity, and supported by that faith which is "the substance of things hoped for and the evidence of things not seen," she had bid adieu to the world, and was waiting to be called to the abodes of the blessed. The widowed mother too, could plead the promise made to the widow and the fatherless.

Having commended to the Great Shepherd this little group of afflicted secluded beings, and bade them
for ever, and as I silently retraced my steps to
busy scenes of life, I indulged the train o
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pious fair too, who in their sphere of benevolence resemble angels of mercy, will not in their "walks of usefulness" forget the cottage of the poor. The cottage scene will often afford to the benevolent mind a happiness far superior to a visit in the halls of a palace. I love to recur, in my lonely meditations, to the "lodge in the wilderness," and I would rather visit the solitary grave of this departed saint (for she now sleeps beneath the shade of the adjacent forest,) and read her rudely sculptured name, than to gaze upon "the storied urn and animated bust" of the proudest hero.

TWILIGHT.

"Of all the myriad sources of enjoyment which nature unfolds to man, I know few equal to those elicited by a balmy summer sunset. The idea is old, but the reflections it excites are perpetually varying. There is something in this hour, so tender, so holy, so fraught with simple, yet sublime associations, that it belongs rather to heaven than to earth. The curtain that drops down on the physical, also descends on the moral world. The day, with its selfish interests, its common-place
tions, has gone by, and the season of intelligence
ination, of spirituality is dawning. Yes,
the Blandusian fountain of fancy:
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but solemn recollections sweep, in shadowy pomp, across the mind, conjured up by the spells of twilight, as he waves his enchanted wand over the earth."

THE HEAD AND HEART.—The heart of a man is older than his head. The first-born is sensitive, but blind—his younger brother has a cold, but all-comprehensive glance. The blind must consent to be led by the clear sighted if he would avoid falling.

POETRY.

(COMMUNICATED BY REV. JOSEPH BUSLING.)

DOMESTIC HAPPINESS

Is there bliss to be found in these regions below,
Where care forms no arrows envenom'd to throw,
A rose from the wild-briar tree;
Where the mind dwells remote from ambition's extreme,
And peace sheds her soft and munificent beam?
'Tis the Cottage, which stands near some murmuring stream,
With a *sweet peaceful family.*

No honors they court from the lords of mankind,
No pleasures beyond what at home they may find,
A frugal and competent cheer;
No profusion of glittering wealth do they crave,
But life's blooming comforts they constantly have
As the fruit of their toils, which they prudently save,
And with generous simplicity share.

There's a richness of *virtue* ennobles their hearts,
Improved by the graces religion imparts,
And charms that with innocence blend;
The demon of ill from the circle is driven,
And each grateful bosom receives what is given,
With perfect delight, as the bounties of heaven,
Which Providence pleases to send.

Free unrestrain'd *friendship* by all is express'd,
And each with the fondest *benevolence* blest
In mutual *harmony* move;
The parents direct with *affectionate* sway,
And guide their loved charge with the *mildest* display,
And thus glide most happy their seasons away,
A circle of pleasure and love.

When the sweet breathing morn lights its earliest ray,
Add the dew-drops like pearls gem the new rising day,
They *all bow the suppliant knee;*
And then, with an ardour which Heaven doth inspire,
Their *devotions* ascend, and awaked is the lyre,
As if kindled again were the primitive fire,
Which prophets in *vision* did see.

Where *pure unaffected* simplicity's found,
And *kindness* and *social contentment* abound,
With *genuine piety* joined;
In the castle or cot, on the mountain or plain,
True *bliss* doth acquire an undisturbed reign,
And Eden's loved bowers are disclosed again,
In a *cheerful* and *virtuous mind!*

LOOK ALOFT.

I do not remember any thing which has produced so pleasing an impression on my mind, as the little story which is said to have been told by the late Dr. Codman to his friends, of the boy who was about to fall from the rigging, and was saved only by the mate's impressive exclamation.—"Look aloft, you lubber." The story and the application were somewhat in the style of Dr. Franklin, and would not have been unworthy of his fame. The following verses cannot claim the merit of the slightest originality, but their insertion will amply reward the author, if they recall the anecdote which prompted them, or enforce its beautiful morality.

In the tempest of life, when the wave and the gale
Are around and above, if thy footing should fail—
If thine eye should grow dim and thy caution depart—
"Look aloft" and be firm, and be fearless of heart.

If the friend, who embraced in prosperity's glow,
With a smile for each joy and a tear for each wo,
Should betray thee when sorrow like clouds are arrayed,
"Look aloft" to the friendship which never shall fade.

Should the visions which hope spreads in light to thine eye,
Like the tints of the rainbow, brighten to fly,
Then turn, and thro' tears of repentant regret,
"Look aloft" to the sun that is never to set

Should they who are dearest, the son of thy heart—
The wife of thy bosom—in sorrow depart,
"Look aloft" from the darkness and dust of the tomb,
To that soil where "affection is ever in bloom."

And oh! when death comes, in terrors to cast
His fears on the future, his pall on the past,
In that moment of darkness, with hope in thy heart,
And a smile in thine eye," look aloft" and depart!

VIEW OF ROCHESTER WITH A SECTION OF THE AQUEDUCT.

MONTHLY REPOSITORY,

AND LIBRARY OF

Entertaining Knowledge.

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VIEW OF ROCHESTER WITH A SECTION OF THE AQUEDUCT.

THE village of Rochester is situated on the Genesee river, a few miles south from Lake Ontario. In the village are many interesting objects deserving the attention of the stranger and tourist. This village, which for population, extent and business, may soon take rank among our cities, was not settled till about the close of the last war—its progress was not very rapid until about the year 1820, from which period we find it gradually improving until the present day. It now contains a population of 12,000 inhabitants, including the suburbs, if we may so call the environs of a village. The water power of the river, within the distance of two miles, is immense. Within the village the same water is used two or three times over for hydraulic purposes, and a mile below at North Rochester may be used again in the same manner. Situated in the heart of a fine country for the growth of wheat, with great facilities for transport by roads, canals, the river and Lake Ontario, we find one of the most important branches of its business to consist of the manufacture of flour for the markets of New-York and Montreal. There are already 12 or 14 flour mills erected, and others in preparation within the distance we have mentioned, containing in all fifty run of stone.—Some of these buildings are substantial stone structures—particularly that denominated the mammoth Mill, calculated for sixteen run of stone.

The aqueduct which takes the Erie Canal across the Genesee river is deserving of notice, and forms a prominent object of interest to all travellers. It is of hewn stone, containing 11 arches of 50 feet span—its length 800 feet, but a considerable part of each end is hid from view by mills and other buildings erected since its construction. The Rochester High School is a spacious building of stone, 80 by 50 feet, and three stories high, capable of accommodating 600 or 700 scholars. There are some other buildings deserving of notice, especially the Arcade, a noble structure, 100 feet in front and four stores high, with a cupola, from which is a fine prospect of the village. Under its roof are six stores, an extensive boarding house, the post office, printing and exchange offices, the Atheneum, justices' and lawyers' offices, &c. The Atheneum is

very creditable to the place, having a very valuable library, maps the periodicals and newspapers from various parts.

The annexed engraving was designed by G. Boulton, Esq. an intelligent gentleman of Rochester, and presented to Mr. Hart, for the purpose of illustrating his valuable geography, which is used in the High Schools of that village as well as those of this city and elsewhere.

THE ANCIENT AND MODERN HISTORY OF NATIONS.

OF THE PERSIAN MONARCHY.

The Persian monarchy, in the height of its glory, included all India, Assyria, Media, Persia, and the parts about the Euxine and Caspian seas. This monarchy was founded by Cyrus, five hundred and thirty six years before Christ, who, on account of his valour and achievements, was surnamed the Great, and it lasted about two hundred years. During the reign of Cyrus, the Jews were permitted to return to their own land, and were assisted by him in rebuilding their temple. Cyrus and his successors governed according to their own arbitrary will; they were revered by their subjects as gods, none daring to appear before their throne without prostrating themselves on the ground with profound reverence. After Cyrus had reigned with great glory for many years he made war against a people of Scythia, by whom he was defeated and slain, and, it is said, by order of Tomyris, their queen, his head was cut off, and put into a vessel filled with human blood, while at the same time she exclaimed, "Satiate thyself with blood now, of which thou hast been so long insatiable." But Xenophon has asserted that he died happily, and was buried with great magnificence at Babylon.

Cyrus was succeeded by his son Cambyses, who subdued Egypt, and added that country to the Persian monarchy. His reign was short, but it is recorded of him, that to prevent instances of mal-administration, he commanded an unjust judge to be flayed alive, and his skin to be spread over the seat of justice, at the same time promoting the son to the office which his father had proved himself so unworthy of holding.

Smerdis one of the magi or priests, succeeded Cambyses, and pretended to be his brother, but the fraud was soon detected, and he with a considerable number of magi were slain, in commemoration of which an anniversary was long kept, called "the slaughter of the magi."

Darius, the next Persian monarch, one of seven nobles who undertook to depose and destroy the usurper Smerdis, was chosen to the office, in consequence of a resolution agreed on between them, that he whose horse neighed first should succeed to the crown. Darius was twenty-nine years old when he ascended the throne, and he soon distinguished himself by his activity and military prowess. He took and destroyed Babylon, and soon after undertook an expedition into Scythia, and in his way thither conquered Thrace; but in his main object he was unsuccessful, and was obliged to return home covered with shame and disgrace. A war was soon after kindled between Greece and Persia. After various success the Persians were completely defeated, at the celebrated battle of Marathon, by ten thousand Athenians. The Persians in this expedition are said to have lost two hundred thousand fighting men. Darius, not disheartened by this blow, was preparing for another expedition, when he died, in the thirty-sixth year of his reign, and was succeeded by his son,

Xerxes, who to revenge the slaughter made by the Athenians, marched into Greece with an army consisting of more than a million and a half of men; but being vanquished by Themistocles, at the battle of Salamis, he escaped in a small fishing-boat, leaving behind him an army of three hundred thousand men, under the command of Mardonius, which was soon after destroyed at the city of Platæa, by Pausanius, the Spartan general. Xerxes, returning from this expedition, was despised by his people, and was slain by one of his own life-guards. But what high respect and obedience the Persians usually paid to their sovereigns we learn from Herodotus, who informs us, that Xerxes being once in considerable danger by sea, many, at the

king's command, strove who should be the first in leaping overboard to lighten the vessel, and save the prince's life at the expense of their own.

Under Artaxerxes *Longimanus*, so called on account of the unequal length of his hands, the successor to Xerxes, the Grecian cities, situated on the borders of Lesser Asia, obtained their freedom.

Of Xerxes the Second, and Ochus, we have nothing remarkable to mention.

Artaxerxes *Mnemon*, so named from the excellence of his memory, studied the arts of Peace; and, to secure his own power and tranquillity, he excited dissensions among the Grecian states. Artaxerxes had three brothers, of whom Cyrus the elder attempted to seize the government, but, after a bloody battle, was killed; and so desirous was Artaxerxes of the honour of having slain his brother with his own hand, that he put to death two men for saying that they had killed him. The Greeks, who had assisted Cyrus against his brother, though at the distance of six hundred leagues from their own country, made their way through the territories of the enemy; and there is no fact in history more celebrated than this as *the retreat of the ten thousand*. The length of their journey has been calculated to be eleven hundred and fifty-five leagues, which was performed in the space of fifteen months.

Artaxerxes reigned forty-six years, and was succeeded by Ochus, a most cruel tyrant, who beheaded in one day his brothers and near relations, to the number of fourscore. He surpassed all the Persian kings in the indulgence of his passions and in the cruelty of his government; and perished by poison, given to him by his physician, at the instigation of Bagoas. Bagoas was an Egyptian by birth, and had conceived hatred to the king because he had plundered the Egyptian temples, and slain the sacred bull, or god Apis. Not satisfied with the death of the king, he cut the dead body into small pieces, and gave it, thus mangled, to the cats, and of the bones he made handles for swords.

Arses, the youngest son of Ochus, was elevated to the throne, who, in the second year of his reign, was

put to death by the same Bagoas, and was succeeded by,

Darius Codomannus, a prince of mild and generous disposition, of great personal valour, and, with regard to his person, he was esteemed the handsomest man in the Persian empire. He was not, however, able to withstand his fortunate rival Alexander the Great. By him Darius was defeated in three battles. The first of which was the battle of Granicus, where the Persians lost twenty thousand foot and two thousand horse. In this action Alexander himself was first wounded in the head, afterwards in the side, besides having a horse killed from under him. In the second battle, which was fought near Mount Taurus, Darius lost, with his army, his wife, his mother, and his children, and with much difficulty escaped himself: after the third defeat at Arbela he fled to Media, where he was betrayed, and mortally wounded by Bessus, governor of Bactria. Two years after, Bessus was taken and sent to Alexander, by whom he was delivered to the brother of Darius, who cut off his nose and ears, and nailed him to a cross as a mark for the soldiers to shoot at.

Although the Persian monarchs were masters of the whole of Asia, yet they were at all times unsuccessful in their attacks upon the Scythians and Greeks. It had therefore been the policy of the Persians, for a number of years, to promote dissensions among the Grecian states, and occasionally to afford assistance to the weaker against the more powerful. Darius Codomannus despised, or was ignorant of this art, and thereby drew the united strength of Greece upon him; hence all Asia was subdued by the Macedonians, and an end put to the Persian monarchy.

Darius, who had been wounded with a shower of arrows, was left lying alone in a cart, to which the groans of the dying monarch conducted Polystratus, a Macedonian. The king, very near his end, had strength enough to ask for water, which Polystratus readily brought him. After drinking he charged him to return his hearty thanks to Alexander for the kindness he had shown to his wife, mother, and children,

and to acquaint him, that with his last breath he besought the gods to prosper him in all his undertakings, and make him sole monarch of the universe; adding, that he thought it needless to beseech him to punish those traitors who had treated him with such cruelty, as it was the common cause of kings. Then taking Polystratus by the hand, "Give him," said he, "your hand, as I gave you mine, and carry him, in my name, the only pledge I am now able to give of my gratitude and affection." Having uttered these words he immediately expired in the arms of Polystratus. Alexander soon after arrived at the spot, and beholding the body of Darius, burst into tears, bewailing the cruel lot of a prince who, he said, had deserved a better fate. He immediately pulled off his own military cloak, and covered the corpse, and causing it to be embalmed, sent it in a rich and magnificent coffin to be interred with the other Persian monarchs.

CIRCLE OF THE SCIENCES, WITH SUITABLE REFLECTIONS.

ASTRONOMICAL SKETCHES.—NO. V.

The seas cover three-fourths of the surface of the earth; but we are not to conclude that this is an inconvenience to mankind. Rain, which is so essential to the comfort of human life, and without which vegetation could have no existence, must first be raised up in vapours from the sea, by the action of the sun, before it can be formed into clouds, and fall in fruitful showers on the land. If the land occupied three-fourths of the surface of the earth, and the seas only one-fourth, the consequences would be the destruction of all vegetable substances for want of moisture; and the land between the Tropics would be in danger of being burnt by the intense heat of the sun. To prevent this, the great Creator has nicely balanced the land and sea on the surface of the earth; so that the land has only that quantity of moisture which is necessary for the produc-

tion of the various fruits of the earth, &c., and for the comfort and support of the animal creation.

The earth, in its annual revolution round the sun, passes through all the signs of the Zodiac. The sun and earth are always in opposite points of the heavens. When the sun enters Aries or Libra, the days and nights are equal in every part of the world except at the Poles of the earth.

When the sun enters Cancer, on the 21st of June, the South Pole has been destitute of the solar light for three months; nor can the sun shine upon that Pole, until the expiration of three months more. When the sun enters Libra, on the 23d of September, the North Pole loses the light of the sun, and is not revisited by that luminary, until the expiration of six months. So that each Pole has but one day and one night in the year, each day and each night being six months long.

These various and important changes are caused by the annual revolution of the earth round the sun, and the declination of its axis, or the angle which the plane of the Ecliptic makes with the plane of the Equator, which is 23° 28″.

If the axis of the earth were parallel with the axis of its orbit, our days and nights would be always equal. In this arrangement of the axis of the earth and the Ecliptic, we should have no diversity of seasons;—no interchange of winter, spring, summer, and autumn? and these northern parts of the world would be rendered nearly uninhabitable for want of heat and sustenance. The influence of the sun would not be sufficiently powerful to produce vegetation in sufficient abundance to supply our wants; we should know nothing of the delights of a summer's morning or evening; and our fields, gardens, &c., would present to our view little else than empty wastes and solitary and barren places. In the equatorial regions, an excess of heat from the rays of a vertical sun, shining day by day and year after year on the same line, would render them intolerable, and endanger the safety of the world. But from the present arrangement of the planes of the Equator and the Ecliptic, we behold the infinite wis-

dom and goodness of God toward mankind, in placing or balancing the earth in such a position toward the sun, as to produce the various seasons of the year, to vary our days and nights, and to cause these high northern regions to become nearly as delightful, as beautiful, and as fruitful, as any other parts of the earth; while the heat of the sun is so diffused along the tropical regions, as to render them not only inhabitable, but beautiful and fruitful in the extreme.

CABINET OF NATURE.

RIVERS.

The next feature of the earth's surface which may be noticed, is, the rivers with which it is indented in every direction. These are exceedingly numerous, and seem to form as essential a part in the constitution of our globe, as the mountains from which they flow, and as the ocean to which they direct their course. It is reckoned, that in the old continent, there are about 430 rivers, which fall directly into the ocean, or into the Mediterranean, and the Black seas; but in the new continent, there are only about 145 rivers known, which fall directly into the sea. In this enumeration, however, only the great rivers are included, such as the Thames, the Danube, the Wolga, and the Rhone. Beside these, there are many thousands of streams of smaller dimensions, which, rising from the mountains, wind in every direction, till they fall into the large rivers, or are carried into the ocean. The largest rivers in Europe are—the Wolga, which, rising in the northern parts of Russia, runs a course of 1700 miles, till it falls into the Caspian sea—the Danube, whose course is 1300 miles, from the mountains in Switzerland to the Black sea—and the Don, which runs a course of 1200 miles. The greatest rivers in Asia are—the Hoanho, in China, whose course is 2400 miles—the Boorhampooter, the Euphrates, and the Ganges. The longest river in Africa, is the Nile, the course of which is estimated at 2000 miles. In the continent of America,

the rivers appear to be formed on the grandest scale, both as to the length of their course, and the vast body of waters which they pour into the ocean. The Amazons, the largest river in the world, runs a course of above 3000 miles across the continent of South America, till it falls into the Atlantic ocean, where it discharges a body of waters 150 miles in breadth. Next to this is the river St. Lawrence, which is more than 2400 miles from its mouth through the lake of Ontario to the lake Alempigo and the Assiniboils; and the rivers La Plata and Mississippi, each of whose courses is not less than 2000 miles.

When we consider the number and the magnitude of these majestic streams, it is evident, that an enormous mass of water is continually pouring into the ocean, from every direction. From observations which have been made on the river Po, which runs through Lombardy, and waters a tract of land 380 miles long, and 120 broad, it is found, that it moves at the rate of four miles an hour, is 1000 feet broad, and 10 feet in depth, and, consequently, supplies the sea with 5068 millions of cubical feet of water in a day, or a cubical mile in 29 days. On the supposition that the quantity of water which the sea receives from the great rivers in all countries, is proportional to the extent and surface of these countries, it will follow, that the quantity of waters carried to the sea by all the other rivers on the globe, is 1083 times greater than that furnished by the Po (supposing the land, as formerly stated to contain about 49 millions of square miles,) and will supply the ocean with 13,630 cubical miles of water in a year. Now, reckoning the ocean, as formerly, to contain 296 millions of cubical miles of water, this last number divided by the former, will give a quotient of 21,716. Hence it appears, that, were the ocean completely drained of its waters, it would require more than *twenty thousand years** before its caverns could be again com-

* Buffon makes this result to be 812 years, in which he is followed by Goldsmith, and most subsequent writers; but he proceeds on the false assumption, that the ocean covers only half the surface of the globe, and that it contains only 85 millions of square miles, and he estimates the average depth of the ocean to be only 440 yards, or one-fourth of a mile.

pletely filled by all the rivers in the world running into it, at their present rate.

Here two questions will naturally occur—Whence do the rivers receive so constant a supply of waters? and, why has not the ocean long ago overflowed the world? since so prodigious a mass of water is continually flowing into its abyss. This was a difficulty which long puzzled philosophers; but it is now satisfactorily solved, from a consideration of the effects of evaporation. By the heat of the sun, the particles of water are drawn up into the atmosphere, from the surface of the ocean, and float in the air in the form of clouds or vapour. These vapours are carried, by the winds, over the surface of the land, and are again condensed into water on the tops and the sides of mountains, which gliding down into their crevices and caverns, at length breaks out into springs, a number of which meeting in one common valley, becomes a river; and many of these united together, at length form such streams as the Tay, the Thames, the Danube, and the Rhine. That evaporation is sufficient to account for this effect, has been demonstrated by many experiments and calculations. It is found that, from the surface of the Mediterranean Sea, which contains 762,000 square miles, there are drawn up into the air, every day, by evaporation, 5280 millions of tons of water, while the rivers which flow into it yield only 1827 millions of tons, in the same time; so that there is raised in vapour from the Mediterranean nearly *three times* the quantity of water which is poured into it by all its rivers. One third of this falls into the sea before it reaches the land; another part falls on the low lands, for the nourishment of plants; and the other third part is quite sufficient to supply the sources of all the rivers which run into the sea. This is in full conformity to what was long ago stated by an inspired Naturalist: "All the rivers run into the sea, and yet the sea is not full; unto the place from whence the rivers came, thither do they return again;" but, before they regain their former place, they make a circuit over our heads through the regions of the atmosphere.

Such are the varied movements and transformations which are incessantly going on in the rivers, the ocean, and the atmosphere, in order to preserve the balance of nature, and to supply the necessities of the animal and the vegetable tribes; all under the agency and direction of Him who "formed the sea and the dry land." and who has arranged all things in number, weight, and measure, to subserve the purposes of his will.

Rivers serve many important purposes in the economy of our globe. They carry off the redundant waters which fall in rains, or which ooze from the springs, which might otherwise settle into stagnant pools; they supply to the seas the loss of waters occasioned by their daily evaporation; they cool the air, and give it a gentle circulation; they fertilize the countries through which they flow; their waters afford a wholesome drink, and the fishes they contain a delicious food for the nourishment of man; they facilitate commerce, by conveying the productions of nature and art from the inland countries to the sea; they form mechanical powers for driving machinery of different kinds; they enliven and diversify the scenery of the countries through which they pass; and the cataracts which they frequently form among the mountains, present us with scenes the most picturesque and sublime; so that every part of the constitution of nature is rendered subservient both to utility and to pleasure.

EXAMPLES FROM HISTORY.

FRATERNAL LOVE.

What inexpressible delight, when brothers and sisters of one family live together in all the harmony of friendship and good esteem, mutually delighted and charmed with each others' presence and society! Peace dwells in their bosom, and transport beats at their heart. They know how to alleviate each others' troubles and difficulties; they know how to impart and double each others' felicity and pleasure. And if perchance their aged parents live, who have formed them

thus to love, whose early care provided for them this high feast of the most delicate sensations, what increasing raptures do they feel from blessing those parents with this fruit of their care! O, ye happy parents! if I could envy any beings upon earth, it were you, who see your youth renewed in good and worthy children flourishing around you; who see those children amply crowning your days and nights of past solicitude, not only with the most reverential respect to yourselves, but with what you wish still more, if possible, with the firmest and most respectful love to each other; who see those children, with all the kindness of that love you sought to inspire, like olive branches, verdant around you, blessed in you, blessed in each other, blessed in themselves; the providence of God smiling upon them; success and honour attending their steps.

EXAMPLES.

The scriptural examples of Joseph and his brethren we think it necessary to point out in Genesis, chap. 43, 44, 45, 46, and 47, and to remark, that this history is not exceeded in interesting passages by any other, sacred or profane.

Cato, when but a boy, being asked whom he loved best, answered "My brother Cæpas;" and so often as the same question was asked, the same reply was given. In proof of his affection, when he grew to manhood, he never went to supper (says Plutarch) nor out of his house to the market-place, nor into the fields, without him: and when Cæpas died, Cato mourned exceedingly, and erected a tomb of Thracian marble to his memory, which cost him eight talents.

Scylurus, the Scythian, having fourscore sons, desired nothing so much as to bring them up in the love of each other; and, to show them how invincible such a concord would render them, as he lay on his death-bed he called them around him, and giving to each of them a bundle of javelins, bade them try if they could break the bundles. The young men having attempted, and declaring it impracticable, Scylurus untied the bundles

in their presence, broke the javelins one by one with the greatest ease, and from thence took occasion thus to address his children: "Behold, my sons, your strength while linked together in the bands of amity! on the contrary, how weak, and what an easy prey you must be, when separated in your interests by discord and sedition!"

The father of that eminent lawyer Mr. Sergeant Glanville had a good estate, which he intended to settle on his eldest son; but he proving a vicious young man, and there being no hopes of his recovery, he devolved it upon the Sergeant, who was his second son. Upon the father's death, the eldest, finding that what he had before considered as the mere threatenings of an angry old man, were now but too certain, became melancholy, which by degrees wrought in him so great a change, that what his father could not prevail in while he lived, was now effected by the severity of his last will. His brother, observing this, invited him, together with many of his friends, to a feast; where, after other dishes had been served up, he ordered one, which was covered, to be set before his brother, and desired him to uncover it; upon his doing which, the company, no less than himself, were surprised to find it full of writings: and still more, when the Sergeant told them, "that he was now doing what he was sure his father would have done had he lived to see the happy change which they now all saw in his brother; and therefore he freely restored to him the whole estate."

In the year 1585, the Portuguese carracks sailed from Lisbon to Goa, a very rich and flourishing colony of that nation in the East Indies. On board of one of these vessels were no less than 1200 souls, mariners, passengers, priests, and friars. The beginning of the voyage was prosperous; but not many days after, through the perverseness of the pilot, the ship struck on a rock, and instant death began to stare them in the face. In this distress the captain ordered the pinnace to be launched; into which having tossed a small quantity of biscuit, and some boxes of marmalade, he

jumped in himself, with nineteen others, who, with their swords, prevented the coming of any more, lest the boat should sink. Thus scantily equipped, they put off into the great Indian Ocean, without a compass to steer by, or any fresh water but what might happen to fall from the heavens, whose mercy alone could deliver them. At the end of four or five days the captain died with sickness; and they were obliged, to prevent confusion, to elect one of their company to command them. This person proposed to them to draw lots, and cast every fourth man overboard, their small stock of provision being now so far spent as not to be sufficient, at very short allowance, to sustain life above three days longer. To this they agreed; so that there were four to die out of their unhappy number, the captain, a friar, and a carpenter, being exempted by general consent. The lots being cast, three of the first submitted to their fate, after they had confessed and received absolution. The fourth victim was a Portuguese gentleman that had a younger brother in the boat; who, seeing him about to be thrown overboard, most tenderly embraced him, and with tears besought him to let him die in his room; enforcing his arguments by telling him, "that he was a married man, and had a wife and children at Goa, besides the care of three sisters, who absolutely depended upon him for support; whereas himself was single, and his life of no great importance; "he therefore conjured him to suffer him to supply his place, assuring him that he had rather die for him than live without him. The other brother, astonished, and melting with his generosity, replied, "that, since the Divine Providence had appointed him to suffer, it would be wicked and unjust to permit any other to die for him, but especially a brother to whom he was so infinitely obliged." The younger, however, persisting in his refusal, would take no denial, but, throwing himself on his knees, held his brother so fast that the company could not disengage him. Thus they disputed awhile; the elder bidding him be a father to his children, and recommending his wife and sisters to his protection;

but all he could say could not make the younger desist. This was a scene of tenderness that must fill every human breast with pity. At last the constancy of the elder brother yielded to the piety of the other, and suffered the gallant youth to supply his stead; who being cast into the sea, and a good swimmer, soon got to the stern of the pinnace, and laid hold of the rudder with his right hand. This being perceived by one of the sailors, he cut off the hand with his sword. The youth dropping into the sea, presently rose again, and regained his hold with his left hand, which received the same fate by a second blow. Thus dismembered of both hands, he made a shift, notwithstanding, to keep himself above water with his feet, and two stumps, which he held bleeding upwards. This moving spectacle so excited the pity of the whole company, that they cried out, "He is but one man; let us endeavour to save him!" Accordingly he was taken into the boat, where he had his hands bound up as well as the place and circumstances would admit. They then continued rowing all night; and the next morning, when the sun rose (as if Heaven would reward the gallantry and piety of this young man,) they descried land, which proved to be the mountains of Mozambique in Africa, not far from a Portuguese colony: thither they all safe arrived, where they remained until the next ship from Lisbon passed by, and carried them to Goa.

Titus, the Roman Emperor, who was called, for his virtues, "the delight of mankind," bore such a brotherly affection towards Domitian, that though he knew he had spoken irreverently of him, and had solicited the army to rebellion, yet he never treated him with the less love or respect even on that account, nor would suffer others to do so; but called him his partner and successor in the empire; and sometimes, when they were alone together, he besought him not only with earnest entreaties, but with tears, that he would bear the same brotherly love towards him, as he always had and ever should find from him.

Timoleon, the Corinthian, is a noble pattern of fra-

ternal love; for being in a battle with the Argives, and seeing his brother fall down dead with the wounds he had received, he instantly leapt over his dead body, and with his shield protected it from insult and plunder; and though sorely wounded in this generous enterprise, he would not by any means retreat to a place of safety, until he had seen the corpse carried off the field by his friends. How happy for Christians would they imitate this Heathen, and as tenderly screen from abuse and calumny the wounded reputation or dying honour of an absent or defenceless brother!

NATURAL HISTORY.

THE BEAVER.

The Beaver has a flat, broad tail, covered with scales, which serves it as a rudder in the water, and as a cart on land to carry materials for its buildings. The hind feet are webbed, but the fore feet are not, from the necessity of using them as hands. The fore part, in general, resembles a land animal, and the hind part a fish. The teeth are formed like a saw, and are used as such in cutting down the wood with which it builds its hut and keeps the water out of it. The fur, which is of a deep chesnut brown, is the most valuable material used in making hats. And hence the name given to our best kind of hats, *beaver hats*. Its length, from

nose to tail, is about three feet; the tail is eleven inches long, and three broad.

In June and July, beavers form their societies, of two or three hundred, which they continue all the rest of the year. They always assemble by the side of a lake or river, where they take up their abode. The skill of these creatures is very extraordinary; and it may teach us a lesson of humility, when we see a beaver, with only its feet, teeth, and tail, capable of building a hut, as commodious for itself and young, as a cottage can be rendered to a peasant, even with the aid of reason and proper tools.

If they fix their station by a river subject to floods, they build a sort of pier which crosses the stream, so as to form a piece of water; but if they settle near a lake not liable to overflow its banks, they save themselves this trouble. To form this pier, they drive stakes of about five or six feet in length, wattling each row with twigs, and filling up the space between the rows with clay and earth, and other materials, calculated to make it firm. The side next the water is sloped, and the other perpendicular. The bottom is from ten to twelve feet thick, gradually diminishing to the top, which is about two or three feet at most. This pier is generally from eighty to a hundred feet in length. The greatness of the work, considering the architect, is not more wonderful than its firmness and solidity.

The houses are erected near the shore, in the water collected by the piers. They are either round or oval, and are built on piles. The tops being vaulted, the inside resembles an oven, and the outside a dome. Some of the houses have only one floor, and others three. The walls, which are two feet thick, are made of earth, stones, and sticks, and plastered with all the skill of an expert mason. Every house has two openings, one into the water, and the other towards the land. The height is about eight feet. From two to thirty beavers inhabit each dwelling; and in each pond there are from ten to twenty-five houses. They have each a bed of moss; and for their support in winter, ample stores are laid up near each separate cabin. For one tenant

to steal from the magazine belonging to the tenants of another cabin is unknown. The notions of property and honesty are universal. Strangers are not permitted to intrude, but strict friendship prevails among the members of the same society. The approach of danger is announced by the violent striking of the tail against the surface of the water, which extends the alarm to a considerable distance, when some throw themselves into the water, and others retire into their houses, where they are safe from every enemy but man. During the summer time they quit their houses and ramble about from place to place, sleeping under the covert of bushes by the water side.

Were a person unacquainted with the history of beavers, to be shown their dwellings, he would doubtless conclude they were the works of eminent architects who were endowed with reason. But on a nearer examination, we shall perceive, that whatever sagacity appears in their works, yet they act only from instinct. Were they guided by reason, there would be a difference in their buildings, and a gradual advancing towards perfection; but we find they never vary from the rules of their forefathers, and the beavers of the present day build just as beavers did two thousand years ago.

Man, therefore, still stands alone upon earth, the chief and head of this lower world. He only possesses that degree of reason which renders him accountable for his actions unto God his Creator. He only is capable of knowing God as his God, of serving and enjoying him for ever.

INTERESTING AND INSTRUCTIVE EXTRACTS.

MATERNAL INFLUENCE.

The mental fountain is unsealed to the eye of a mother, ere it has chosen a channel, or breathed a murmur. She may tinge with sweetness or bitterness the whole stream of future life. Other teachers have to contend with unhappy combinations of ideas. She rules the simple and plastic elements. Of her, we may

say, she "hath entered into the magazine of snow, and seen the treasures of the hail." In the moral field, she is a privileged labourer. Ere the dews of morning begin to exhale she is there. She breaks up a soil which the root of error, and the thorns of prejudice have not pre-occupied. She plants germs whose fruit is for eternity. While she feels that she is required to educate not merely a virtuous member of society but a Christian, an angel, a servant of the most High, how does so holy a charge quicken piety, by teaching the heart its own insufficiency!

"The soul of her infant is uncovered before her.—She knows that the images which she enshrines in that unoccupied sanctuary must rise before her at the Bar of doom.—Trembling at such tremendous responsibility, she teaches the little being, whose life is her dearest care, of the God who made him; and who can measure the extent of a mother's lessons of piety, unless his hand might remove the veil which divides terrestrial things?

"When I was a little child, said a good man, my mother used to bid me kneel beside her, and place her hand upon my head while she prayed. Ere I was old enough to know her worth, she died, and I was left too much to my own guidance. Like others, I was inclined to evil passions, but often felt myself checked, and as it were, drawn back, by a soft hand upon my head. When a young man I travelled in foreign lands, and was exposed to many temptations. But when I would have yielded, that *same hand was upon my head*, and I was saved. I seemed to feel its pressure as in days of my happy infancy, and sometimes there came with it a voice, in my heart, a voice, that must be obeyed—"O! do not this wickedness, my son, nor sin against thy God."—

"I HAVE SEEN AN END OF ALL PERFECTION."

I have seen a man in the glory of his day and the pride of his strength. He was built like the tall cedar

that lifts its head above the forest trees; like the strong oak that strikes its roots deeply into the earth. He feared no danger—he felt no sickness. His mind was vigorous like his body; he was perplexed at no intricacy, he was daunted at no difficulty; into hidden things he searched, and what was crooked he made plain. He went forth fearlessly upon the face of the mighty deep; he surveyed the nations of the earth; he measured the distance of the stars, and called them by their names; he gloried in the extent of his knowledge, in the vigour of his understanding, and strove to search even into what the Almighty had concealed. And when I looked on him I said, "What a piece of work is man! how noble in reason! how infinite in faculties? in form and moving how express and amiable! in action how like an angel! in apprehension how like a god!"

I returned—his look was no more lofty nor his step proud! his broken frame was like some ruined tower; his hairs were white and scattered; and his eyes gazed vacantly upon what was around him. The vigour of his intellect was wasted, and of all that he had gained by study nothing remained. He feared when there was no danger, and when there was no sorrow he wept. —His memory was decayed and treacherous, and showed him only broken images of the glory that was departed. His house was to him, like a strange land, and his friends were counted as enemies; and he thought himself strong and healthful while his foot tottered on the verge of the grave. He said of his son —he is my brother; of his daughter—I know her not; and inquired what was his own name. And one who supported his steps, and ministered to his many wants, said to him, as I looked on the melancholy scene— "Let thine heart receive instruction, for thou hast seen an end of all earthly perfection."

I have seen a beautiful female treading the first stages of youth, and entering joyfully into the pleasures of life. The glance of her eye was variable and sweet, and on her cheek trembled something like the first blush of the morning; her lips moved, and there

was harmony, when she floated in the dance, her light form like the aspen seemed to move to every breeze.

I returned—but she was not in the dance—I sought her in the gay circle of her companions, but I found her not. Her eyes sparkled not there—the music of her voice was silent—she rejoiced on earth no more. I saw a train, sable and slow paced, who bore slowly to an open grave, what was once animated and beautiful. They paused as they approached, and a voice broke the awful silence :—"Mingle ashes with ashes and dust to its original dust. To the earth whence she was first taken, consign we the body of our sister." They covered her with the damp soil and the cold clods of the valley—and the worm crowded into her silent abode, Yet one sad mourner lingered to cast himself upon the grave, and as he wept he said: "There is no beauty, or grace, or loveliness, that continueth in man : for this is the end of all glory and perfection." I have seen an infant with a fair brow, and a frame like polished ivory. Its limbs were pliant in its sports —it rejoiced and again it wept—but whether its glowing cheek dimpled with smiles, or its blue eye was brilliant with tears, still I said to my heart "It is beautiful." It was like the first pure blossom which some cherished plant has shot forth, whose cup is filled with a dew drop, and whose head reclines upon its parent stem.

I again saw this child when the lamp of reason first dawned in its mind. Its soul was gentle and peaceful —its eye sparkled with joy, as it looked round on this good and pleasant world. It ran swiftly in the ways of knowledge—it bowed its ear to instruction—it stood like a lamp before its teachers. It was not proud or envious, or stubborn, and it had never heard of the vices and vanities of the world. And when I looked upon it, I remembered that our Saviour said :—"Except ye become as little children, ye cannot enter into the kingdom of heaven."

But the scene was changed, and I saw a man whom the world called honourable : and many waited for his smiles. They pointed out the fields that were his, and

talked of the silver and gold that he had gathered: they admired the stateliness of his domes, and extolled the honour of his family. And his heart answered secretly, "By my wisdom have I gotten all this," so he returned no thanks to God, neither did he fear or serve him. And as I passed along I heard the complaints of the labourers who had reaped down the fields, and the cries of the poor whose covering he had taken away—but the sound of feasting and revelry was in his apartments, and the unfed beggar came tottering from his door. But he considered not that the cries of the depressed were continually entering the ears of the Most High. And when I knew that this man was once the teachable child that I had loved—the beautiful infant I had gazed on with delight—I said in my bitterness—"I have seen an end of all perfection,"—and I laid my mouth in the dust.

THE ATONEMENT.

In the wide ranges of the human mind, there is no subject on which we can reflect with more satisfaction and profit than the atonement of the Lord Jesus Christ, and justification through his merits. With wonder we see the unbounded love of the deity; with profound awe and overwhelming astonishment, we behold the Son of God descending from heaven to earth, from thrones, honours, adorations, praise and consummate bliss, to the manger, to severe poverty, to reproaches, to contempt, to persecution, to curses, to the cross, to death, to the grave! Incomprehensible love! Unmeasurable grace! Wondrous era! At his birth the songs of heavenly hosts are heard. His life is fraught with marvellous and miraculous events.—But at the hour of his crucifixion still higher wonders rise. In deep silence his death wraps all nature? His expiring breath rends the temple, shakes the earth's deep foundations, clothes in sable night the noontide sun, makes kings tremble, enemies fear, infidels confess, astonished angels gaze, while the God-like innocent sufferer exclaims, "My God, my God, why hast thou forsaken

me! *To* this hour, the law with its types and shadows, patriarchs and prophets, pay homage and retire. *At* this, Satan, like lightning falls from his usurped throne, and a crimson tide of meritorious sanctifying efficacy gushes forth, and swells a mighty stream flowing back to the first transgression of man, and forward to the end of time, and on every side to the utmost limits of human guilt. *From* his hour, victims cease to bleed, and altars smoke no more. A flood of divine illumination is poured forth upon the benighted world, and life and immortality are brought to light. O may my redeemed soul, in holy rapture, tune her grateful songs aloft, and resound through heaven's wide expanse, redemption in his blood! O may I mend my pace towards my heavenly inheritance, and make this all-sufficient atonement the only foundation of my hopes by a living faith in its divine reality and personal application.

ANECDOTE OF THE REV. JAMES ARMSTRONG.

Some months ago the Rev. Mr. Armstrong preached at Harmony, near the Wabash, when a doctor of that place, a professed Deist or Infidel, called on his associates to accompany him, while he "attacked the Methodist," as he said. At first he asked Mr. A. if he "followed preaching to save souls?" he answered in the affirmative. He then asked Mr. A. "if he ever saw a soul?" "No." "If he ever heard a soul?" "No." "If he ever tasted a soul?" "No." "If he ever smelt a soul?" "No." "If he ever felt a soul?" "Yes, thank God," said Mr. A. "Well," said the doctor, "there are four of the five senses against one, to evidence that there is no soul." Mr. Armstrong then asked the gentleman if he was not a doctor of medicine? and was answered in the affirmative. He then asked the doctor "if he ever saw a pain, "No."—"If he ever heard a pain?" "No." "If he ever tasted a pain?" "No." "If he ever smelt a pain?" "No." "If he ever felt a pain? "Yes." Mr. A. then said, "there are also four senses against one

to evidence that there is no pain, and yet, sir, you know there is pain, and I know there is a soul." The doctor appeared confounded and walked off.

REAL BENEVOLENCE.

The late Archbishop of Bordeaux was remarkable for his tolerance and enlightened benevolence. The following anecdote will not be read without interest. "My lord," said a person to him one day,—"here is a poor woman come to ask charity—what do you wish to do for her?" "How old is she?" "Seventy."—"Is she in great distress?" "She says so."—"She must be relieved; give her twenty-five francs."—"Twenty-five francs! my lord, it is too much, especially as she is a Jewess."—"A Jewess?" "Yes, my lord." "O, that makes a great difference, give her fifty francs, then, and thank her for coming."

GOOD CHARACTER.

A young man who is entering upon life with a fair reputation, feels that he possesses a treasure that is above all price; and he will be likely to guard it from the contamination of evil: he will also be excited to make higher and still higher attainments in excellence. Character is like stock in trade—the more of it a man possesses, the greater are his facilities for making addition to it: or, it is like an accumulating fund, constantly increasing in value, and daily acquiring to itself fresh accessions of stability and worth.

THE THREE TEACHERS.

To my question, how he could, at his age, have mastered so many attainments, his reply was, that with his three teachers, "every thing might be learned, common sense alone excepted, the peculiar and rarest gift of Providence." These three teachers were Necessity, Habit and Time. At his starting in life, Necessity had told him that if he hoped to live, he

must! labour; Habit had turned the labour into an indulgence; and Time gave every man an hour for every thing, unless he chose to yawn it away.

MIRROR OF LIFE.

The following observations on a looking glass, made at an advanced period of life, convey a moral reflection, which, if duly weighed, may prove a salutary warning against indulging those deceitful dreams, which too frequently grow on the mirthful scenes and careless indolence of youth. "this piece of furniture brings before me an epitome of my life. When I first looked on it, this identical article, being then such as it now appears, presented to my view a rosy-faced laughing little boy. A few years passed away, and it reflected the image of a growing heedless youth, full of health, and exhibiting all the animation of joyous hope.—At a subsequent period I again looked on it, and saw a man. Boundless expectation had now been brought down to calm satisfaction. I had no further good to expect; the first throb of exultation was over, but fear and distrust were unknown. More advanced in years, I saw in it one of middle-aged appearance whose aspect was soured by the disappointments and vexations of the world, but yet covered with hope, and elate with conscious integrity. Now this object which originally reflected my infant mirth, gives me to see a picture of declining life, a faded remnant of humanity, and a living record of mournful error."

DR. BLAIR AND THE REV. R. WALKER.

The late Dr. Blair when concluding a public discourse, in which he had descanted with his usual eloquence on the amiability of virtue, gave utterance to the following apostrophe: "O virtue, if thou wert embodied, all men would love thee." His colleague, the Rev. R. Walker, ascended the same pulpit, on a subsequent part of the same sabbath; and addressing the congregation, said, "my reverend friend observed in the morning, that if virtue were embodied all men would love her. Virtue

has been embodied but how was she treated? Did all men love her? No, she was despised, and rejected of men: who after defaming, insulting, and scourging her, led her to Calvary, where they crucified her between two thieves." The effect of this fine passage on the audience was very powerful.

YOUNG GENTLEMEN'S DEPARTMENT.

EARLY REPUTATION.

It is an old proverb that he who aims at the sun, to be sure, will not reach it, but his arrow will fly higher than if he aimed at an object on a level with himself. Just so in the formation of character. Set your standard high, and though you may not reach it, you can hardly fail to rise higher than if you aimed at some inferior excellence. Young men are not, in general, conscious of what they are capable of doing. They do not task their faculties, nor improve their powers, nor attempt as they ought, to rise to superior excellence. They have no high, commanding object at which to aim: but often seem to be passing away life without object and without aim. The consequence is their efforts are feeble; they are not waked up to any thing great or distinguished; and therefore, fail to acquire a character of decided worth.

Intercourse with persons of decided virtue and excellence, is of great importance in the formation of a good character. The power of example is proverbial. We are creatures of imitation, and by a necessary influence, our temper and habits are very much formed on the model of those with whom we familiarly associate. In this view, nothing is of more importance to young men than the choice of their companions. If they select for their associates the intelligent, the virtuous, and the enterprising, great and most happy will be the effects on their own character and habits. With these living, breathing patterns of excellence before them, they can hardly fail to feel a disgust at every thing that is low, unworthy and vicious, and to be in-

spired with a desire to advance in whatever is praiseworthy and good. It is needless to add, the opposite of all this is the certain consequence of intimacy with persons of bad habits and profligate lives.

Young men are, in general, but little aware how much their reputation is affected in the view of the public, by the company they keep. The character of their associates is soon regarded as their own. If they seek the society of the worthy and respectable, it elevates them in the public estimation, as it is an evidence that they respect others. On the contrary, intimacy with persons of bad character, always sinks a young man in the eye of the public. While he, perhaps in intercourse with such persons, thinks but little of the consequences, others are making their remarks; they, learn what his taste is; what sort of company he prefers; and predict on no doubtful ground, what will be the issue to his own principles and character.—There are young men, and those too, who have no mean opinion of themselves, to be intimate with whom would be as much as one's reputation is worth.

ADVICE TO YOUNG MEN.

"Ever carry about with you such a sense of the uncertainty of every thing in this life, and of life itself, as to put nothing off till to-morrow which you can conveniently do to-day. Dilatory persons are frequently exposed to surprise and hurry in every thing that belongs to them. The time is come and they are unprepared. Let the concerns of your soul and your shop, your religion and your business, lie always in such order, as far as possible, that death at a short warning, may be no occasion of a disquieting tumult in your spirit, and that you escape the anguish of a bitter repentance in a dying hour. Farewell."

Phrœimus, a considerable Eastland merchant, happened upon a copy of these advices, about the time when he permitted his son to commence a partnership with him in his trade; he transcribed them with his own hand, and made a present of them to the youth

together with the articles of partnership. Here, young man, said he, is a paper of more worth than these articles. Read it over once a month till it is wrought in your very soul and temper. Walk by these rules and I can trust my estate in your hands. Copy out these counsels in your life and you will make me and yourself easy and happy.

POPULAR AND INSTRUCTIVE TALES.

THE PRETTY APPLE GIRL.

The following article has been handed us for publication, by a gentleman who assures us that the "leading traits" are literally true. It first appeared in the Charleston Courier, and was, we are informed, written by a distinguished clergyman.

Having, with my companion, reached the lower end of Fulton slip, directly opposite the gate where the ferry boats touch, I discovered that the boat had just gone from the wharf, and that we should, in consequence, have to wait until the other arrived. We immediately went a little to the corner of the market house so as to escape the burning afternoon sun. "Surely," said I to my companion, "these poor women seated along the pavement, can scarcely make a living by selling a few apples and pears, and other little trifles which they appear to have in their possession." "A living, my dear sir; depend upon it, they live more comfortably than many of the young girls who would not appear in the streets without their flowered muslin dresses and their parasols. Do you observe," said he, "that young girl." "Yes," replied I; she is tolerably pretty; she has got black eyes, cheeks as rosy as the apples she sells, and fine auburn hair that many a fine lady would give a thousand dollars for." "Take my word for it," said my companion, "she'd rather sell her apples at a penny a piece than her hair for any money." "I should conceive," said I, "that her hair could be of very little use to a girl who appears by her dress to be destitute of the great passion of her sex: I mean personal vanity. Look at her drapery; I should suppose she had picked

it up among the rags which had been ejected by a disconsolate manager from the wardrobe of some country theatre." "That is thrift," said my companion; "sheer thrift. That girl, notwithstanding her apparent miserable situation, is sensible, pretty, (when dressed,) and, I have every reason to believe, perfectly happy and content with her situation. From morning to night she sits at her apple table all the week, and when not engaged in selling her articles, you will always see her either knitting a stocking, or sewing a piece of linen. Her time is completely improved. She makes about two hundred dollars a year by her weekly labours, and with this little sum supports a mother and several young sisters, who, from their youthful age, are nearly helpless. You observed," continued he, that the young girl was rather pretty when you abstracted your attention from her picturesque drapery. But if you saw her on a Sunday, dressed in a plain jaconet frock, with a blue silk bonnet and a little fancy moss rose in it, as I have seen her at church in the morning when she presided over a class of young girls, committed to her for their instruction, you would soon give her personal appearance that justice which it deserves." "What," said I, "is she an instructress at one of the Sunday Schools?" "She is," replied my companion. "On Sunday morning," continued he, "she lays aside the habiliments of the apple girl, and decorating her person in the manner I have described, she trips away to one of the churches in —— street, about an hour before the bells commence ringing for divine service. Then pulling off her blue bonnet, and blowing the dust from the fancy rose which adorns it, she lays it down at the corner of one of the pews in the gallery.

"She then goes to about a dozen of little girls, dressed in clean frocks, and salutes them all in the manner which her feelings prompt.—They collect about her in a group and strive who shall have the first kiss. Innocence, youth, and female feeling blend together in such salutations, and the sanctity of the place only adds the colouring of piety to the pure emotion. Distributing them in proper order, she assumes a little willow, which

has been adopted as her rod of command, but which is more appropriated to give force and understanding to her gestures than for any purpose of enforcing orders or awaking dulness. She opens her books and teaches the little innocents psalms, hymns and different parts of scripture. In this manner she continues her labour, until the church bells have rung in, and the congregation are coming into the body of the church. She closes then, and the little apple girl, with her youthful pupils, remain in the church and join in the service of Him, who desired little children to come unto him, and who, placing them upon his knees, blessed them as an example to all succeeding generations."

"Why, my dear sir," said I, as he closed his relation, "what you have been telling me must be a novel—is it not a fancy sketch?" My companion assures me that the leading traits were absolute facts. "Possibly," said he, "I have made the apple girl prettier, and the little children more affectionate than they might appear at all times, to a stranger. But you may depend upon it that the actual truth, if we could contemplate it in its most secret recesses, is frequently far beyond the brightest picture of the imagination. It is perhaps easy to those who are masters of high-sounding words to give a tolerable description of outward show and pompous circumstances, but few have that delicacy of mental vision which pierces the inmost chambers of human feeling. My sketch is far short of that, I am persuaded."

PERFECTION.

The last best, fruit which comes to late perfection even in the kindliest soul, is—tenderness towards the hard, forbearance towards the unforbearing, warmth of heart towards the cold, philanthropy towards the misanthrope.

POVERTY.

One solitary philosopher may be great, virtuous and happy, in the depth of poverty, but not a whole people.

POETRY.

LINES

Written after witnessing the death of an endeared young friend.

BY REV. HUGH HUTTON.

There played a smile on the pale young face,
Where the hand of death was stealing;
And her bright eye gazed on vacant space,
As if heaven were its bliss revealing.

And I heard her tongue speak an angel's name,
To welcome his peaceful greeting;
While her cheek was flushed with joy's high flame,
But the pulse more faintly was beating.

I beheld that loved one sink to rest,
Like a wearied seraph sleeping;
And hers is the sleep of the pure and blest,
Whence she'll wake without pain or weeping.

I look'd on the mourning friends around—
Their tears were not those of anguish;
But their voices whispered a grateful sound,
When they saw her no longer languish.

And I listened to hear a parent's tongue,
Speak words of pious trusting;
O'er the grave of a child, so pure, so young,
Faith beamed, though the heart was bursting.

Oh, yes! there's a world more sure, more bright,
Than this valley of pain and sorrow,
Where again we shall meet in eternal light
When we wake on the glorious morrow.

THOU HAST GONE FROM ME, MY SISTER.

"Thou hast gone from me," my sister,
Thy voice no more I hear,
Thou has left our kindred circle,
A brighter home to cheer.

Still as I wander silently,
Beside our lone blue stream,
Thy form seems present with me,
In fancy's pleasing dream.

And memory brings the happy hours,
  We passed in days long gone,
When life was bright with opening flowers
  Without one wounding thorn.

But ah, the thornless flowers soon fade,
  Their leaves are round me strown,
Thy footsteps too, far off have strayed
  And I am left alone.

Whose smile shall now light up the gloom,
  That must gather round my brow,
Should pale disease with withering hand,
  Her venomed arrow throw.

Though many friends are round me,
  Who love my joys to share,
And mingle smiles of pleasantry,
  With spirits light as air—

Yet still my heart is lonely,
  When adverse storms arise,
For such bright smiles are only
  Like stars in cloudless skies.

But thine the clouds dispersing,
  Shine brighter 'mid the gloom,
While of *high hopes* conversing
  And scenes beyond the tomb.

These blissful hopes still cheer me,
  And still I hear thee say,
Press onward, soon I'll meet thee
  Freed from this suffering clay.—

Where thornless flowers for ever bloom
  And sorrows flee away,
Where parting hours can never come,
  Through heaven's unending day.

HANNAH.

New-Jersey, Oct. 1, 1830.

UNCLOUDED HOURS.

Lines addressed to a friend who envied the author's perpetual high spirits.

Oh do not suppose that my hours
  Are always unclouded and gay;
Or that thorns never mix with the flowers
  That fortune has strewed in my way:
When seen by the cold and unfeeling
  We smile through the sorrows we feel;
But smiles are deceitful—concealing
  The wounds which they never can heal.

Our moments of mirth may be many,
And hope half our sorrows beguile,
But, believe me, there cannot be any
Whose features wear ever a smile.
The heart may be sad and repining,
Though cheerfulness brightens the scene,
As a goblet with gems may be shining
Though bitter the potion within.

A glittering volume may cover
A story of sorrow and wo;
And night's gayest meteors may hover,
Where dangers lie lurking below;
Thus oft in the sunshine of gladness
The cheek and the eye may be drest,
Whilst the clouds of dejection and sadness
In secret o'ershadow the breast.

HENRY KIRKE WHITE.*

"Fifty years hence, and who will hear of Henry? Oh none:——"
H. K. White.

No, Henry, no! thy name shall live,
While nature to her sons doth give
A spark of that pure burning flame
That gained to thee a poet's name,
Or sympathy hath one warm tear,
To shed on dying Genius' bier.

Shall worth like thine neglected lie,
And Fame her greenest bay deny?
Shall science never stoop to see
Her brightest hopes o'erthrown in thee?
And Virtue's incense cease to burn,
Extinguished on her Henry's urn?

No! bard immortal! Henry's name
Hath gained an everlasting fame;
And Learning's loveliest laurels now,
Are wreathing on thy faded brow;
And long, above thy early tomb,
Shall flowers of sweetest fragrance bloom.

With tears of truest sorrow yet,
Thy hallowed memory is wet;
And time's full years may roll away,
And life renew an endless day,
Ere virtue cease to love thy name,
Or Learning to repeat thy fame.

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* In our last an error occurred in the obituary notice of the amiable and lamented White.—He died in October 1806, not 1830, as incorrectly printed.

Yes, on eternity's bright shore,
Where earth shall hinder thee no more,
Thou, sainted bard, shall strike the lyre,
Enkindling with angelic fire,
While kindred seraphs list the song
Poured on celestial plains along.

Why should the envious angel death,
Blast with his chill and withering breath,
Such hopes as were by thee inspired,
When with immortal genius fired,
Thy mighty mind grasped science deep,
And touched the harp with plaintive sweep!

Was there no spot for thee to toil,
And pour compassion's healing oil,
And cheer, with bland religion's smile,
The broken spirit's woes awhile?
No dwelling for thee here, that Heaven
Should claim the boon so lately given?

A mind so pure, so great as thine,
Was fit in holier climes to shine;
Thy home was in a purer sphere;
We drop not one repining tear;
But joy that thou hast left the pains
That bought for us, thy dear "Remains."

M.

THE HOLY SEPULCHRE.

How sweet, in the musings of faith, to repair
To the garden where Mary delighted to rove;
To sit by the tomb, where she breath'd her fond prayer,
And paid the sad tribute of sorrow and love;
To see the bright beam which disperses her fear,
As the Lord of her soul, breaks the bars of his prison,
And the voice of the angel salutes her glad ear—
The Lord is a captive no more; "He is risen!"

O! Saviour, as oft as our footsteps we bend
In penitent sadness to weep at thy grave,
On the wings of thy greatness in pity descend,
Be ready to comfort, be "mighty to save."
We shrink not from scenes of desertion and wo,
If there we may meet with the Lord of our love;
Contented with Mary to sorrow below,
If, with her, we may drink of thy fountains above.

EDYSTONE LIGHT-HOUSE AND SHIP IN DISTRESS.

MONTHLY REPOSITORY,

AND LIBRARY OF

Entertaining Knowledge.

VOL. I. NOVEMBER, 1830. No. 6.

EDYSTONE LIGHT-HOUSE.

Light-Houses were known to the ancients. The light-house, or Pharos of Alexandria, built in the island of Pharos, at the mouth of the Nile, was much celebrated, and gave its name to all buildings erected for similar objects. This Pharos was a magnificent tower, consisting of several stories and galleries, with a lantern at the top, in which a light was kept continually burning, and might, it is said, be seen at the distance of a hundred miles. It was accounted one of the seven wonders of the world, and was erected by Sostrates, a famous architect of Cnidos, though some say it was built by his father, Deiphanes. The several stories were adorned with columns, balustrades, and galleries of the finest marble and workmanship. Some of the historians add, that the architect fixed looking-glasses against the highest galleries, which reflected the distant vessels as they sailed along. The Pharos cost Ptolemy Philadelphus 800 talents.

The Edystone Light-house, of which we give a view as it appears in a storm, is situated southwest from the middle of Plymouth Sound, and about fourteen miles from Plymouth. The uncommon tumult of the sea in this place is occasioned by a peculiarity in the rocks. As they all slope and point to the north-east, they spread their inclined sides, of course, to the swelling tides and storms of the Atlantic. And as they continue in this shelving direction many fathoms below the surface of the sea, they occasion that violent working of the water, which the seamen call a *ground swell.* So that

after a storm, when the surface of the sea around is perfectly smooth, the swells and agitation about these rocks are dangerous. From these continual eddies the Edystone derives its name.

The first light-house of any consequence, erected on this rock, was undertaken by a person of the name of Winstanley, in the reign of King William. He had fixed it to the rock by twelve massy bars of iron, which were let down deep into the body of the stone. It was generally indeed thought well founded; and the architect himself was so convinced of its stability, that he would often say, he wished for nothing more than to be shut up in it during a violent storm. He at length had his wish; for he happened to be in it at the time of that memorable storm on the 26th of November, 1703. As the violence, however, of the tempest came on, the terrified architect began to doubt the firmness of his work: it trembled in the blast, and shook in every joint. In vain he made what signals of distress he could invent, to bring a boat from the shore. The terrors of the storm were such, that the boldest vessel durst not face it. How long he continued in this melancholy distress is unknown; but in the morning no appearance of the light-house was left. It and all its contents, during that terrible night, were swept into the sea. This catastrophe furnished Mr. Gay with the following simile in his Trivia, which was written a few years after the event:

> "So when fam'd Edyston's far shooting ray,
> That led the sailor through the stormy way,
> Was from its rocky roots by billows torn,
> And the high turret in the whirlwind born,
> Fleets bulg'd their sides against the craggy land,
> And pitchy ruins blacken'd all the strand."

A light-house was again constructed on this rock before the conclusion of Queen Anne's reign. It was undertaken by one Rudyard, who built it also of wood, but having seen his predecessor's errors, avoided them. In short, every precaution was taken to secure it against the fury of the two elements of wind and water, which had destroyed the last. But it fell by a third.

Late one night, in the year 1755, it was observed from the shore to be on fire. Its upper works having been constructed of light timber, probably could not bear the heat. It happened fortunately that Admiral West rode with a fleet at that time in the Sound; and being so near the spot, he immediately manned two or three swift boats. Other boats put off from the shore; but though it was not stormy, it was impossible to land. In the mean time the fire having descended to the lower parts of the building, had driven the poor inhabitants upon the skirts of the rock; where they were sitting disconsolate, when assistance arrived.

The next light-house, which is the present one, was built by Mr. Smeaton, and is entirely of stone, in a circular form. Its foundations are let into a socket in the rock on which it stands, and of which it almost makes a part; for the stones are all united with the rock, and with each other, by massy dovetails. The door of this ingenious piece of architecture is only the size of a ship's gun-port; and the windows are mere loopholes, denying light to exclude wind. When the tide swells above the foundation of the building, the lighthouse makes the odd appearance of a structure emerging from the waves. But sometimes a wave rises above the very top of it, and circling round, the whole looks like a column of water, till it breaks into foam and subsides.

THE POWER OF POETRY.

We may animate the canvass with the features of one we love—we may cast upon the changeless brow, the calm sunshine of her gentle nature; we may elicit from the expressive eye, the speechless tenderness of a confiding affection; we may curl around the lip the smiling pledges of reciprocal fondness; we may spread behind her glowing cheek, the richness of her flowing tresses; we may cast around the symmetry of her form, the waving softness of her graceful drapery; and we may give her the air in which romantic devotion ever

beholds the angels of its vows. We may represent, near at hand, the favorite glen in which we strayed—the moonlit arbour, in which we sung—the silvery lake on which we sailed. We may look on this representation of life and nature, and deem it reality. We may gaze till bewildered sense reels in rapture.—But look again, the floating vision becomes more calm, the associations less vivid, the tumult in our breast subsides.—But look again, here and there a new shade may be developed; here and there an unfamiliar expression be caught. But look again, it is what you have seen before; it is changeless—it is cold tapestry!

But give this glowing subject to the poet, surrender it to the magic of his genius. The changeless object lives; the motionless object moves; the silent object speaks. The heart where quenched existence had its grave; is kindled and renovated; life gleams through its shroud as the warm sun through its light vesture of clouds. The fount of feeling is stirred, and its current comes forth, fresh as the overflowing of spring, when it melts away the icy fetters of winter. The features lose their fixed expression, and are radiant with a bright train of passing thoughts, and glad imaginings. Hope is there, mingling its colors with the shade of doubt; confidence is there, banishing distrust; affection is there, lighting up adversity. Every feature lives, every look tells. We not only see the glen, but here the soft whispers of the breeze, the mirthful voice of the brook; we not only see the arbour, but hear the echoes, waking from their slumbers, repeat the favorite strain; we not only see the lake, but hear the light drip of the suspended oar, and the soft murmur of the breaking wave. Every object is animated, and lives before us in palpable reality. We may gaze, and turn away, and gaze again, but new images, new sounds, new feelings, and new associations, crowd upon us like stars on the stedfast vision of the astronomer.

Or we may animate the marble, with the features of the man we venerate. We may render these features radiant with the noble qualities of his mind and heart. We may make the ruling passion brightly apparent

upon the majestic brow. We may give the countenance that peculiar cast which calls up the lofty, the tender recollection. And we may imagine the departed sage, still existent, and before us, in undecaying strength and beauty. But just lay our hand on this faultless resemblance; the clay of the grave is not colder; it is death with its icy chill!

But commit this departed saint to the gifted spirit of the poet. The veil of the grave is rent; the silent sleeper called up from the couch of corruption, and in the garments of immortality. His actions are grouped around him, in the brightness of their first appearance; his feelings recalled in the freshness of their innocency; and his secret motives are revealed in their innocency with which they were conceived; and his generous purposes, which perished in the bud, revived, and expanded into fragrant life. You see the whole man, not in cold marble, not in awful abstraction from his fellow beings; but within the warm precincts of friendship, love, and veneration, invested with the sympathies and attributes of real existence.

THE CABINET OF NATURE.

ATMOSPHERE.

The atmosphere is one of the most essential appendanges to the globe we inhabit, and exhibits a most striking scene of Divine skill and omnipotence. The term *atmosphere* is applied to the whole mass of fluids, consisting of air, vapours, electric fluid, and other matters, which surrounds the earth to a certain height. This mass of fluid matter gravitates to the earth, revolves with it in its diurnal rotation, and is carried along with it in its course round the sun every year. It has been computed to extend about 45 miles above the earth's surface, and it presses on the earth with a force proportioned to its height and density. From experiments made by the barometer, it has been ascertained, that it presses with a weight of about 15 pounds on

every square inch of the earth's surface; and, therefore, its pressure on the body of a middle-sized man, is equal to about 32,000 lbs. or 14 tons avoirdupois, a pressure which would be insupportable, and even fatal, were it not equal in every part, and counterbalanced by the spring of the air within us. The pressure of the whole atmosphere upon the earth, is computed to be equivalent to that of a globe of lead 60 miles in diameter, or about 5,000,000,000,000,000 tons; that is, the whole mass of air which surrounds the globe, compresses the earth with a force or power equal to that of *five thousand millions of millions of tons.** This amazing pressure is, however, essentially necessary for the preservation of the present constitution of our globe, and of the animated beings which dwell on its surface. It prevents the heat of the sun from converting water, and all other fluids on the face of the earth, into vapour; and preserves the vessels of all organized beings in due tone and vigour. Were the atmospherical pressure entirely removed, the elastic fluids contained in the finer vessels of men and other animals, would inevitably burst them, and life would become extinct; and most of the substances on the face of the earth, particularly liquids, would be dissipated into vapour.

The atmosphere is now ascertained to be a com-

* The pressure of the atmosphere is most strikingly illustrated by means of the air-pump. But as few persons, comparatively, possess this instrument, the following experiment, which any person may perform at pleasure, is sufficiently convincing on this point. Take a common wine glass, and fill it with water; apply a piece of paper over the mouth of the glass; press the paper to the rim of the glass with the palm of the hand; turn the glass upside down; withdraw the hand from the paper, and the water will be supported by the pressure of the atmosphere. That it is the atmospherical pressure, and not the paper, which supports the water, is evident; for the paper, instead of being pressed down by the weight of the water, is pressed upward by the pressure of the atmosphere, and appears concave, or hollow in the middle. If the flame of a candle be applied to the paper, it may be held for an indefinite length of time, close to the paper, without setting fire to it. The same fact is proved by the following experiment;—Take a glass tube, of any length, and of a narrow bore; put one end of it in a basin of water; apply the mouth to the other end, and draw out the air by suction; the water will immediately rise towards the top of the tube; and if the finger or thumb be applied to the top of the tube, to prevent the admission of air, and the tube removed from the basin of water, the water in the tube will be supported by the pressure of the atmosphere on the lower end. Again—Take a wine glass, and burn a small bit of paper in it; and, while the paper is burning, press the palm of the hand upon the mouth of the glass, and it will adhere to the hand with considerable force. In this case the pressure of the atmosphere will be *sensibly* felt; for it will sometimes require a considerable force to detach the glass from the hand.

pound substance, formed of two very different ingredients, termed *oxygen*, and *nitrogen gas*. Of 100 measures of atmospheric air, 21 are oxygen, and 79 nitrogen. The one, namely, oxygen, is the principle of combustion, and the vehicle of heat, and is absolutely necessary for the support of animal life, and is the most powerful and energetic agent in nature. The other, is altogether incapable of supporting either flame or animal life. Were we to breathe oxygen air, without any mixture or alloy, our animal spirits would be raised, and the fluids in our bodies would circulate with greater rapidity; but we should soon infallibly perish by the rapid and unnatural accumulation of heat in the animal frame. If the nitrogen were extracted from the air, and the whole atmosphere contained nothing but oxygen, or vital air, combustion would not proceed in that gradual manner which it now does, but with the most dreadful and irresistible rapidity: not only wood and coals, and other substances now used for fuel, but even stones, iron, and other metalic substances, would blaze with a rapidity which would carry destruction through the whole expanse of nature. If even the proportions of the two airs were materially altered, a variety of pernicious effects would instantly be produced. If the oxygen were less in quantity than it now is, fire would lose its strength, candles would not diffuse a sufficient light, and animals would perform their vital functions with the utmost difficulty and pain. On the other hand, were the nitrogen diminished, and the oxygen increased, the air taken in by respiration would be more stimulant, and the circulation of the animal fluids would become accelerated; but the tone of the vessels thus stimulated to increased action, would be destroyed, by too great an excitement, and the body would inevitably waste and decay. Again, were the oxygen completely extracted from the atmosphere, and nothing but nitrogen remained, fire and flame would be extinguished, and instant destruction would be carried throughout all the departments of vegetable and animated nature. For a lighted taper will not burn for a single moment in nitrogen gas, and if an animal be plunged into it, it is instantly suffocated.

Again, not only the extraction of any one of the component parts of the atmosphere, or the alteration of their respective proportions, but even the slightest increase or diminution of their *specific gravity*, would be attended with the most disastrous effects. The nitrogen is found to be a little lighter than common air, which enables it to rise towards the higher regions of the atmosphere. In breathing, the air which is evolved from the lungs, at every expiration, consists chiefly of nitrogen, which is entirely unfit to be breathed again, and therefore rises above our heads before the next inspiration. Now, had nitrogen, instead of being a little lighter, been a slight degree heavier than common air, or of the same specific gravity, it would have accumulated on the surface of the earth, and particularly in our apartments, to such a degree as to have produced diseases, pestilence, and death, in rapid succession. But being a little lighter than the surrounding air, it flies upwards, and we never breathe it again, till it enter into new and salutary combinations. Such is the benevolent skill which the Author of Nature has displayed, for promoting the comfort and preservation "of every thing that lives."*

Farther, *were the air coloured*, or were its particles much larger than they are, we could never obtain a distinct view of any other object. The exhalations which rise from the earth, being rendered visible, would disfigure the rich landscape of the universe, and render life disagreeable. But the Almighty, by rendering the air invisible, has enabled us not only to take a delightful

* The necessity of atmospherical air for the support of life, was strikingly exemplified in the fate of the unhappy men who died in the *Black-hole* of Calcutta. On the 20th of June, 1756, about eight o'clock in the evening, 146 men were forced, at the point of the bayonet, into a dungeon only 18 feet square. They had been but a few minutes confined in this infernal prison, before every one fell into a perspiration so profuse, that no idea can be formed of it. This brought on a raging thirst, the most difficult respiration, and an outrageous delirium. Such was the horror of their situation, that every insult that could be devised against the guard without, and all the opprobrious names that the Viceroy and his officers could be loaded with, were repeated, to provoke the guard to fire upon them, and terminate their sufferings. Before eleven o'clock the same evening, one third of the men were dead; and before six next morning, only 23 came out alive, but most of them in a high putrid fever. All these dreadful effects were occasioned by the want of atmospheric air, and by their breathing a superabundant quantity of the nitrogen emitted from their lungs.

and distinct survey of the objects that surround us, but has veiled from our view the gross humours incessantly perspired from animal bodies, the filth exhaled from kitchens, streets, and sewers, and every other object that would excite disgust. Again, *were the different portions of the atmosphere completely stationary*, and not susceptible of agitation, all nature would soon be thrown into confusion. The vapours which are exhaled from the sea by the heat of the sun would be suspended, and remain for ever fixed over those places from whence they arose. For want of this agitation of the air, which now scatters and disperses the clouds over every region, the sun would constantly scorch some districts, and be for ever hid from others; the balance of nature would be destroyed; navigation would be useless, and we could no longer enjoy the productions of different climates. In fine, were the atmosphere capable of being frozen, or converted into a solid mass, as all other fluids are, (and we know no reason why it should not be subject to congelation, but the will of the Creator,) the lives of every animal in the air, the waters, and the earth, would, in a few moments, be completely extinguished. But the admirable adjustment of every circumstance, in relation to this useful element, produces all the beneficial effects which we now experience, and strikingly demonstrates, that the intelligent Contriver of all things is "wonderful in counsel, and excellent in working."

From the instances now stated, we may plainly perceive, that if the Almighty had not a particular regard to the happiness of his intelligent offspring, and to the comfort of every animated existence; or, if he wished to inflict summary punishment on a wicked world, he could easily effect, by a very slight change in the constitution of the atmosphere, the entire destruction of the human race, and the entire conflagration of the great globe they inhabit,—throughout all its elementary regions. He has only to extract one of its constituent parts, and the grand catastrophe is at once accomplished. With what a striking propriety and emphasis, then, do the inspired writers declare, that, "In Him

we live, and move, and have our being;" and that "in His hand is the soul of every living thing, and the breath of all mankind!"

A great variety of other admirable properties is possessed by the atmosphere, of which we shall briefly notice only the following:—it is the vehicle of *smells*, by which we become acquainted with the qualities of the food which is set before us, and learn to avoid those places which are damp, unwholesome, and dangerous. It is the medium of *sounds*, by means of which knowledge is conveyed to our minds. Its undulations, like so many couriers, run for ever backwards and forwards, to convey our thoughts to others, and theirs to us; and to bring news of transactions which frequently occur at a considerable distance. A few strokes on a large bell, through the ministration of the air, will convey signals of distress, or of joy, in a quarter of a minute, to the population of a city containing a hundred thousand inhabitants. So that the air may be considered as a conveyer of the thoughts of mankind, which are the cement of society. It transmits to our ears all the harmonies of music, and expresses every passion of the soul: it swells the notes of the nightingale, and distributes alike to every ear the pleasures which arise from the harmonious sounds of a concert. It produces the blue colour of the sky, and is the cause of the morning and the evening twilight, by its property of bending the rays of light, and reflecting them in all directions. It forms an essential requisite for carrying on all the processes of the vegetable kingdom, and serves for the production of clouds, rain, and dew, which nourish and fertilize the earth. In short, it would be impossible to enumerate all the advantages we derive from this noble appendage to our world. Were the earth divested of its atmosphere, or were only two or three of its properties changed or destroyed, it would be left altogether unfit for the habitation of sentient beings. Were it divested of its undulating quality, we should be deprived of all the advantages of speech and conversation—of all the melody of the feathered songsters, and of all the pleasures of music: and, like the deaf

and dumb, we could have no power of communicating our thoughts but by visible signs. Were it deprived of its reflective powers, the sun would appear in one part of the sky of a dazzling brightness, while all around would appear as dark as midnight, and the stars would be visible at noon-day. Were it deprived of its refractive powers, instead of the gradual approach of the day and the night which we now experience, at sun-rise, we should be transported all at once from midnight darkness to the splendor of noon-day: and, at sun-set, should make a sudden transition from the splendors of day to all the horrors of midnight, which would bewilder the traveller in his journey, and strike all creation with amazement. In fine, were the oxygen of the atmosphere completely extracted, destruction would seize on all the tribes of the living world, throughout every region of earth, air, and sea.

Omitting, at present, the consideration of an indefinite variety of other particulars, which suggest themselves on this subject, I shall just notice one circumstance more, which has a relation both to the waters and to the atmosphere. It is a well known law of nature, that all bodies are expanded by heat, and contracted by cold. There is only one exception to this law which exists in the economy of our globe, and that is, *the expansion of water in the act of freezing.* While the parts of every other body are reduced in bulk, and their specific gravity increased by the application of cold; water, on the contrary, when congealed into ice, is increased in bulk, and becomes of a less specific gravity than the surrounding water, and, therefore, swims upon its surface. Now, had the case been otherwise; had water, when deprived of a portion of its heat, followed the general law of nature, and like all other bodies, become specifically heavier than it was before, the present constitution of nature would have been materially deranged, and many of our present comforts, and even our very existence, would have been endangered. At whatever time the temperature of the atmosphere became reduced to 32° of the common thermometer, or to what is called the freezing

point, the water on the surface of our rivers and lakes would have been converted into a layer of ice; this layer would have sunk to the bottom as it froze; another layer of ice would have been immediately produced, which would also have sunk to the former layer, and so on in succession, till, in the course of time, all our rivers, from the surface to the bottom, and every other portion of water, capable of being frozen, would have been converted into solid masses of ice, which all the heat of summer could never have melted. We should have been deprived of most of the advantages we now derive from the liquid element, and, in a short time, the face of nature would have been transformed into a frozen chaos. But, in the existing constitution of things, all such dismal effects are prevented, in consequence of the Creator having subjected the waters to a law contrary to that of other fluids, by means of which the frozen water swims upon the surface, and preserves the cold from penetrating to any great depth in the subjacent fluid; and when the heat of the atmosphere is increased, it is exposed to its genial influence, and is quickly changed into its former liquid state. How admirably, then, does this *exception* to the general law of nature display the infinite intelligence of the great Contriver of all things, and his providential care for the comfort of his creatures, when he arranged and established the economy of nature!

CIRCLE OF THE SCIENCES, WITH SUITABLE REFLECTIONS.

ASTRONOMICAL SKETCHES.—NO. VI.

The velocity of the earth, like that of all the other planets, varies in different parts of its orbit; being most rapid about the 1st of January, and slowest about the 1st of July. The cause of this increase and decrease in the motion of the Earth is the situation of the Sun in respect to the earth's orbit. The orbit of the Earth is eliptical, and the Sun is placed in the lower focus of this orbit, which is 1,377,000 miles from the middle point of the longer axis; consequently, the earth comes

twice as much, or 2,754,000 miles, nearer the Sun in winter than in summer.

As the Earth passes over a greater portion of the ecliptic in a given time in winter than in summer, there is one fact connected with this circumstance which we ought not to overlook, viz., that our winters are shorter and our summers longer, by six or seven days,* than they would be, if the motion of the Earth in the ecliptic was equal throughout the year.

The north pole of the Earth appears to be always directed towards the north pole, or the same point of the heavens; but this is not correct in fact. The Earth's axis preserves its parallelism from year to year, with the exception of a very slight and imperceptible variation in that time; consequently, the axis of the earth describes a circle in the heavens, the diameter of which is equal to the diameter of the Earth's orbit, or 190 millions of miles. But this amazing extent is only a mere point in comparison with our distance from the fixed stars.

The certainty of all astronomical calculations depends on the parallelism of the axis of the Earth and the equal or uniform motion of its diurnal revolution. And the important science of navigation greatly depends on the same circumstances.

PHILIP GARRETT.

THE ANCIENT AND MODERN HISTORY OF NATIONS

OF THE GRECIAN MONARCHY.

ANCIENT GREECE was bounded on the east by the Ægian sea, now called the Archipelago; on the south by the Cretan or Candian sea; on the west by the Ionian sea; and on the north by Illyria and Thrace. This country, though limited within such narrow bounds, gave birth to all the arts of war and peace, produced the greatest generals, philosophers, poets, painters, architects, and statuaries that the world ever knew:

* Six days in the leap year, and seven in the common year.

she overcame the most powerful monarchs, and dispersed the largest armies that were ever brought into the field, and at length became the instructer of all mankind.

In the early periods of the world kingdoms and states were inconsiderable: a single city, with a few leagues of land attached to it, was denominated a kingdom. Ancient Greece was divided into several such states, of which

SICYON is reckoned the oldest, the commencement of which is, by historians, dated 2089 years before the christian era. The founder and first monarch of Sicyon was Ægialeus, who was succeeded by twenty-five kings, whose several reigns together make an epoch of nine hundred and sixty years, and at last became subject to the kingdom of

ARGOS, which was founded in 1856, B. C. Among the Argive kings was Danaus, from whom the Greeks were called Danai.

ATHENS was formed into a kingdom about three hundred years after the establishment of Argos. Cecrops, the first king, was by birth an Egyptian; he instituted many wise laws relating to the conduct of life, and the exercise of religious and civil offices. He divided the whole country into twelve districts, and established a court for trying causes, entitled the Areopagus. Codrus, the last of the Athenian kings, is celebrated for having devoted himself to death for his country. Medon, his son, was set at the head of the commonwealth, under the title of Arcon, an office which, at first, was held for life, afterwards the Archon's power was limited to ten years, and at last the office was elective every year.

THEBES, the next of the Grecian kingdoms, was founded by Cadmus, to whom is ascribed the honour of inventing sixteen letters of the Greek alphabet. The history and adventures of his posterity, Laius, Iocasta, Œdipus, &c. make a principal figure in the tragedies of Eschuylus, Sophocles, and Eurypides.

SPARTA, or Lacedæmon, was instituted by Lelex. Helen, the tenth in succession from this monarch, is

celebrated for her beauty. She had not lived with Menelaus her husband more than three years before she was carried away by Paris, the son of Priam, king of Troy, which was, perhaps, the first occasion in which the Greeks united in one common cause. The inhabitants of Lacedæmon rendered themselves illustrious for their courage, intrepidity, and self-denial. From their valour in war, and their moderation and temperance at home, they were courted and revered by all the neighbouring princes. In the affairs of Greece the interest of the Lacedæmonians obtained a decided superiority for five hundred years. They were forbidden by the laws to visit foreign states, lest their habits should be softened, and their morals should be corrupted. They were remarkable for the great respect and reverence which they paid to old age. The women were as courageous as the men, and many a mother has celebrated with festivals the death of a son who had fallen in battle, or has coolly put him to death, if by shameful flight he brought disgrace upon his country. Among many festivals celebrated at Lacedæmon, it was customary for the women to drag all the old batchelors round the altars, and beat them with their fists, that the shame and ignominy to which they were exposed might induce them to marry.

Corinth was formed into a state, and governed by regular kings at a later period than the cities above mentioned. It was founded by Sifyphus, and received its name from Corinthus, the son of Pelops. The inhabitants were once very powerful, and had considerable influence among the Grecian states. They colonized Syracuse, in Sicily, and delivered it from the tyranny of its oppressors by means of Timoleon. Corinth was burnt to the ground during the consulship of L. Mummius, 146 B. C. The riches which the Romans found there were immense.

Macedonia was founded by Caranus 814 B. C. and continued as a kingdom till the battle of Pydna. The Macedonian soldiers were always held in the highest repute: they resisted the repeated attacks of the bravest and most courageous enemies.

Such is the picture that Greece offers in its earliest infancy. A combination of little states, each governed by its respective sovereign, yet all uniting for their mutual safety and general advantage. Still, however, their intestine quarrels were carried on with great animosity; the jealousy of their princes was a continual cause of discord. The people, at length, worn out with the contentions of their sovereigns, desired to free themselves from those wars in which they were involved by the ambition or folly of their leaders. A spirit of freedom prevailed universally over Greece, and a change of government was effected in every part of the country, except in Macedonia. Thus monarchy gave way to a republican government, which was diversified into as many various forms as there were different cities, according to the different genius and peculiar character of each people.

These cities, though seemingly different from each other in their laws and separate interests, were united with each other by a common language, one religion, and a degree of national pride, which taught them to consider all other nations as barbarous and feeble. To strengthen this union games were instituted in different parts of the country, with rewards for excellence in every pursuit. These sports were intended for very serious and useful purposes: they afforded an opportunity for the several states to meet together; for exercising the youth in the business of war: and increasing that vigour and activity, which were of the utmost importence in deciding the fate of a battle.

(*To be continued.*)

CHAMOIS HUNTING.

The chamois has been confined by its Maker to those icy palaces of Nature, amidst which that Maker's presence is more immediately and sensibly felt. It has always struck me that the ocean is the fittest emblem, and conveys the deepest impression of God's immensity and eternity—the Alps, of his unapproachable power, and everlasting unvariableness. In the sea, wave suc-

ceeds wave for ever and for ever; billow swells upon billow, and you see no end thereof.—But magnificent a spectacle as ocean ever is, at all times, and under all aspects, it still cannot be enjoyed without some alloy. It must be seen either from a ship, in which man ventures too much; or from the land, which again breaks the unity of the idea.

The effect of the scenes among which the chamois-hunter lives, is weakened by no such intrusion as this. Man's works enter not there. From the moment he quits the chalet in which he has taken his short rest, until his return, he sees no trace of man; but dwells amid scenery stamped only with its Creator's omnipotence and immutability. Nature is always interesting. *Elsewhere* she is lovely, beautiful; *here* she is awful, sublime. —*Elsewhere* she shrouds all things in a temporary repose, again to clothe them with surpassing beauty and verdure. But *here* there is no change; such as the first winter beheld them, after they sprang from the hands of their Great Architect, such they still are; like himself, unchangeable and unapproachable. Nor summer's heat, nor winter's cold have any effect on their everlasting hues; nor can the track or works of man stain the purity of their unsullied snows! His voice may not even reach that upper air to disturb "the sacred calm that breathes around"—that stilly silence which holds for ever, save when the hurwine wakes it with the voice of thunder! In such situations, it is impossible not to feel as far elevated in mind as in body, above the petty cares, the frivolous pursuits, "the low ambition," of this nether world. If any one desire really to feel that all is vanity here below; if he wish to catch a glimpse of the yet undeveloped capabilities of his nature, of those mysterious longings, after which the heart of man so vainly yet so earnestly aspires,—let him wander amongst the higher Alps, and alone.

Scenes like these must be seen and felt; they cannot be described. Languages were formed in the plain; and they have no words adequately to represent the sensations which all must have experienced among

mountain scenery. A man may pass all his life in towns, and the haunts of men, without knowing he possesses within him such feelings as a single day's chamois-hunting will awaken. A lighter and purer air is breathed there; and the body, being invigorated by exercise and temperance, renders the mind more capable of enjoyment. Though earthly sounds there are none, I have often remarked, amid this solemn silence, an undefinable *hum*, which yet is not sound, but seems, as it were the still small voice of Nature communing with the heart, through other senses than we are at present conscious of possessing.

If ever my earthly spirit has been roused to a more worthy contemplation of the Almighty Author of Creation, it has been at such moments as these; when I have looked around on a vast amphitheatre of rocks, torn by ten thousand storms, and of Alps clothed with the spotless mantle of everlasting snow. Above me, was the clear blue vault of heaven, which at such elevations seems so perceptibly nearer and more azure: far below me, the vast glacier, from whose chill bosom issues the future river, which is there commencing its long course to the ocean; high over head, those icy pinnacles on which countless winters have spread their dazzling honors; who is there that could see himself surrounded by objects such as these, and not feel his soul elevated from Nature to Nature's God? Yes, land of the mountain and the torrent! land of the glacier and the avalanche! who could wander amidst thy solitudes of unrivalled magnificence without catching a portion, at least, of the inspiration they are so calculated to excite? I wonder not that thy sons, cradled among thy ever-matchless scenery, should cling with such filial affection to the mountain breast that nursed them and yearn for their native cot amid the luxuries of foreign cities; when even a stranger, born in softer lands, and passing but a few months' pilgrimage within thy borders, yet felt himself at once attached to thee as to a second home; nor yet can hear without emotion the sounds that remind him of thy hills of freedom!

EXAMPLES FROM HISTORY.

HUMANITY.

"Blessed are the merciful, for they shall obtain mercy."

HUMANITY, or Mercy, is the first great attribute of the Deity, "who maketh his rain to fall upon the just and unjust." Consequently there is nothing that can bring a man to so near a likeness to his Maker.

A good hearted man is easy in himself, and studies to make others so; and a denial from him is better relished by his obliging regret in doing it, than a favour granted by another.

That scourge of the human race, War, is totally repugnant to his generous attribute: but it presents innumerable opportunities of its being exercised; and he who spares a cruel enemy when in his power, gains more honour than by winning a battle.

EXAMPLES.

The Senate of the Areopagites being assembled together in a mountain without any roof but heaven, the senators perceived a bird of prey, which pursued a little sparrow that came to save itself in the bosom of one of the company. This man, who naturally was harsh, threw it from him so roughly that he killed it; at which the court was offended, and a decree was made, to banish him from the Senate." The judicious may observe, that this company, which was at that time one of the gravest in the world, did it not for the care they had to make a law concerning sparrows; but it was to show that clemency, and a merciful inclination, were so necessary in a state, that a man destitute of them was not worthy to hold any place in government, he having, as it were, renounced humanity.

MARCUS ANTONIUS, the philosopher and emperor, excelled most other men in that excellent virtue; as he manifestly showed in that glorious action of his towards Avidius Cassius and his family who had rebelled against him in Egypt. For as the Senate bitterly prosecuted Avidius and all his relations, Antonius, as if they had

been his friends, always appeared as an intercessor in their behalf.

Alphonsus, King of Naples and Sicily, was all goodness and mercy. He had besieged the city of Cajeta, that had insolently rebelled against him; and the city being distressed for want of necessary provisions, put forth all their old men, women, and children, and such as were unserviceable, and shut their gates against them. The king's council advised that they should not be permitted to pass, but should be forced back again into the city; by which means he would speedily become the master of it. The king, pitying the distressed multitude, suffered them to depart; though he knew it would occasion the protraction of the siege. But when he could not take the city, some were so bold as to tell him, that it had been his own in case he had not dealt in this manner. "But (said the king) I value the safety of so many persons at the rate of an hundred Cajetas.

C. Julius Cæsar was not more famous for his valour in overcoming his enemies, than he was for his clemency, wherein at once he overcame both them and himself. Cornelius Phagita, one of the bloody emissaries of Sylla, in the civil dissension between him and Marius, industriously hunted out Cæsar (as one of the Marian party) from all his lurking holes, at last took him, and was with difficulty persuaded to let him escape at the price of two talents. When the times changed, and it was in his power to be severely revenged of this man, he never did him the least harm, as one that could not be angry with the winds when the tempest was over. L. Domitius, an old and sharp enemy of his, held Corfinium against him with thirty cohorts: there were also with him very many senators, knights of Rome, and the flower and strength of the Pompeian party. Cæsar besieged the town; and the soldiers talked of surrendering both the town and themselves to Cæsar. Domitius, despairing of any mercy, commanded a physician of his to bring him a cup of poison. The physician knowing he would repent it upon the appearance of Cæsar's cle-

mency, gave him, instead of poison, a soporiferous potion. The town being surrendered, Cæsar called all the more honourable persons to his camp, spoke civilly to them, and, having exhorted them to peaceable and quiet counsels, sent them away in safety, with whatsoever was theirs. When Domitius heard of this, he repented of the poison he supposed he had taken: but being freed of that fear by his physician, he went out unto Cæsar, who gave him his life, liberty, and estate. In the battle of Pharsalia, as he rode to and fro, he cried, "Spare the Citizens!" nor were any killed, but such only as continued to make resistance. After the battle he gave leave to every man of his own side to save one of the contrary: and at last, by his edict gave leave to all whom he had not yet pardoned, to return in peace to Italy, to enjoy their estates, honours, and commands. When he heard of the death of Pompey, which was caused by the villany of others, so far was he from exulting, that he broke out into tears, and prosecuted his murderers with slaughter and blood.

During the retreat of the famous King Alfred, at Athelney, in Somersetshire, after the defeat of his forces by the Danes, the following circumstance happened; which, while it convinces us of the extremities to which that great man was reduced, will give a striking proof of his pious and benevolent disposition. A beggar came to his little castle there, and requested alms; when his Queen informed him, "that they had only one small loaf remaining, which was insufficient for themselves and their friends, who were gone abroad in quest of food, though with little hopes of success." The king replied, "Give the poor Christian the one half of the loaf. He that could feed five thousand men with five loaves and two fishes, can certainly make that half of the loaf suffice for more than our necessities." Accordingly the poor man was relieved; and this noble act of charity was soon recompensed by a providential store of fresh provisions, with which his people returned.

Louis the Ninth, on his return to France with his

queen and his children, was very near being shipwrecked, some of the planks of the vessel having started, and he was requested to go into another ship, which was in company with that which carried them. He refused to quit his own ship, and exclaimed, "Those that are with me most assuredly are as fond of their lives as I can possibly be of mine. If I quit the ship, they will likewise quit it; and the vessel not being large enough to receive them, they will all perish. I had much rather entrust my life, and those of my wife and children, in the hands of God, than be the occasion of making so many of my brave subjects perish."

Sir Philip Sidney, at the battle near Zutphen, displayed the most undaunted courage. He had two horses killed under him; and whilst mounting a third, was wounded by a musket-shot out of the trenches, which broke the bone of his thigh. He returned about a mile and a half, on horseback, to the camp; and being faint with the loss of blood, and probably parched with thirst, through the heat of the weather, he called for drink. It was presently brought him; but as he was putting the vessel to his mouth, a poor wounded soldier, who happened to be carried by him at that instant, looked up to it with wishful eyes. The gallant and generous Sidney took the bottle from his mouth, just when he was going to drink, and delivered it to the soldier, saying, "Thy necessity is yet greater than mine."

Richard Cromwell, son of Oliver Cromwell, is said to have fallen at the feet of his father, to beg the life of his Sovereign Charles I. In the same spirit of humanity, when Colonel Howard told him, on his father's death, that nothing but vigorous and violent measures could secure the Protectorate to him, and that he should run no risk, as himself would be answerable for the consequences; Richard replied, "Every one shall see that I will do nobody any harm: I have never done any, nor ever will. I shall be much troubled if any one is injured on my account; and instead of taking away the life of the least person in

stead of taking away the life of the least person in the nation for the preservation of my greatness, (which is a burthen to me) I would not have one drop of blood spilt."

An anecdote is told of the late Beau Nash, of Bath. When he was to give in some official accounts, among other articles he charged, "For making one man happy, 10*l.*" Being questioned about the meaning of so strange an item, he frankly declared, that happening to overhear a poor man say to his wife, and a large family of children, that 10*l.* would make him happy, he could not avoid trying the experiment. He added, that if they did not choose to acquiesce in his charge, he was ready to refund the money. His employers, struck with such an uncommon instance of good feeling, publicly thanked him for his benevolence, and desired that the sum might be doubled as a proof of their satisfaction. In the severe winter of 1739, his charity was great, useful, and extensive. He frequently, at that season of calamity, entered the houses of the poor whom he thought too proud to beg, and generously relieved them. But of all the instances of Nash's bounty, none does him more real honour than the pains he took in establishing a hospital at Bath. It is with pain we add that, after this, in the evening of his life he stood in want of that charity which he had never refused to any one.

YOUNG LADIES' GARLAND.

AMIABILITY.

"I would not rail at beauty's charming power,
I would but have her aim at something more;
The fairest symmetry of form or face,
From intellect receives its highest grace."

Of all the graces which adorn and dignify the female character, amiability is perhaps the most pre-eminent; the peculiar excellence of this virtue consists in the power of exciting universal love and esteem. It is exercised without effort, and enjoyed without alloy; dis-

cretion and good nature are the material ingredients of this valuable quality.

It was this inestimable grace which induced the wise man, to confer on the woman under its influence, a value *whose price is above rubies;* and he invested her with this endearing attribute—that *she opened her mouth with wisdom, and in her tongue is the law of kindness.* It is this grace that throws an irresistible charm over the natural beauties, and exhibits every moral and intellectual attainment in their most interesting point of view. While many other graces have a specific and limited operation, this is universal; when once it is implanted as a principle in the heart, it never ceases to grow, but is continually yielding the most delectable fruit; every incident, however minute, and every event, however disastrous and mournful, constitutes alike an element in which this grace flourishes in all the luxuriance of eternal health. In the sick chamber, the social circle, and the drawing room, it furnishes from its own ample resources all that is most soothing, attractive, and captivating; ever prompt without officiousness, and deliberate without indifference. It invests its most trifling offices with an unspeakable value to those on whom they are conferred, and bestows the most costly presents with a liberality so pure and genuine, as to silence the most captious, and captivate the most scrupulous.

Of the conduct of others, an amiable female is always charitable. The omission of attentions disturbs her not: she is ever ready to suggest a thousand reasons for a supposed injury: and should it be realized she is satisfied with *one*—she knows she does not deserve it! In the absence of evil she invariably argues good.

Of her own conduct she is scrupulously guarded and rigidly exact. She remembers the language of a modern writer, "that virtue in general is not to feel, but to do—not merely to conceive a purpose, but to carry that purpose into execution—not merely to be overpowered by the impression of a sentiment, but to practice what it loves, and to imitate what it admires;"

and thus loving and beloved, she progresses through the various stages of life, ornamenting all its interesting relations, and bestrewing the path of duty with flowers of sweetest fragrance: she closes her brilliant and beauteous course, by gathering her duties together as a never fading boquet of flowers, binds them with her amiability, and bequeaths them to posterity; then full-orbed, she sinks beneath the serene and expansive horizon.

> "Death steals but to renew with bloom
> The life that triumphs o'er the tomb,
> She died not—but hath flown.
> Live, live above! all beauties here,
> What art thou in another sphere—
> An angel in their own?"

ERNEST.

YOUNG GENTLEMEN'S DEPARTMENT.

ECONOMY WITHOUT AVARICE.

There is no station in life sufficiently elevated to render a regard to economy altogether unnecessary; and as the income of the majority is confined within narrow limits, the duty of becoming economists is invested with additional importance. Let me, therefore, strongly exhort you to be temperate in all your views and actions; be especially discreet in the article of apparel; for if you do not adhere to moderation in this respect, you will soon have the mortification of seeing your affairs in disorder. If you once lay aside attention to economy, nothing can be answered for—pompous living is the high road to ruin, and the reduction of fortune is almost always followed by depravity of manners. Remember, that in order to be regular, it is not necessary to be sordid—avarice is unprofitable, and dishonourable. Adhere to good management only in order to avoid the injustice and shame attendant on irregularity. Let us retrench unnecessary expenses for the sake of preferring such as decency, friendship, and charity require us to make. It is established good order, and not an avaricious looking into trifling matters, which turns to great account: avoid meanness in every shape,

for it is usually associated with dishonesty. When PLINY sent back a bond for a considerable sum, which the father of his friend owed him, accompanied with a complete acquittance, he remarked—"Though my estate be small, and I am subject to heavy expenses, yet my frugality produces a fund which enables me to render services to my friends." Abridge, therefore, your fancies and diversions, that you may not be deprived of the gratifications of generous actions, in which every person of a liberal mind ought to indulge. Avoid vanity, and be wholly regardless of the wants it creates. It is commonly said, "we must necessarily be like others:" this sentiment has great latitude, and leads to much evil:—a just regard to your income will leave you in no doubt as to the line of conduct you ought to adopt. He who is regardless of his own means, can never effectually enhance his friend's. Have a noble emulation, and be ambitious to excel in honour, probity, and integrity. Be rich in the endowments of mind, and in the practice of virtue. Poverty of mind is far more deplorable than poverty of circumstances. S. L.

CHANGES IN SOCIETY.

I LOOK forward a few short years, and see the aspect of society entirely changed. The venerable fathers, who have borne the heat and burden of the day, are dropping one after another into the grave, and soon they will be gone. Of those too, who are now acting members of society, some have passed the meridian of life, others are passing it, and all will soon be going down in its decline, to mingle with the generations who have disappeared before them, from this transitory scene of action. To a mind, seriously contemplating this mournful fact, it is an inquiry of deep and tender interest;—who are to rise up and fill their places? To whom are to be committed the invaluable interests of this community? Who to sustain its responsibilities and to discharge its duties? You anticipate the answer. It is to you young men, that these interests are to be committed and these responsibilities transferred—you are fast advancing to fill the places of those who are fast retiring to give

place to a new generation. You are soon to occupy the houses and own the property, and fill the offices and possess the power, and direct the influence that are now in other hands. The various departments of business and trust, the pulpit and bar, our courts of justice and halls of legislation; our civil, religious, and literary institutions; all, in short, that constitutes society, and goes to make life useful and happy, are to be in your hands and under your control.

This representation is not made to excite your vanity, but to impress you with a due sense of your obligations. You cannot take a rational view of the stations to which you are advancing, or of the duties that are coming upon you, without feeling deeply, your need of high and peculiar qualifications. In committing to you her interests and privileges, society imposes on you corresponding claims; and demands that you be prepared to fill, with honour and usefulness, the places which you are destined to occupy. She looks to you for future protection and support, and while she opens her arms to welcome you to her high immunities and hopes, she requires of you the cultivation of those virtues, and the attainment of those gratifications, which can alone prepare you for the duties and scenes of future life.

THE RIVER.

"How happens it, papa, that the river, which is commonly so peaceful and clear, that it resembles a large-looking-glass, is to-day so swelled and yellowish?" "My dear, that is because the stormy south winds have brought down torrents of rain, which have drawn all the impurities of the fields into the river. A peaceful and innocent heart is like the surface of the water when it is limpid. Heaven and earth paint themselves upon it in all their beauty; one may read to the bottom of it. It is thus, my child, that I can still read in your's; but if stormy passions should one day rise in your breast, your heart will be like this river, swelled and dusky, my eyes will no longer be able to read in it, and it can no longer reflect the beauty of heaven."

THE TALLOW TREE.

We present our readers with a print of the Tallow-tree, which grows in great plenty in China, and produces a substance much like our *tallow*, which serves for the same purpose.

It is about the height of a cherry-tree; its leaves are in the form of a heart, of a deep shining red colour, and its bark is very smooth. Its fruit is inclosed in a kind of pod, or cover, like a chesnut, and consists of three round white grains, of the size and form of a small nut, each having its own coat, and within that a little stone. This stone is encompassed with a white pulp, which has all the properties of tallow as to consistence, colour, and even smell. The Chinese make their candles of it, which would doubtless be as good as ours, if they knew how to purify their vegetable tallow, as well as we do our animal tallow, and to make their wicks as fine. All the preparation they give it, is to melt it down, and mix a little oil with it, to make it softer and more pliant. Their candles, it is true, yield a thicker smoke, and a dimmer light than ours; but those defects are owing, in a great measure, to the wicks, which are not of cotton, but only a little rod of dry wood, covered with the pith of a rush, wound round it, which being very porous, serves to filtrate the tallow attracted by the burning stick, which by this means is kept burning.

NATURAL HISTORY.

SYRIAN GOAT.

This animal, whose appearance is very singular, is found in different parts of Asia. It is larger in size than the common goat, and the body is covered with long shaggy hair, which, it is probable, was the article used in making cloth, as spoken of in Exod. xxvi. 7, and xxxv. 26. The most striking part of this animal is its ears, which are remarkably large, being from one to two feet in length, and broad in proportion. In colour the Syrian goats are black; some black and white, and some gray.

Dr. Russel, a modern traveller, informs us that this kind of goat is to be found in the country round Aleppo, a city in Asia, near the head of the Mediterranean sea, not far from Antioch; where they are kept chiefly for their milk, which is sweet and well tasted, and which they yield in considerable quantities. This milk is esteemed highly as food by the inhabitants of that country.

The same kind of goat is also to be found in the country near about the city of Jerusalem, and it is no doubt to flocks of this description of goats, that Solomon refers at the end of the twenty-seventh chapter of Pro-

verbs, where he says," Look well to the state of thy flocks—and thou shalt have goat's milk enough for thy food, for the food of thy household," &c.

These animals which have been seen by modern travellers are probably of the same kind that were kept in Judea in the days of the prophet Amos, more than two thousand six hundred years ago. Amos lived in the reign of Jeroboam the Second, and prophesied a little before Isaiah; He was a shepherd, and many allusions in his writings, which are esteemed very beautiful, are drawn from his country employment.

INTERESTING AND INSTRUCTIVE EXTRACTS.

AUTUMN.

Autumn has come again! One more is added to the list of years that have passed over us, and the ripe fruit and the falling leaf show that many of us have filled our cup of life; and that, as the leaf turns pale, we too must cease our mortal vegetation! The stream runs on—but we cease to be. The moonlight rests upon the hill side—but it will fall upon our graves!—The leaf is renewed and the fruit will be ripened—but man lives not again upon the earth! He leaves only a perishing monument of good or evil, in the memory of surviving friends—a trace in sand, which the returning tide of time will obliterate for ever! The insect on which we tread, the fabled gods of olden time, the wish as yet unwished, are not more frail, feeble, unlasting, than all that man is and must be! Like the meteor, he lights the sky for a moment, passes in darkness and is forgotten!—There is a melancholy pleasure in contemplating the "sear and yellow leaf." The autumnal season is one dear to memory. All things die about us, and we remember the departed. The eye naturally looks back upon the vales and mountains of existence over which we have passed, even until distance makes indistinct the occurrences of infancy.—We have ever found it to be the case, that autumn calls up our remembrance of of those who are dead—the playmates of our youth.

The first kindling of the parlor fire—the gathering

around it—the "wheeling of the sofa round"—these circumstances alone call up recollections of the past, and turn the tide of thought from anticipation to memory. They will send us slowly back to the bright fountains and green landscape of younger days. The head sinks upon the hand, and visions of early pleasure flit across the brain—the cares of to-day vanish, and we live over in an hour, a life of joy and sorrow.

CURIOUS PROPERTIES OF THE FIGURE 9.

The following discovery of remarkable properties of the number 9 was accidentally made by Mr. V. Green, more than fifty years since, though, we believe, not generally known.

9	×	1	=	9;	9	+	0	=	9
9	×	2	=	18;	1	+	8	=	9
9	×	3	=	27;	2	+	7	=	9
9	×	4	=	36;	3	+	6	=	9
9	×	5	=	45;	4	+	5	=	9
9	×	6	=	54;	5	+	4	=	9
9	×	7	=	63;	6	+	3	=	9
9	×	8	=	72;	7	+	2	=	9
9	×	9	=	81;	8	+	1	=	9

The component figures of the product, made by the multiplication of every digit into the number 9, when added together make *nine*. The order of these component figures is reversed, after the said number has been multiplied, by 5. The component figures of the amount of the multiplier, (viz. 45) when added together make *nine*. The amount of the several products, or multiples of 9, (viz. 405) when divided by nine, gives for a quotient, 45; that is 4+5=9. The amount of the first product, (viz. 9) when added to the other products, whose respective component figures makes 9, is 81; which is the square of *nine*. The said number 81, when added to the above mentioned amount of the several products, or multiples of 9, (viz. 405) makes 486; which, if divided by 9, give for a quotient 54; that is 5+4=9. It is also observable that the number of changes that may be rung on 9 bells, is

362,880; which figures, added together, make 27; that is 2+7=9. And the quotient of 362,880, divided by 9, is 40,320; that is 4+0+3+2+0=9.

No man can safely go abroad, that does not love to stay at home; no man can safely speak, that does not willingly hold his tongue; no man can safely govern, that would not willingly become subject; no man can safely command, that has not truly learned to obey; and no man can safely rejoice, but he that has the testimony of a good conscience.

POETRY.

WITHERED BLOSSOMS.

BY REV. H. HUTTON.

The blossoms are withered!—we tread oe'r their form,
On the plain as we pass, without care for them now;
In their frailty they meet the rude shock of the storm,
And they dropped, unprotected, uncropt from the bough.

But lately we gazed on their beauties, and prayed
That the sun-beam would cherish and ripen their bloom;
And we hoped, ah how vainly, for see where they fade!
'Twould be long ere the garden should lose their perfume.

Thus often young genius is praised and caressed,
While his morning of promise is splendid and gay:
And bright seem his prospects of fame and of rest,
Till the blast of detraction sweeps over his way.

Alas! how the world views the fallen with scorn—
How it heedlessly tramples the withering mind!
Forgotten the charms which attracted at morn,
All its worth, all its hopes, are to darkness consigned.

How dull and unfeeling the hearts of the crowd,
To the pinings of virtue in misery's hour!
In the reign of her sunshine they greet her aloud,
But leave her neglected when storms overpower.

The many will tread on the best of their race,
When ruins sharp blight o'er their prospects has blown:
Or coldly will gaze on the sufferer's face,
And pass on their way without pity or moan.

Oh, court not the smiles of the world; they are vain!
Nor trust in its promises—fear not its strife;
But cherish thy conscience through sorrow and pain,
And confide in that Being, whose favour is life.

For he who decrees a new spring to appear
To adorn the sear bough with its splendors once more,
Will cause joy to arise from each struggle and tear
And thy leaf to be green when life's winter is o'er.

"TIME.

I speak to time.

"What voice may speak to thee, tomb-builder, Time!
Thou wast, and art—and shall be when the breath
That holds communion now is hushed in death.
Upon thy tablet earth—a page sublime—
Are cherished the wrecks of buried years!
The cities of the lava-sepulchre—
The relics of God's wrathful minister—
Yield up their hoarded history of tears.

The Pyramid and Mousoleum proud,
Attest of thee and tell of those that were,
Of sounding names now heard as empty air,
That once were as the voice of nations loud;
The Persian and the Greek are kindred there—
Feuds are forgot when foes the narrow dwellings crowd!

IT IS NOT SO.

It is not so, it is not so,
The world may think me gay,
And on my cheek the ready smile
May ceaseless seem to play;
The ray that tips with gold the stream,
Gilds not the depth below,
All bright alike the eye may seem,
But yet it is not so.

Why to the cold and careless throng
The secret grief reveal?
Why speak to one who was, to those
Who do not, cannot feel?
Not! joy may light the brow, unknown,
Unseen, the tear-drop flow,
'Tis the poor sorrowing heart alone
Responds—it is not so.

A SONG.

There's a language that's mute, there's a silence that speaks
  There's a something that cannot be told;
There are words that can only be read on the cheeks,
  And thoughts but the eyes can unfold,
There's a look so expressive, so timid, so kind,
  So conscious, so quick to impart;
Though dumb, in an instant it speaks out the mind,
  And strikes in an instant the heart.

This eloquent silence, this converse of soul,
  In vain we attempt to suppress;
More prompt it appears from the wish of control,
  More apt the fond truth to express.
And oh! the delight on the features that shine,
  The raptures the bosom that melt;
When blest with each other, this converse divine,
  Is mutually spoken and felt.

HEBREW.—Isaiah lxiv—11.

How proudly burst the golden light of day
  Upon the temple where Jehovah stood;
How softly twilight flung its parting ray
  Upon his altar's holy solitude!
For there, commingling, bright, the sunbeam met
  Its essence in the day-spring of the sky,
His fiat warms its golden glory yet,
  But thine, my land, was quench'd in agony.

Yet, when from yonder broad blue arch of Heaven
  I see the storm-cloud roll its gloom away,
Shall I not dream of thee, as free, forgiven,
  Thou'lt start to more than glory's primal day.
Oh never does the breeze of ocean bear
  The fragrance of thy desolated shore,
But with its sigh, my country, thine is there,
  And thy sad murmur sweeps the waters o'er.

I cannot mingle with the breath of flowers
  One thought of loveliness not born of thee,
I cannot tread the sweet and laughing bowers
  And e'er forget thee, in their revelry;
Oh no! thy broken shrines, thy blacken'd towers
  That rose so proudly by fair Gallilee,
Come coldly on the brightness of those hours,
  And from them all, I turn to sigh for thee.

RETREAT OF DR. JOHNSON IN STREATHAM PARK.

MONTHLY REPOSITORY,

AND LIBRARY OF

Entertaining Knowledge.

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NOTICE OF THE LIFE OF THE LATE DR. JOHNSON.

WITH A VIEW OF HIS RETREAT IN STREATHAM PARK.

The father of Dr. Samuel Johnson, was a respectable bookseller at Litchfield, England, in which place the subject of this notice was born, March, 1709. In 1728 he was entered at Pembroke College, Oxford, but withdrew himself from the University before any degree was conferred upon him. He afterwards went to London, where he met with repeated disappointments. In 1740, he began to write the "Debates in the Senate of Lilliput," printed in the Gentleman's Magazine; and, after producing some poems, translations, and biographical works, which met with a good reception, (particularly "London," the "Vanity of Human Wishes, and "The Life of Savage,") he brought forth "Irene," in 1749. This not meeting with the success that he expected, he set about his "Dictionary," the execution of which cost him the labour of many years; but he was amply repaid by the fame which he acquired. During the recesses of this stupendous labour, he published his "Ramblers." The reputation of these works gained him the honorary [illegible] doctor of laws, in the Univ[illegible] soon after followed by the [illegible] To this succeeded hi[illegible] was "Rasselas, P[illegible] book, in the [illegible] useful and [illegible] tions of [illegible]

at distant intervals, the public are more divided about the merits: it is, however, but fair to presume that they were his candid opinions upon the subjects, and as such, deserving of no censure from the judgment of impartiality. His last undertaking, "The Lives of the British Poets," would alone have been sufficient to immortalize his name, as it by far excels any thing executed upon a similar plan, by others; and, though the critical remarks, in a few instances, incorporate a little too much with political opinions, their general excellence must always give them deserved celebrity. It is said, that he was executing a second part of "The Prince of Abyssinia," and was in hopes to have finished it before his death, which event happened Dec. 13, 1784. The editor of the "Biographia Dramatica," after bestowing many just encomiums on the genius of Dr. J., says, it would be the highest injustice, were I not to observe, that nothing but that genius can possibly exceed the extent of his erudition; and it would be adding a greater injury to his still more valuable qualities, were we to stop here; since, together with the ablest head, he seems to have been possessed of the very best heart at present existing. Every line, every sentiment, that issues from his pen, tends to the great centre of all his views, the promotion of virtue, religion, and humanity; nor are his actions less pointed toward the same great end. Benevolence, charity, and piety, are the most striking features of his character; and while his writings point out to us what a good man ought to be, his own conduct sets us an example of what he is." A statue to Dr. Johnson's memory has been erected in St. Paul's Cathedral.

The "Retreat of Dr. Johnson," is an interesting
genius though its claims are of an unostenta-
ing with which the present
bellished, represents a
tached to a villa at
briel Piozzi, who
Thrale. Du-
frequently
favourite

resort of the philosopher during his hours of meditation; for—

> ——————'Tis most true,
> That musing meditation most affects
> The pensive secrecy of desert cell,
> Far from the cheerful haunt of men and herbs,
> And sits as safe as in a senate house.

and the fact of *Streatham House* having been a hospitable asylum for Johnson, and a "peaceful hermitage" for his "weary age," leads us to one of the most interesting portions of the illustrious man's biography.

Johnson's introduction to the Thrales, about the year 1765, was a good piece of fortune for the former. Mr. Thrale was an opulent brewer, and M. P. for Southwark; both he and Mrs. T. conceived such a partiality for Johnson, that he soon came to be considered as one of their family, and had an apartment appropriated to him, both in their town-house and their villa at Streatham. Boswell says:—"Nothing could be more fortunate for Johnson than this connexion. He had at Mr. Thrale's all the comforts and even luxuries of life; his melancholy was diverted and his irregular habits lessened by association with an agreeable and well ordered family. He was treated with the utmost respect, and even affection.—The vivacity of Mrs. Thrale's literary talk roused him to cheerfulness and exertion even when they were alone. But this was not often the case, for he found here a constant succession of what gave him the highest enjoyment, the society of the learned, the witty, and the eminent in every way, who were assembled in numerous companies, called forth his wonderful powers, and gratified him with admiration to which no man could be insensible." Mr. Thrale died in 1781, and the loss of his friend deeply affected Johnson; his health declined; and after a lingering illness he died happy.

Make for yourself good friends, that you may dwell in the shadow of their protection; they will be a joy to you in prosperity, and a solace in distress.

THE INDULGENCE OF GRIEF.

It is not in the power of every one, to prevent the calamities of life—but it evinces true magnanimity to bear up under them with fortitude and serenity. The indulgence of grief is made a merit of by many, who, when misfortunes occur, obstinately refuse all consolation, till the mind, oppressed with melancholy, sinks under its weight. Such conduct is not only destructive to health, but inconsistent with reason and common sense.—"There are what are called the ceremonies of sorrow; the pomp and ostentation of effeminate grief, which speak not so much the greatness of the misery, as the smallness of the mind."

> To persevere
> In obstinate condolement, is a course
> Of impious stubbornness, unmanly grief.
> It shows a will most incorrect to Heaven,
> A heart unfortified, a mind impatient—
> An understanding simple and unschooled.

Change of ideas, is as necessary to health, as change of posture. When the mind dwells long upon one subject, especially if it be of a disagreeable and depressing nature, it injures the functions of the body. Hence, the prolonged indulgence of grief, spoils the digestion and destroys the appetite. The spirits become habitually depressed—the body emaciated, and the fluids, deprived of their appropriate supply of nourishment from without, are greatly vitiated. Thus many a constitution has been seriously injured by a family misfortune, or by any occurrence giving rise to excessive grief.

It is, indeed, utterly impossible, that any person of a dejected mind should enjoy health. Life may, it is true, be dragged on for years. But whoever would live to good old age, and vigorous withal, must be good humoured and cheerful.—This, however, is not at all times in our power—yet, our temper of mind, as well as our actions, depends greatly upon ourselves. We can either associate with cheerful or melancholy com-

panions—mingle in the offices and amusements of life—or sit still, and brood over our calamities as we choose. These, and many similar things, are certainly within our power, and from these the mind very commonly takes its complexion.

The variety of scenes which present themselves to our senses, were certainly designed to prevent our attention from being too constantly fixed upon one single object. Nature abounds with variety, and the mind, unless chained down by habit, delights in the contemplation of new objects. Examine them for a time—when the mind begins to recoil, shift the scene. By these means, a constant succession of new ideas may be kept up, till what are disagreeable disappear. Thus, travelling, occasional excursions, the study of any art or science, reading or writing on such subjects as deeply engage the attention, will expel grief sooner than the most sprightly amusements. The body cannot enjoy health, unless it be exercised—neither can the mind; indolence nourishes grief. When the mind has nothing else to think of but calamities, it is no wonder that it dwells upon them.—Few persons are hurt by grief, if they pursue their business—their active duties, with attention. When, therefore, misfortune happens, instead of abstracting ourselves from the world, or from business, we ought to engage in it with more than ordinary attention—to discharge with double diligence the duties of our station, and to mingle with friends of a social and cheerful disposition. Innocent amusements are, by no means, to be neglected; these by leading the mind to the minute contemplation of agreeable objects, help to dispel the gloom which misfortune sheds over it. They cause time to seem less tedious, and have many other beneficial effects. But it is to be lamented, that too many persons, when overwhelmed with grief, betake themselves to the intoxicating bowl. This is making the cure worse than the disease, and seldom fails to end in the ruin of fortune, character, happiness, and constitution.

HIEROGLYPHICS.

"Essay on the Hieroglyphic System of Mr. Champollion, jun. and on the advantages which it offers to Sacred Criticism. By J. G. H. Greppo, vicar general of Belley. Translated from the French by Isaac Stuart, with notes and illustrations," as might be inferred from the title, gives an account of the investigations which led to the discovery of the meaning of the Egyptian hieroglyphics. Most persons familiar with the history of ancient Egypt, are aware of the interest that has long been felt in relation to these mysterious characters, and of the efforts made to interpret them, and thus raise the veil with which time has shrouded the early history of a nation once the favourite abode of civilization and genius. Many specious hypotheses have been formed, but the test of experiment has proved them to be [illegible] hypothetical; and the traveller, as he strayed among the ruins of Egypt and gazed upon the towering obelisk, or stupendous pyramid, has sought in vain to read their former history in the inscriptions with which they were covered. The recent discoveries of Champollion, of which the work we have named gives an account, induce the expectation that every difficulty will be removed, and the object so long desired be fully attained. The manner in which the discovery has been made is briefly this:—When Bonaparte undertook his expedition into Egypt, he took with him a company of learned men; intending that while he was employed in earning laurels for the conqueror's brow, his corps of *savans* should be engaged in gathering laurels of another description, among the interesting ruins with which the country abounds. Among others, a mutilated part of a monument was discovered, having three inscriptions in different characters, one of which was hieroglyphics, and the other Greek. This was sent home to France,*

* This is a mistake. A copy of the inscription, only, was taken and sent to France. The stone, by the capitulation of Alexandria, fell into the hands of the English, and being afterwards transported to London, was placed in the British museum.

and Champollion was led to believe that the hieroglyphic inscriptions might be found to correspond with the Greek. In this way he formed an alphabet; and so far as it has been tried, it proves the key that is to unlock the mysterious chamber into which none have hitherto been permitted to enter. The bearing which this discovery is to have upon the sacred writings will be at once perceived. The light which will thus be thrown upon the manners and customs of a nation, whose history is so blended with that of the ancient people of God, will bring new evidence of the truth of the inspired volume. Indeed, what has already been discovered, is sufficient to put at rest many difficulties which modern infidel objectors have raised.

CIRCLE OF THE SCIENCES, WITH SUITABLE REFLECTIONS.

ASTRONOMICAL SKETCHES.—NO. VII.

The revolution of the earth about the sun divides time into astronomical *years*, and the rotation of the earth about its axis divides it into astronomical *days*; these, which are called *natural days*, include a common day and night. These natural days are subdivided by clocks into *hours*, *minutes*, *seconds*, &c. The first object in the regulation and division of time is to keep the same seasons to the same months, so that the middle of summer may always happen towards the end of June, and the middle of winter towards the end of December. But before the sun's motion was tolerably well known, it was not easy to accomplish this. Some of the ancients formed a *lunar* year, consisting of 12 synodic lunar months, or 354 days, at the end of which they made the year begin again. But finding that this year would not agree with the seasons, to correct it, they first added a month every three years; afterwards, three months every eight years; and lastly, eight months every 19 years. These were called *luni-solar* years, and were used by the Jews and Romans.

The Egyptian year consisted of 365 days; it had 12 months of 30 days each, and five days more were then added.

The civil year is that which is in common use among the different nations of the world, of which some reckon by the lunar, but most by the solar. The civil solar year contains 365 days, for three years running, which are called common years; and then comes in what is called Bissextile or Leap year, which contains 366 days. This is called the Julian year, on account of Julius Cæsar, who appointed the intercalary day every fourth year; thinking thereby to make the civil and solar years keep pace together. In our calendar, this day is added every fourth year to the end of February.

But time showed that this correction was not so perfect as it was at first thought to have been; for it was found that the equinoxes and solstices happened earlier by some days than they did in some former distant years; and more accurate observations of the sun discovered that the true tropical year was not 365 days 6 hours, but 365 days 5 hours 48 min. 48 sec. The tropical year was therefore thought to be longer than it really was, by 11 min. 12 sec., which in about 129 years would amount to a whole day, and cause the equinoxes to fall sooner by one day. Pope Gregory XIII., therefore, set about the correction, from a desire that the moveable feast of Easter should happen as nearly as possible at the same times of the year respectively, with those at which it had been kept for some years after the general Council of Nice, which was holden in the year 325. But this could not be corrected without affecting the civil year in such a manner, that the vernal equinox should then, and at all future times, fall on, or as near as possible to, March 21, as it did at that general Council, but which had been anticipated by 10 days. For this purpose, he ordered 10 days to be dropped in October, 1582, and by this means the vernal equinox was restored to the 21st of March; and it was endeavoured, by the omission of three intercalary days in 400 years, to make the civil or political year keep pace with the solar for the

time to come. By these regulations, the difference between the *civil* and *tropical* accounts for the space of 400 years will not differ so much as two hours, and will not amount to a whole day in less than 5082 years, at the end of which time it will be necessary to make a correction for this day. The civil year thus corrected took place in most parts of Europe many years ago, but it was not adopted in England till the year 1752, at which time a correction of 11 days, which, as will appear, then became necessary, were applied, and so many days were taken from September, the *third* day of that month being called the *fourteenth*. This is called the *New Style*, and that in use before, or the Julian account, is called the *Old Style*.

PHILIP GARRET.

CABINET OF NATURE.

GEOLOGY.

THIS science has for its object, to investigate and describe the *internal structure* of the earth, the arrangement of the materials of which it is composed, the circumstances peculiar to its original formation, the different states under which it has existed, and the various changes which it appears to have undergone, since the Almighty created the substance of which it is composed. From a consideration of the vast quantity of materials contained in the internal structure of our globe, and of the limited extent to which men can carry their operations, when they attempt to penetrate into its bowels, it is obvious, that our knowledge of this subject must be very shallow and imperfect. The observations, however, which have been made on the structure of our globe during the last half century, and the conclusions deduced from them, are highly interesting, both to the philosopher, and to the christian.

Geology has, of late, become an interesting object of inquiry to the student of general science, and is now prosecuted with ardor by many distinguished

philosophers. The observations which have been made in various parts of the world, by late navigators; the facts which have been ascertained by Pallas, Saussure, De Luc, Humboldt, and other intelligent travellers; and the discoveries which have been brought to light by modern chemists and mineralogists, have all conspired to facilitate Geological inquiries, to render them more enlightened and satisfactory, and to prepare the way for future ages establishing a rational, scriptural, and substantial theory of the earth. The man who engages in such inquiries has always at hand a source of rational investigation and enjoyment. The ground on which he treads—the aspect of the surrounding country—the mines, the caves, and the quarries which he explores—every new country in which he travels, every mountain he climbs, and every new surface of the earth that is laid open to his inspection, offer to him novel and interesting stores of information. On descending into mines, we are not only gratified by displays of human ingenuity, but we also acquire views of the strata of the earth, and of the revolutions it has undergone since the period of its first formation. Our researches on the surface of the earth, amidst abrupt precipices and lofty mountains, introduce us to the grandest and most sublime works of the Creator, and present to our view the effects of stupendous forces, which have overturned mountains, and rent the foundations of nature. "In the midst of such scenes, the Geologist feels his mind invigorated; the magnitude of the appearances before him extinguishes all the little and contracted notions he may have formed in the closet; and he learns, that it is only by visiting and studying those stupendous works, that he can form an adequate conception of the great relations of the crust of the globe, and of its mode of formation."

The upper crust, or surface of the earth, is found to be composed of different *strata*, or beds, placed one above another. These strata, or layers, are very much mixed, and their direction, matter, thickness, and relative position, vary considerably in different places. These strata are divided into seven classes, as follows:

—black earth, clay, sandy earth, marl, bog, chalk, and scabeous or stony earth. The surface of the globe, considered in relation to its inequalities, is divided into Highland, Lowland, and the Bottom of the sea. Highland comprises Alpine land, composed of mountain groupes, or series of mountain chains: Lowland comprises those extensive flat tracts which are almost entirely destitute of small mountain groupes. To the Bottom of the sea belong the flat, the rocky bottom, shoals, reefs, and islands.

At first sight, the solid mass of the earth appears to be a confused assemblage of rocky masses, piled on each other without regularity or order, where none of those admirable displays of skill and contrivance are to be observed, which so powerfully excite attention in the structure of animals and vegetables. But, on a nearer and more intimate view, a variety of beautiful arrangements has been traced by the industry of Geologists, and the light of modern discoveries; by which they have been enabled to classify these apparent irregularities of nature. The materials of which the solid crust of the earth is composed, have been arranged into the four following classes:—1. Those rocks which contain neither any animal nor vegetable remains themselves, nor are intermixed with rocks which do contain them, and are therefore termed *Primitive*, or *Primary* rocks; the period of whose formation is considered as antecedent to that of the creation of organic beings. These are granite, gneiss, mica slate, and clay slate, which occur abundantly in all regions of the globe, with quartz rock, serpentine, granular limestone, &c. which occur more sparingly.—2. Rocks containing organic remains, or generally associated with other rocks in which such substances are found, and which, as having been formed posterior to the existence of organized beings, are termed *Secondary*. These are greywacke, sandstone, limestone, and gypsum of various kinds, slate clay, with certain species of trap; and they are found lying above the primary or older rocks.—3. Above these secondary rocks, beds of gravel, sand, earth, and moss, are found, which have been

termed *Alluvial rocks* or *Formations*. This class comprehends those rocky substances formed from previously existing rocks, of which the materials have been broken down by the agency of water and air; they are therefore generally loose in their texture, and are never covered with any real solid and rocky secondary strata. —4. *Volcanic rocks;* under which class are comprehended all those rocks, beds of lava, scoriæ, and other matter thrown out at certain points of the earth's surface by the action of subterraneous fire.

"The phenomena of Geology show, that the original formation of the rocks has been accompanied, in nearly all its stages, by a process of waste, decay, and recomposition. The rocks, as they were successively deposited, were acted upon by air and water, heat, &c. broken into fragments, or worn down into grains, out of which new strata were formed. Even the newer secondary rocks, since their consolidation, have been subject to great changes, of which very distinct monuments remain. Thus, we have single mountains which, from their structure, can be considered only as remnants of great formations, or of great continents no longer in existence. Mount Meisner, in Hesse, six miles long, and three broad, rises about 1800 feet above its base, and 2100 above the sea, overtopping all the neighbouring hills for 40 or 50 miles round. The lowest part of the mountain consists of the same shell, limestone, and sandstone, which exist in the adjacent country. Above these are, first, a bed of sand, then a bed of fossil wood, 100 feet thick at some points, and the whole is covered by a mass of basalt, 500 feet in height. On considering these facts, it is impossible to avoid concluding, that this mountain which now overtops the neighbouring country, occupied at one time, the bottom of a cavity in the midst of higher lands. The vast mass of fossil wood could not all have grown there, but must have been transported by water from a more elevated surface, and lodged in what was then a hollow. The basalt which covers the wood must also have flowed in a current from a higher site; but the soil over which both the wood and the basalt passed,

has been swept away, leaving this mountain as a solitary memorial to attest its existence. Thus, also, on the side of Mount Jura, next the Alps, where no other mountain interposes, there are found vast blocks of granite (some of 1000 cubic yards) at the height of more than 2000 feet above the Lake of Geneva. These blocks are foreign to the rocks among which they lie, and have evidently come from the opposite chain of the Alps; but the land which constituted the inclined plane over which they were rolled or transported, has been worn away, and the valley of lower Switzerland, with its lakes, now occupies its place. Transported masses of primitive rocks of the same description are found scattered over the north of Germany, which Von Buch ascertained, by their characters, to belong to the mountains of Scandinavia; and which, therefore, carry us back to a period when an elevated continent, occupying the basin of the Baltic, connected Saxony with Norway."

A BEAUTIFUL FIGURE.

Life is fitly compared to a fountain fed by a thousand streams that perishes if one be dried. It is a silver cord twisted with a thousand strings that parts asunder if one be broken. Frail and thoughtless mortals are surrounded by innumerable dangers which makes it much more strange that they escape so long than that they almost all perish suddenly at last. We are encompassed with accidents every day to crush the mouldering tenement that we inhabit. The seeds of disease are planted in our constitution by the hand of nature. The earth and the atmosphere, whence we draw our life, are impregnated with death—health is made to operate its own destruction. The food that nourishes the body contains the elements of its decay; the soul that animates it by a vivifying fire, tends to wear it out by its action; death lurks in ambush along our paths. Notwithstanding this is the truth so palpably confirmed by daily examples before our eyes, how little do we lay it to heart! We see our friends and neighbours perishing around us, but how seldom does it occur to our thoughts that our knell shall, perhaps, give the next fruitless warning to the world?

Extract from Emerson's Letters from the Ægean.*

ANCIENT SEPULCHRES.

Our view from the summit of the hill was really splendid; beneath us lay the barren, rocky island, with scarce a tree to diversify its monotonous cliffs, and beyond it the broad expanse of the Adalian Gulf, with its countless islands and glittering silvery waves; while on either side extended the towering shores of Karamania. Of the ancient city of Megiste the perfect circuit of the walls can still be traced, enclosing a space of nearly half a mile in circumference.

The vestiges of this forsaken city are now abandoned to the winds and the beasts of prey. They stretch in loneliness along the deserted beach; and amidst the ruins of lofty walls, proud theatres, and gorgeous temples, a few miserable huts, inhabited by groveling serfs, alone give life to the scene of desolation. The roadstead in which it is situated, is known by the name of Port Piandouri; and a narrow tongue

* "*Letters from the Ægean, by James Emerson, Esq.*" is the title of an 8vo. volume published by the Messrs. Harpers, of this city. This work is one of general interest. It gives a much better idea of ancient and modern customs in the Levant, illustrative of mysterious passages of scripture, than any other work of the kind we have ever met with. It ought to be in the hands of at least every clergyman and biblical student.

of land stretching out from the shore, divides the line of the coast into two commodious harbours, called Vathi and Sevedo, at the junction of which the few habitations I have mentioned, now shelter the population of Antiphellus, while the fallen edifices and mouldering tombs of their ancestors stretch far along the level shore.

As our boat grounded on the strand, some three or four of them came down to meet us; they appeared poor, and miserable, and naked; but, alas, as Nehemiah said unto Ahasuerus, why should my countenance be sad, when the city, the place of my father's sepulchres, lieth waste? As we drew near to the land, the first objects which were visible were the remnants of the ancient terrace which repelled the sea, and the ruins of a theatre on an eminence above the shore; on coming closer still, the tombs became gradually more and more distinct, while their gloomy aspect and melancholy association served to increase the sombre dreariness of the scene.

On landing, we proceeded first to the examination of these singular, and in many instances beautiful sepulchres. They are principally situated above Port Sevedo, and are formed out of the rock of the coast, or constructed with materials found on the spot, being a sort of limestone approaching to marble, with a slight yellow tint, save where it has assumed a grayish hue, and the surface has become corroded from the effects of time and the siroccos. They are of two kinds, either built upon the surface, or hollowed from the face of the cliff.

The former are not by any means so numerous as the latter, but are in many instances of extremely elegant design, though the workmanship, especially in the ornaments and mouldings, is by no means equal to the conception of the arts. Their form is that of a parallelogram, of seven feet long inside, by three feet wide. This is cut from one block of stone, the exterior carved into pilasters to receive inscriptions, many of which are still legible; and we observed a few in which the lower plinth was chiselled from the native rock,

which was levelled to receive the superstructure. The coverings, which have, with very few exceptions, been all removed, were likewise formed from one single block, shaped into a lancet arch, each end decorated with a wreath, and the sides with lions' heads projecting very boldly from the surface.

In some, the two ends are formed like doors with sunk panels, one of which is generally open, by which access has been gained to the interior: and from the holes for hinges and fastenings, there can be no doubt of doors having been once attached to them; but in others no aperture whatever is visible, and the body must have been deposited within ere the ponderous roof was placed upon the sepulchre.—There does not remain one which has not been violated by the curiosity of Europeans or the avarice of the Moslemen, who expect in such monuments to discover the gold reputed to have been enclosed along with the remains of the deceased; all, without exception, have been opened and plundered of their contents.—These repositories of dust are pretty numerous, and in some instances (perhaps those of relatives) are placed side by side; but it does not appear to have been an object to produce a general effect by their location, or to arrange them in streets as at Pompeii, though such a design might perhaps have been rendered impossible by the unevenness of the surrounding soil.

THE MICROSCOPE.

The invention of the microscope must have been almost necessarily coeval with that of the telescope, depending, as they do, on principles so nearly allied; and it is clear from Friar Bacon's Works that he was not less acquainted with the one than with the other. It was first brought into use in more recent times by the same Jansen of Middleburgh, to whom Borellus ascribes the invention of the telescope. Jansen presented the first microscope he constructed, to Prince Maurice, from whom it passed into the hands of Albert, Archduke of Austria. William Borell, who gives this

account in a letter to his brother Peter, says, that when he was ambassador in England, in 1619, Cornelius Drebell showed him a microscope which he said had been given to him by the Archduke, and was the same Jansen himself had made. Many of those who purchase microscopes are so little acquainted with their general and extensive usefulness, and so much at a loss for objects to examine by them, that after diverting their friends some few times with what they find in the slides which generally accompany the instrument, or perhaps with two or three common objects, the microscope is laid aside, as of little further virtue; whereas no instrument has yet appeared in the world capable of affording so constant, various, and satisfactory entertainment to the mind. Of this, a recent observer has furnished us with the following very curious particulars. On examining the edge of a very keen razor by the microscope, it appeared as broad as the back part of a very thick knife; rough, uneven, full of notches and furrows, and so far from any thing like sharpness, that an instrument so blunt as this seemed to be, would not serve even to cleave wood. An exceedingly small needle being also examined, the point thereof appeared above a quarter of an inch in breadth, not round nor flat, but irregular and unequal; and the surface, though extremely smooth and bright to the naked eye, seemed full of ruggedness, holes, and scratches. In short, it resembled an iron bar out of a smith's forge. But the sting of a bee viewed through the same instrument showed every where a polish amazingly beautiful, without the least flaw, blemish, or inequality, and ended in a point too fine to be discerned. A small piece of very fine lawn, appeared from the large distances or holes between its threads, somewhat like a hurdle or a lattice and the threads themselves seemed somewhat coarser than the yarn with which the ropes are made for anchors. Some Brussels lace, worth five pounds a yard, looked as if it were made of a thick, rough, uneven hair line, and twisted, fastened, or clotted together in a very clumsy manner. But a silkworm's web being examined, appeared perfectly smooth and

shining, every where equal, and as much finer than any thread the finest spinster in the world ever made, as the smallest twine is finer than the thickest cable. A pod of this silk being wound off, was found to contain nine hundred and thirty yards; but it is proper to take notice, that as two threads are glued together by the worm through its whole length, it makes really double the above number, or one thousand eight hundred and sixty yards; which being weighed with the utmost exactness, were found no heavier than two grains and a half.

What an exquisite fineness was here! and yet this is nothing when compared to the web of a small spider, or even with the silk that is issued from the mouth of this very worm when but newly hatched from the egg. Let us examine things with a good microscope, and we shall be immediately convinced, that the utmost power of art is only a concealment of deformity, an imposition upon our want of sight, and that our admiration of it arises from our ignorance of what it really is. This valuable discovery will prove the most boasted performances of art to be ill-shaped, rugged, and uneven, as if they were hewn out with an axe, or struck out with a mallet and chisel; it will show bungling inequality and imperfections in every part, and that the whole is disproportionate and monstrous. Our finest miniature paintings appear before this instrument as mere daubings, plastered on with a trowel, and entirely void of beauty, either in the drawing or the colouring. Our most shining varnishes, our smoothest polishings, will be found to be mere roughness, full of gaps and flaws. Such are the works of man compared with those of his Maker.

THE ANCIENT AND MODERN HISTORY OF NATIONS.

OF THE GRECIAN MONARCHY.

We shall now recite the most memorable facts recorded of those states of Greece which flourished in what is usually termed the *Third Monarchy*, beginning with Athens as the most eminent. It has already been

observed that, upon the death of Codrus, a magistrate was chosen to succeed, under the title of archon; this office was continued for nearly three hundred years, when there seemed to be a general desire among the people to be governed by written laws, instead of being subject to the caprice of individuals. For this purpose they pitched upon Draco, as a legislator, a man of tried wisdom and integrity, but whose severity against human frailties was so great, that his laws were said not to be written with ink but with blood. By his code all crimes were punished with death; and being once questioned as to the justice and propriety of these laws, he replied, "Small crimes deserve death, and I have no higher punishment for the greatest."

The excessive severity of Draco's laws prevented them from being justly administered: sentiments of humanity in the judges, compassion for the accused, and the unwillingness of witnesses to exact so cruel an atonement, conspired to render the laws obsolete before they could be well put into execution. In this manner they counteracted their own purposes, and their excessive rigour paved the way for the most dangerous impunity.

In this distressful state of the commonwealth Solon was applied to for his advice and assistance. His great learning had gained him the reputation of being the first of the seven wise men of Greece, and his known humanity procured him the love and veneration of all his fellow citizens. At the time when Greece had carried the arts of eloquence, poetry, and government, higher than they had been seen among mankind, Solon was considered as one of the foremost in each department. A question was once proposed to the wise men of [illegible] *which was the most perfect popular govern-* [illegible] that where the laws have no su- [illegible] where the in-

regarded than orators. But Solon's opinion seems to have been most respected, viz. that the most perfect popular government was that where an injury done to the meanest subject is an insult upon the whole constitution.

Such was the man to whom the Athenians delegated the power of making a new code of laws. Athens at that time was divided into different parties; but it is said that the rich loved Solon because he was rich, and the poor because he was honest. He was chosen archon with the unanimous consent of all, and then set about giving his countrymen the best constitution they were capable of receiving. He abolished the debts of the poor; repealed all the laws enacted by Draco, except those for murder; regulated all offices, employments, and magistrates, which he left in the hands of the rich; he distributed the citizens into four classes, according to their incomes; he restored, reformed, and gave dignity to the court of Areopagus, so called from the place where it was held; and instituted a court superior to this, consisting of four hundred persons, who were to judge upon appeals from the Areopagus.

The particular laws instituted by Solon for dispensing justice were numerous and excellent, of which we shall mention a few. He obliged all persons, during public dissentions, to espouse one side or the other, under the penalty of being declared infamous, condemned to perpetual punishment, and to have their estates confiscated. By this law a spirit of patriotism was encouraged and excited. He permitted every person to espouse the cause of him that was insulted and injured; thus all virtuous characters became enemies to the man who did wrong, and the turbulent were overpowered by the number of their [illegible]

He abolished the custom of giv[illegible]

OF THE GRECIAN MONARCHY.

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by discountenancing and punishing idleness. No one was allowed to revile another in public; the magistrates, who were considered as examples, as well as guardians to the public, were obliged to be very circumspect in their behaviour, and it was even death for an archon to be taken drunk.

After Solon had framed these institutions, with many others, he caused transcripts of them to be hung up in the city for all the inhabitants to peruse; and appointed a set of magistrates to revise them carefully, and rehearse them to the people once a year, and then he withdrew from the state.

Not many years after Solon had left Athens, the city became divided into factions, at the head of which were Pisistratus, Megacles, and a person named Lycurgus; of whom the first, by an insinuating behaviour, and by his kindness to the poor, gained the ascendancy, and at length seized the government into his own hands. Solon, who had returned to Athens, finding it impossible to stop the public torrent, retired to Cyprus, where he died in the eightieth year of his age.

Pisistratus, though twice deposed, found means to reinstate himself, and at his death to transmit the sovereign power to his sons Hippias and Hipparchus, Hipparchus, for an act of private treachery and infamy, was slain in a popular tumult; and Hippias, at length, was obliged to resign all pretensions to sovereign power, and to leave the state in the space of five days.

We cannot, in this sketch, trace the different important changes which happened to the Athenian state during the period of its glory. Its manners and customs were frequently changing; the genius and learning of its inhabitants were never excelled, perhaps, scarcely ever equalled by the people of any country in the world. Athens was, in fact, the school and abode of polite learning, arts, and sciences. The study of poetry, eloquence, philosophy, and mathematics began, and arrived almost at perfection in that celebrated city. At length growing vain with too great prosperity at home, or by their success against their enemies, or by that respect and admiration paid them by

foreign states, they treated their subjects and allies with insolence, which brought upon themselves the envy and hatred of all Greece. This gave rise to the Peloponnesian war, when the Peloponnesians and others, to tame the insolence of the Athenians, took up arms, under the direction and auspices of the Spartans. The war was carried on with equal fortune for a long time, till at last the Athenians being broken by a great slaughter at the river Ægos, were forced to yield to the Spartan yoke.

We shall close this account with some particulars relating to the Areopagus, which was the senate-house of Athens, and was, as the name denotes, situated on a hill, dedicated to Mars. This court was composed of those persons who had filled the office of archon with dignity and public approbation. It always consisted of men distinguished by the excellence of their character, and the purity of their manners; They determined all causes relating to the civil and religious government of the state; the custody of the laws, the direction of the public revenues, and the inspection of the morals of the youth were committed to their care; and so high was the estimation in which this court was held, that Demosthenes asserts, that in his time, they had never passed a judgment that did not satisfy both the plaintiff and defendant. The fame and authority of the Areopagus were so universal, that even foreign states often referred to them the decision of their differences. They usually met three times every month, always in the night, that they might not be interrupted by the business of the day, nor be influenced by objects that excite the passions either of pity or resentment.

YOUNG LADIE'S GARLAND.

FEMALE EDUCATION.

FEMALE EDUCATION is of immense importance, as connected with domestic life. It is at home where man generally passes the greatest portion of his time; where he seeks a refuge from the vexations and em-

barrassments of business, an enchanting repose from exertion, a relaxation from care by the interchange of affection; where some of his finest sympathies, tastes, and moral and religious feelings are formed and nourished; where is the treasure of pure disinterested love, such as is seldom found in the busy walks of a selfish and calculating world. Nothing can be more desirable than to make one's domestic abode the highest object of his attachment and satisfaction.

> Well ordered home, man's best delight to make,
> And by submissive wisdom, modest skill,
> With every gentle, care-eluding art
> To raise her virtues, animate the bliss,
> And sweeten all the toils of human life.
> This be the female dignity and praise.

Neither rank nor splendid mansions, nor expensively furnished apartments, nor luxurious repasts, can accomplish these actions. They are to be obtained only from the riches of elevated principles, from the nobility of virtue, from the splendor of religious and moral beauty, from the banquet of refined taste, affectionate deportment, and intellectual pleasures. Intelligence and piety throw the brightest sunshine over the dwellings of private life, and these are the results of female education.

Female education is extremely valuable from its imparting an elevated and improved character to domestic intercourse.—Conversation is one of the greatest joys of existence; and the more perfect it is made by the resources of learning, enlarged views of morality, the refinement of taste, the riches of language, and the splendors of imagery, the more exquisite is the joy. It is from education that discourse collects all its original drapery, "its clothing of wrought gold," its thrilling eloquence, its sweetest music and all its magical influence over the soul. Intelligence and animated discourse eminently exalts the dignity, and multiplies the charms of every female that can excel in it.

> It is a sacred and homefelt delight,
> A sober certainty of waking bliss.

She who can sustain an elevated course of conversa-

tion, whose mind soars above the trifles and common things of time and sense, who is distinguished for well digested opinions, sensible remarks, habits of thinking and observation, good judgment and a well disciplined temper, is a perpetual source of blessings, and exhilaration to all within her circle. If her education is seasoned with an admixture of genuine piety she cannot fail making her home all that is desirable, so that none of her household will need or wish to seek elsewhere for happiness. They will be able "to drink waters out of their own cisterns, and running waters out of their own well."

FEMALE BEAUTY.

True female beauty does not consist in any particular form, or external appearance alone; but in symmetry and elegance, together with the assemblage of those interesting qualities which adorn and render their persons permanently pleasing. A mere external beauty may attract momentarily, but something else is requisite to secure the affections; the first impressions produced by mere external beauty soon wear away; but it is the internal worth and beauty which give daily increasing permanence to the social affections. Hence one reason why men are often reproached with inconstancy of love; their feelings are interested and their affection excited by a display of external beauty; but a more intimate acquaintance convinces us that they are destitute of the graces and charms which render those feelings strong and lasting. Let the female then who is desirous to shine as a beauty, attend to intellectual improvement as of first concern; let her cherish health, which itself is beauty; let her lay aside those foolish and prejudicial fashions, which have so much power over persons of disordered minds; who conceive that beauty is best displayed in artificial, pale, and sickly forms; let her use frequent and active exercise, which gives health and vigor; let her indulge and cultivate every virtue; for every virtue sits with peculiar grace on the female countenance, and let her not forget religion, the greatest ornament to female worth

and acquirements. With these accomplishments beauty exerts an influence which extends throughout creation.

"——Hence the wide universe,
Through all the seasons of revolving worlds,
Bears witness with it's people, Gods and men;
To beauty's blissful power, and with the voice
Of grateful admiration still resounds;—"

YOUNG GENTLEMEN'S DEPARTMENT.

"ONE AND TWENTY."

With youth no period is looked forward to with so much impatience, as the hour which shall end our minority—with manhood, none is looked back to with so much regret. Freedom appears to a young man as the brightest star in the firmament of his existence, and is never lost sight of until the goal for which he has been so long travelling, is reached. When the mind and the spirit are young, the season of manhood is reflected with a brightness from the future, which nothing can dim but its own cold reality. The busy world is stretched out before our boyhood like the exhibition of mechanical automata–we behold the merchant accumulating wealth, the scholar planting his foot upon the summit of the temple of fame, the warrior twining his brow with the laurel wreath, and we yearn to struggle with them for supremacy. In the distance we see nothing but the most prominent part of the picture, which is success—the anguish of disappointment and defeat is hidden from our view; we see not the pale cheek of neglected merit, or the broken spirit of unfortunate genius, or the sufferings of worth. But we gaze not long, for the season of youth passes away like a moon's beam from the still water, or like a dew drop from a rose in June, or an hour in the circle of friendship. Youth passes away, and we find ourselves in the midst of that great theatre upon which we have so long gazed with interest—the paternal bands, which in binding have upheld us, are broken, and we step into the crowd with no guide but our conscience to carry us through the intricate windings of the path of human life. The beauties of the

perspective have vanished—the merchant's wealth has furrowed his cheek, the acquirements of the scholar were purchased at the price of his health; and the garland of the conqueror in fastened upon his brow with a thorn, the rankling of which shall give him no rest on this side of the grave. Disappointment damps the ardor of our first setting out, and misfortune follows closely in our path to finish the work and close our career. How often amid the cares and troubles of manhood do we look back to the sunny spot on our memory, the season of our youth; and how often does a wish to recall it, escape from the bosom of those who once prayed fervently that it might pass away. From this feeling we do not believe that living man was ever exempt. It is twined around the very soul; it is incorporated in our very nature, and will cling to us, even when reason itself has passed away. And although the period when parental enthralment is broken, and when the law acknowledges the intellect to be full grown, may at the time be considered one of rejoicing, yet after-life will hang around it the emblems of sorrow, while it is hallowed as the last bright hour of a happy youth.

INFLUENCE OF YOUNG MEN.

When Cataline attempted to overthrow the liberties of Rome, he began by corrupting the young men of the city, and forming them for deeds of daring crime. In this he acted with keen discernment of what constitutes the strength and safety of a community—the virtue and intelligence of its youth, especially of its young men. This class of persons, has, with much propriety, been denominated the flower of the country—the rising hope of the church and society. Whilst they are preserved uncorrupted, and come forward with enlightened minds and good morals, to act their respective parts on the stage of life, the foundations of social order and happiness are secure, and no weapon formed against the safety of the community can prosper. This indeed is a truth so obvious, that all wise and be-

nevolent men, whether statesmen, philanthropists or ministers of religion, have always felt a deep and peculiar interest in this class of society; and in attempts to produce reformation and advance human happiness, the young, and particularly the young men, have engaged their first and chief regards. How entirely this accords with the spirit of inspiration, it is needless to remark. Hardly any one trait of the Bible is more prominent than its benevolent concern for the youthful generations of men. On them its instructions drop as the rain, and distil as the dew; round their path it pours its purest light and sweetest promises; and by every motive of kindness and entreaty, of invitation and warning, aims to form them for duty and happiness, for holiness and God.

NATURAL HISTORY.

[Few subjects are more interesting in their nature, or are calculated to excite more profound meditation on the wonders of creation, and the harmony of the Providence that superintends it, than the study of Natural History. It was the remark of one to whom we were indebted for much valuable instruction in our youthful years, that, to the reflecting mind, all the works of creation were alike wonderful, from the blade of grass, or even the minutest atom of matter, to the whole system of worlds and to the economy which guides their paths in the Heavens and maintains the harmony which subsists in all their motions; that one then was looked upon with less surprise than another only because it had become more familiar to us. A similar idea is expressed in the beautiful lines of Pope, which are familiar to most of our readers.

"All are but parts of one stupendous whole
Whose body nature is, and God the soul;
That, changed through all, and yet in all the same;
Great in the earth, as in th' ethereal frame
Warms in the sun, refreshes in the breeze,
Glows in the stars, and blossoms in the trees;
Lives through all life, extends through all extent:
Spreads undivided, operates unspent;
Breathes in our soul, informs our mortal part,
As full, as perfect, in a hair as heart;
As full, as perfect, in vile man that mourns,
As the rapt seraph that adores and burns."

It has been said with great truth and propriety, that

"An undevout Astronomer is mad;"

and the same remark may, with justice, be applied to the study of

Natural History. To trace the animal and vegetable world through all their states and stages; to see how admirably they are adapted to the situations and circumstances in which they are placed; with what nicety and accuracy their several functions are adjusted, must impress upon the mind the most exalted ideas of the matchless wisdom of the Deity, and of the infinite power of Him, who by his word, spoke worlds into existence.

In a paper like this, it cannot be expected that Natural History can be introduced as a science; yet such facts in relation to it as will be interesting to all classes of our readers, will be selected and published from time to time, as may be found convenient.]

THE OWL.

There are a great many different kinds of owls; the one here represented is the screech owl, which is a very common bird, and is generally to be found not far from the dwellings of men. This bird has its head like a cat, and its feet armed with sharp claws. It catches mice like a cat, but its eyes cannot bear the great light of the sun, so that it sleeps during the day time, and moves about at night, when it procures its food. The cry of the owl is very mournful and dismal.

The screech owl in particular, sends forth a scream, which in the silence and darkness of night, sounds through the woods to a great distance, and is such as to terrify those who are not used to it. The owl is hated and pursued by other birds, and in its turn hurts and eats the smaller ones, which it can destroy.

Moses, in the law which was given to the children of Israel, puts the owl among the unclean birds, that is those which were not to be eaten, as will be seen in the eleventh chapter of Leviticus, sixteenth verse.

It is supposed that the bird called the night hawk, in this verse, is the owl. The night owl of Asia is thus described by a traveller. "It is of the size of the common owl, and lodges in the ruins of Egypt and Syria, and sometimes even in the dwelling houses. In Syria it is very voracious, to such a degree, that if great care is not taken to shut the windows at the coming on of night, he enters the houses and kills the children; the women, therefore, are very much afraid of him"—That such a bird should be counted as unclean, and unfit for food, is very natural.

INTERESTING AND INSTRUCTIVE EXTRACTS.

PRIDE.

The proud heart is the first to sink before contempt—it feels the wound more keenly than any other can. Oh, there is nothing in language that can express the deep humiliation of being received with coldness when kindness is expected—of seeing the look, but half concealed, of strong disapprobation from such as we have cause to feel beneath us, not alone in vigor of mind and spirit, but even in virtue and truth. The weak, the base, the hypocrite, are the first to turn with indignation from their fellow-mortals in disgrace; and, whilst the really chaste and pure suspect with caution, and censure with mildness, these traffickers in petty sins, who plume themselves upon their immaculate conduct, sound the alarm bell at the approach of guilt, and clamor their anthemas upon their unwary and cowering prey.

PICTURESQUE BEAUTY OF THE OAK.

A FINE oak is one of the most picturesque of Trees. It conveys to the mind associations of strength and duration, which are very impressive. The oak stands up against the blast, and does not take, like other tress, a twisted form from the action of the winds. Except the cedar of Lebanon, no tree is so remarkable for the stoutness of its limbs; they do not exactly spring from the trunk, but divide from it; and thus it is sometimes difficult to know which is stem and which is branch.

The twisted branches of the oak, too, add greatly to its beauty; and the horizontal direction of its boughs, spreading over a large surface, completes the idea of its sovereignty over all the trees of the forest. Even a decayed oak—

> "———dry and dead,
> Still clad with reliques of its trophies old,
> Lifting to heaven its aged hoary head,
> Whose foot on earth hath got but feeble hold."—

even such a tree as Spenser has thus described is strikingly beautiful: decay in this case looks pleasing. To such an oak Lucan compared Pompey in his declining state.

TRUE NOBILITY.

Rank titles, grandeur, are mere earthly baubles. The treasures of an upright heart are the only treasures that moths may not corrupt, and thieves break through into and steal. The refinements of the mind are indeed, what constitute nobility of demeanor, and cannot be dispensed with; they polish with higher lustre than any court etiquette; they give that native elegance which has superior charms to any that can be acquired.

IMAGES OF TIME AND ETERNITY.

There is something attractive in the contemplation of a river—it is not indeed so vast, so sublime, as that which we experience when gazing on the boundless expanse of the world of waters—the mighty ocean—but it is more analogous to the mind of man in its mortal state—the one is the image of life, the other of eternity.

NOTICE OF RECENT PUBLICATIONS.

The Commandment with Promise. By the Author of the "Last day of the Week." Boston: Perkins & Marvin. pp. 208.

This volume deserves a large share of attention from both parents and children. In the form of a narrative, it brings forward some of the main principles of family government, exhibited in practical operation. The various classes of unruly children may find their own pictures drawn here with such accuracy that they cannot deny the likeness, though they may blush to own it, and tremble while they ponder on the consequences of their conduct. The child of obedience may also find some pleasing resemblances to himself or herself, and without flattering their own vanity, may take encouragement from good example, to follow on, in the path of rectitude, with the certainty of receiving the recompense of reward, both in this life and that which is to come. Parents, too, of every age, husbands or wives, of whatever station in society, may here draw lessons of instruction from the same pages, which please and inform the minds of very little children. It is evident that the author has watched the progress of more families than one, and that he describes characters from real life, though he may for prudence' sake adopt fictitious names. Reader, change but the name, perhaps the person is yourself.

The Life of Mohammed, by the Rev. George Bush, A. M. No. X. of the Family Library. New-York: J. & J. Harper, 1830.

We are happy to see so interesting an account of the Arabian Prophet by an American writer. It is drawn up with great care from the best sources that were accessible; and not only exhibits the exciting scenes of Mohammed's life, but gives a very accurate representation of the doctrines and the style of the Koran. There is peculiar interest attached to such a work at this time, when the Mohammedan delusion is evidently falling before the power of Christianity. It gives us great pleasure to find the Author every where recognizing a superintending Providence.

A Lexicon of Useful Knowledge.—The Rev. H. Wilbur, the author of several school books of good repute, has recently published a handsome duodecimo, of the above title, in which a vast number of the terms explained in the Dictionary are illustrated by appropriate wood cuts. There can be no doubt that such a work is highly advantageous in instruction, and that proper ideas are acquired and false ideas corrected by such pictural explanations.

The Advancement of Society in Knowledge and Religion, by James Douglas, Esq. from the 2d Edinburgh edition. Hartford: Cooke & Co. 1830.

This is a work of great originality, and one which compels the reader to think. The author is the same who published a little work some few years since, entitled, "Hints on Missions," which at that time excited very general notice. He has recently issued another entitled, "Errors regarding Religion," of which we should be very glad to see an American edition. His views of religion are

strictly evangelical, his style animated, and in many places eloquent, and his thoughts profound and practical. This is one of those few books which a man may use to put his own mind in motion, and in reading which he may be as much profited by what is suggested as by what is expressed.

POETRY.

(For the Repository and Library of Entertaining Knowledge.)

PLEASURES OF FRIENDLY INTELLECTUAL INTERCOURSE.

BY REV. JOSEPH RUSLING.

Is there a place to peace assigned
  Secure from tumult, strife and care;
A spot where *kindred spirits* find
  A calm retreat, their joys to share;
Some hallowed shade to *friendship* given,
Where souls on earth, meet souls from heaven?

Not at the gay voluptuous shrine
  Of worldly pleasures, wealth, and fame,
Where moral energies decline,
  And bliss is but an empty name,
Where vice refined, our joys impair,
And leaves us victims of despair.

Virtue, alone conforms the mind
  To happiness, its heavenly grace
Is pure—and permanent, and kind,
  And full of *friendship, love* and *peace;*
And brighter scenes perspective rise,
When virtue, happiness supplies.

Heaven has ordained, that perfect bliss
  Should flow from *goodness;* as the stream
A tribute from the fountain is:
  Or from the sun, the solar beam;
And where *true goodness* doth obtain,
Intrinsic *friendship* must remain.

I venerate the sacred range
  Of noble minds, whose pleasures flow
In cheerful streams; whose free exchange
  Of sentiment, true goodness show;
Where social charms, with beauteous smile,
The lapse of passing years beguile.

Sweet, intellectual repast;
  Commerce divine; the bliss of heaven!
Long may those grateful pleasures last,
  And boundless be their influence given;
Till *souls congenial* meet above,
In *friendly intercourse* and love.

THE REALMS OF AIR.

The realms on high—the boundless halls, where sports the wing of light,
And Morn sends forth her radiant guest unutterably bright,
And evening rears her gorgeous piles amidst the purple ray,—
How glorious in their far extent and ever fair are they!

The dark autumnal firmament, the low cloud sweeping by,
The unimaginable depth of summer's liquid sky—
Who hath not felt in these a power, enduring, undefined—
A freshness to the fevered brow, a solace to the mind?

But most when, robed in nun-like garb, with sober pace and still,
The dun night settles mournfully on wood and fading hill,
And glancing through its misty veil, o'er ocean's depths afar,
Shines here and there, with fitful beams, a solitary star.

Then wearied sense and soul alike receive a nobler birth,
Then flies the kindling spirit forth beyond the thrall of earth;
While lasts that soft and tranquil hour, to thought's high impulse given,
A chartered habitant of space—a denizen of heaven!

Then, seen in those eternal depths, the forms of vanished days
Come dimly from their far abodes to meet the mourner's gaze;
And they the fondly cherished once, and they the loved in vain,
Smile tranquilly, as erst they smiled, restored and hailed again.

And words which, breathed in long-past years, the ear remembers yet,
And sounds whose low endearing tone the heart shall not forget;
The parent speech, the friendly voice, the whispered vow, are there,
And fill with gentle melody the shadowy Realms of Air.

J. F. Hollings.

THE DEAD.

Ye dead! ye dead! how quiet is your long and dreamless sleep,
While the solemn yew trees o'er you their stately vigils keep—
And the long blades sighing gently, as the whisp'ring breezes pass,
Disclose the springing flow'rets amid the waving grass.

The monarch sleeps among ye—the crowds that owned his sway
Lie prone in dust before him—but he lies as low as they—
Above the mould'ring coffin lid the merry crickets sing,
And the still corpse-worm banquets there, companion of the king.

Among the crowd ungreeted, lie the unhonored fair—
The bloom has left their cheek, for no roses flourish where
That form with icy fingers has its pallid sigil prest,
To mark his chosen brides amid the loveliest and the best.

O! where is he, whose sabre, like the meteor's lurid ray,
Marshalled the host to battle, and gleamed above the fray?
His victims cling around him—their arms above him meet—
He lies 'mid fest'ring corpses—his well-earned winding sheet.

And where lies he who noiselessly thro' life had won his way,
With praise begun the morning, with prayer closed in the day?
Who pointed to the pearly gates beyond the western sun,
And in the path his eye had traced, unwearied followed on?

Where?—mark that grassy mound on which the early sunbeams rest!
The gentle daisy loves to bloom upon its verdant breast—
The dews fall lightly on it when they leave the summer skies,
And mark for angels' visits the hillock where he lies!

THE SABBATH SCHOOL.

'Twas still! for Sabbath morning had arrived.
At the appointed hour the deep toned bells
Pour'd forth their music on the silent air.
The children of the Sabbath School were seen,
With rapid steps hastening to the place
Where they were wont to meet each other's smile
From week to week, and hear of God and Heaven.
It was within the consecrated walls
Of that fair temple (on the hallow'd spot
Where sleep in undisturbed repose, the dead,)
Pointing to heaven its towering spire,
As if to guard its precious sacred trust,
I saw the young immortals, as they sat,
Listening to the word of God's own truth.
Christ's crucifixion was the holy theme;
And as they meditated on that scene,
When on the cross the Lord of glory hung,
Revil'd, and mock'd, and piere'd by wicked men,
At last exclaiming, "It is finished,"
Bowing his head and giving up the ghost,
Rocks rending, earth convulsing, graves opening,—
Upon each countenance I saw surprise,
And heard one wondering say, "How God hates sin!"

THE SETTING SUN AN EMBLEM OF A GLORIOUS FUTURITY.

Yon sapphire clouds and those gleams divine—
Oh! they tell of a rest far brighter than mine:—
A land of all that is hallow'd and dear;
A land of love undash'd with a tear;
Of spring whose warblers no winter shall dread;
Of flow'rs ne'er braided to die o'er the dead;
"Of glories unknown in a world such as this;
Of transports untold in an Eden of bliss!"

S. M. Waring.

NEW-YORK DEAF AND DUMB ASYLUM.

MONTHLY REPOSITORY,

AND LIBRARY OF

Entertaining Knowledge.

VOL. I. JANUARY, 1831. No. 8.

NEW-YORK DEAF AND DUMB ASYLUM.

WITH AN ENGRAVING.

THIS building, which has been constructed for an Asylum, is situated on a rising ground, about three and a half miles from the centre of the thickly settled part of the city, and a mile and a half from the suburbs, about midway between the East and North Rivers. From the site of the building, there is a beautiful and commanding prospect of the surrounding country. It is sufficiently remote from the city to enjoy the benefit of the country, and it is near enough to partake of the conveniences and facilities afforded by a dense population, and to avoid some of the inconveniences. The asylum is erected near the centre of a lot of five acres. The building itself is a plain structure of brick, covered with a coat of stucco resembling marble. Its architectural appearance is chaste and elegant, without superfluous ornament, having an elevation of three stories above the basement. The basement story contains a large dining room, two studies for the pupils when out of school, kitchens and store rooms, &c. On the first floor above the basement story is a large central school-room, and on either side, family rooms, another smaller school-room, and an apartment for the directors. On the next floor is a second large and central school-room, capable of accommodating more than one class by a temporary partition. On either side are family bed-rooms, and two others to be reserved for the sick of the different sexes. The third story is entirely appropriated for dormitories; the males in one end, and the females in the other, separated by two brick partitions,

and intervening rooms for teachers and others. The superficial area of the asylum is a parallelogram of 110 feet by 60. Its front has a southern aspect, with a portico supported by six wooden columns. In the rear of the building are separate yards for the pupils, and a shed the whole length of the Asylum. In the easterly and westerly ends of this shed two rooms have been finished, which will answer for store rooms or work shops. The other outhouses are two separate structures, 30 feet by 25 each, and two stories high, calculated for a stable and work shops, under one of which is a vegetable cellar for the Institution. In planting and constructing this Asylum and the necessary out-buildings, the Directors have spared no pains nor labour to render every thing convenient and commodious for the accommodation and benefit of the Deaf and Dumb.

CABINET OF NATURE.

GEOLOGY.

The production of a bed for *vegetation* is effected by the decomposition of rocks. This decomposition is effected by the expansion of water in the pores or fissures of rocks, by heat or congelation—by the solvent power of moisture—and by electricity, which is known to be a powerful agent of decomposition. As soon as the rock begins to be softened, the seeds of *lichens*, which are constantly floating in the air, make it their resting place. Their generations occupy it till a finely divided earth is formed, which becomes capable of supporting mosses and heath; acted upon by light and heat, these plants imbibe the dew, and convert constituent parts of the air into nourishment. Their death and decay afford food for a more perfect species of vegetable; and at length a mould is formed, in which even the trees of the forest can fix their roots, and which is capable of rewarding the labours of the cultivator. The decomposition of rocks tends to the *renovation* of soils, as well as their cultivation. Finely divided matter is carried by rivers from the higher dis-

tricts to the low countries, and alluvial lands are usually extremely fertile. By these operations, the quantity of habitable surface is constantly increased; precipitous cliffs are gradually made gentle slopes, lakes are filled up, and islands are formed at the mouths of great rivers; so that as the world grows older, its capacity for containing an increased number of inhabitants is gradually enlarging.

Of all the memorials of the past history of our globe, the most interesting are those myriads of remains of organized bodies which exist in the interior of its outer crusts. In these, we find traces of innumerable orders of beings existing under different circumstances, succeeding one another at distant epochs, and varying through multiplied changes of form. "If we examine the secondary rocks, beginning with the most ancient, the first organic remains which present themselves, are those of aquatic plants and large reeds, but of species different from ours. To these succeed madrepores, encrenites, and other aquatic zoophites, living beings of the simplest forms, which remain attached to one spot, and partake, in some degree, of the nature of vegetables. Posterior to these, are ammonites, and other mollusci, still very simple in their forms, and entirely different from any animals now known. After these, some fishes appear; and plants, consisting of bamboos and ferns, increase, but still different from those which exist. In the next period, along with an increasing number of extinct species of shells and fishes, we meet with amphibious and viviparous quadrupeds, such as crocodiles and tortoises, and some reptiles, as serpents, which show, that dry land now existed. As we approach the newest of the solid rock formations, we find lamantins, phocæ, and other cetaceous and mammiferous sea animals, with some birds. And in the newest of these formations, we find the remains of herbiferous land animals of extinct species, the paleotherium, anaplotherium, &c. and of birds, with some fresh water shells. In the lowest beds of loose soil, and in peat bogs, are found the remains of the elephant, rhinoceros, hippopotamus, elk, &c. of different species from those which now exist, but

belonging to the same genera. Lastly, the bones of the species which are apparently the same with those now existing alive, are never found except in the very latest alluvial depositions, or those which are either formed in the sides of the rivers, the bottoms of ancient lakes and marshes now dried up, in peat beds, in the fissures and caverns of certain rocks, or at small depths below the present surface, in places where they may have been overwhelmed by debris, or even buried by man. Human bones are never found except among those of animal species now living, and in situations which show that they have been, comparatively speaking, recently deposited."

More than thirty different species of animals have been found embedded in the secondary strata—no living examples of which are now to be found in any quarter of the globe. Among the most remarkable of these are the following.—1. The *Mammoth*, which bears a certain resemblance to the Elephant, but is much larger, and differs considerably in the size and form of the tusks, jaws and grinders. The fossil remains of this animal are more abundant in Siberia than in other countries; there being scarcely a spot, from the river Don to Kamtschatka, in which they have not been found. Not only single bones and perfect skeletons of this animal are frequently to be met with; but, in a late instance, the whole animal was found preserved in ice. This animal was discovered on the banks of the frozen ocean, near the mouth of the river Jena, in 1799; and in 1805, Mr. Adams got it conveyed over a space of 7000 miles to Petersburgh, where it is deposited in the museum. The flesh, skin, and hair were completely preserved, and even the eyes were entire. It was provided with a long mane, and the body was covered with hair. This hair was of different qualities. There were stiff black bristles from twelve to fifteen inches long, and these belonged to the tail, mane, and ears. Other bristles were from nine to ten inches long, and of a brown colour; and besides these, there was a coarse wool, from four to five inches long, of a pale yellow colour. This mammoth was a

male; it measured nine feet four inches in height, and was sixteen feet four inches long, without including the tusks. The tusks, measuring along the curve, are nine feet six inches; and the two together weigh 360 libs avoirdupois. The head alone without the tusks, weighs 414 libs avoirdupois. The remains of this animal have been found likewise in Iceland, Norway, Scotland, England, and in many places through the continent onwards to the Arctic ocean.

2. The *Megatherium*. A complete skeleton of this colossal species was found in diluvial soil near Buenos Ayres, and sent to Madrid. The specimen is fourteen feet long, and seven Spanish feet in height.

3. The great *Mastodon* of the Ohio. This species appears to have been as tall as the elephant, but with longer and thicker limbs. It had tusks like the elephant, and appears to have lived on roots. Its remains abound in America, particularly in the great valley of the Mississippi.

4. The *Tapir*, which also abounds in America. The one named *Gigantic Tapir*, is about eighteen feet long, and twelve feet high.

5. The *Irish Elk*, or Elk of the Isle of Man. This gigantic species, now apparently extinct, occurs in a fossil state, in Ireland, Isle of Man, England, Germany and France. The most perfect specimen of this species, which was found in the Isle of Man, is six feet high, nine feet long, and in height to the tip of the right horn, nine feet 7½ inches. An engraving of this skeleton may be seen in vol. sixth of *Supp. to Encyc. Brit.*

The researches of Geology confirm the fact of a universal deluge, and thus afford a *sensible* proof of the credibility of the Sacred Historian, and, consequently, of the truth of the doctrines of Divine Revelation. But, besides the testimony which this science bears to the authenticity of Scripture History, it exhibits some of the grandest objects in the history of the physical operations of Divine Providence. It presents to our view, in a most impressive form, the majestic agency of God, in convulsing and disarranging the structure of our globe, which at first sprung from his hand in perfect

order and beauty. When we contemplate the objects which this science embraces, we seem to be standing on the ruins of a former world. We behold "hills" which "have melted like wax at the presence of the Lord," and "mountains" which "have been carried into the midst of the sea." We behold rocks of enormous size, which have been rent from their foundations, and rolled from one continent to another—the most solid strata of the earth bent under the action of some tremendous power, and dispersed in fragments through the surrounding regions. We behold the summits of lofty mountains, over which the ocean had rolled its mighty billows—confounding lands and seas in one universal devastation—transporting plants and forests from one quarter of the world to another, and spreading universal destruction among the animated inhabitants of the waters and the earth. When we enter the wild and romantic scene of a mountainous country, or descend into the subterraneous regions of the globe, we are every where struck with the vestiges of operations carried on by the powers of Nature, upon a scale of prodigious magnitude, and with the exertion of forces, the stupendous nature of which astonishes and overpowers the mind. Contemplating such scenes of grandeur, we perceive the force and sublimity of those descriptions of Deity contained in the volume of inspiration: "The Lord reigneth, he is clothed with majesty; in his hand are the deep places of the earth, the strength of hills is his also. He removeth the mountains, and they know not; he overturneth them in his anger; he shaketh the earth out of her place, and the pillars thereof tremble. At his presence the earth shook and trembled; the foundations also of the hills moved, and were shaken, because he was wroth." "Thou coveredst the earth with the deep, as with a garment; the waters stood above the mountains. At thy rebuke they fled; at the voice of thy thunder they hastened away." While retracing such terrific displays of Omnipotence, we are naturally led to inquire into the *moral* cause which induced the Benevolent Creator to inflict upon the world such overwhelming desolations. For reason,

as well as revelation, declares, that a *moral* cause must have existed. Man must have violated the commands of his Maker, and frustrated the end of his creation; and to this conclusion the Sacred historian bears ample testimony—"God saw that the wickedness of man was great in the earth, and that every imagination of the thoughts of his heart was only evil continually: and Jehovah said, I will destroy man whom I have created, from the face of the earth, both man and beast, and the creeping thing, and the fowls of the air."

EXAMPLES FROM HISTORY.

EMPLOYMENT OF TIME.

To be idle and unimployed, is a sign not only of a weak head, but of a bad heart. And as it is one vile abuse of time, which is given us for action, and action of the utmost moment, so is it one sure method to lead us to other and worse abuses. For he who is idle, and wholly unoccupied, will ere long, without question, be occupied in mischief. You must therefore take care that you employ your time; but then you must take as much care to employ it innocently; and by innocent employment is meant all the proper duties of your station, and all those inoffensive and short relaxations which are necessary either to the health of your bodies, or to the enlivening and invigorating your minds. You must be anxious to employ it in the best and noblest uses, in subserviency to your own eternal welfare; that is, with a constant eye to the glory of God and the good of mankind: for herein consists our duty, and for this end was all our time given us.

EXAMPLES.

"We all complain of the shortness of time, (says Seneca,) and yet have much more than we know what to do with. Our lives are either spent in doing nothing at all, or in doing nothing to the purpose, or in doing nothing that we ought to do. We are always complaining that our days are few, and acting as though there would be

no end of them." In short, that noble philosopher has described our inconsistency with ourselves in this particular, by all those various turns of expression and thought which are peculiar to his writings.

It was a memorable practice of Vespasian, the Roman Emperor, throughout the course of his whole life, that he called himself to an account every night for the actions of the past day; and as often as he found he had slipped any one day without doing some good, he entered upon his diary this memorandum, "Diem perdidi." "I have lost a day."

The excellent education which the younger Scipio had received, under his father Paulus Æmilius, and from the instructions of Polybius, perfectly qualified him to fill his vacant hours with advantage, and afterwards to support the leisure of a retired life with pleasure and dignity. "Nobody," says a valuable historian, "knew better how to mingle leisure and action, nor to employ the intervals of public business with more elegance and taste." His predecessor, (and grandfather by adoption,) the illustrious Scipio Africanus, used to say, "that he was never less idle than when he was entirely at leisure; nor less alone, than when he was wholly by himself;" a very uncommon turn of mind in those who have been accustomed to the hurry of business, who too generally sink, at every interval of leisure, into a kind of melancholy nausea, and a listless disgust for every thing about them.

The example of Alfred the great, is highly memorable. "Every hour of his life had its peculiar business assigned it. He divided the day and night into three portions of eight hours each; and, though much afflicted with a very painful disorder, assigned only eight hours to sleep, meals, and exercise; devoting the remaining sixteen, one half to reading, writing, and prayer, and the other to public business." So sensible was this great man that time was not a trifle to be dissipated, but a rich talent entrusted to him, and for which he was accountable to the great dispenser of it.

We are told of Queen Elizabeth, that, except when engaged by public or domestic affairs, and the exercises

necessary for the preservation of her health and spirits, she was always employed in either reading or writing; in translating from other authors or in compositions of her own; and that notwithstanding she spent much of her time in reading the best writings of her own and former ages, yet she by no means neglected that best of books the Bible: for proof of which take her own words: "I walk (says she) many times in the pleasant fields of the Holy Scriptures, where I pluck up the goodlisome herbs of sentences, by pruning; eat them by reading; digest them by musing, and laid them up at length in the high seat of memory, by gathering them together; that so having tasted their sweetness, I may the less perceive the bitterness of life."

Gassendi, the celebrated philosopher, was perhaps one of the hardest students that ever existed. In general he rose at three o'clock in the morning, and read or wrote till eleven, when he received the visits of his friends. He afterwards at twelve made a very slender dinner, at which he drank nothing but water, and sat down to his books again at three. There he remained till eight o'clock, when, after having eaten a very light supper, he retired to bed at ten o'clock. Gassendi was a great repeater of verses in the several languages with which he was conversant. He made it a rule every day to repeat six hundred. He could repeat six thousand Latin verses, besides all Lucretius, which he had by heart. He used to say, "that it is with the memory as with all other habits. Do you wish to strengthen it or prevent its being enfeebled, as it generally happens when a man is growing old, exercise it continually, and in very early life get as many fine verses by heart as you can: they amuse the mind, and keep it in a certain degree of elevation, that inspires dignity and grandeur of sentiment." The principles of moral conduct that he laid down for the direction of his life, were,—To know and fear God. Not to be afraid of death: and to submit quietly to it whenever it should happen. To avoid idle hopes, as well as idle fears."

When Socrates, in Plato's Phædo, has proved the immortality of the soul, he considers it as a necessary

consequence of the belief thereof, "That we should be employed in the culture of our minds; in such care of them as shall not only regard that term to which we give the name of life, but also the whole which follows it; in making ourselves as wise and good as may be; since on it our safety entirely depends; the soul carrying hence nothing with it but its good or bad actions, its virtues or vices; and these constitute its happiness or misery to all eternity." How might many a Christian redden to think that this is the language of a Pagan mind; a mind unenlightened with the bright splendors of gospel truth, and equally ignorant of a Saviour's merits, and of a Saviour's example!

Seneca, in his letters to Lucilius, assures him that there was not a day in which he did not either write something, or read and epitomize some good author: and Pliny, in like manner, giving an account of the various methods he used to fill up every vacancy of time, after several employments which he enumerates, observes, "Sometimes I hunt; but even then I carry with me a pocket-book, that, while my servants are busied in disposing the nets and other matters, I may be employed in something that may be useful to me in my studies: and that, if I miss my game, I may at least bring home some of my thoughts with me, and not have the mortification of having caught nothing."

"Among the Indians (says Apuleius) there is an excellent set of men, called Gymnosophists. These I greatly admire; though not as skilled in propagating the vine, or in the arts of grafting or agriculture. They apply not themselves to till the ground, to search after gold, to break the horse, to shear or feed sheep or goats, What is it then that engages them? One thing preferable to all these. Wisdom is the pursuit, as well of the old men, the teachers, as of the young, their disciples. Nor is there any thing among them that I do so much praise as their aversion to sloth and idleness. When the tables are overspread, before the meat is set on them, all the youths, assembling to their meal, are asked by their masters, In what useful task they have been employed from sun-rise to that time? One repre-

sents himself as having been an arbitrator, and succeeded by his prudent management in composing a difference; in making those friends who were at variance. A second had been paying obedience to his parents' commands. A third had made some discovery by his own application, or learned something by another's instruction. The rest gave an account of themselves in the same way. He who has done nothing to deserve a dinner, is turned out of doors without one, and obliged to work while the others enjoy the fruits of their application."

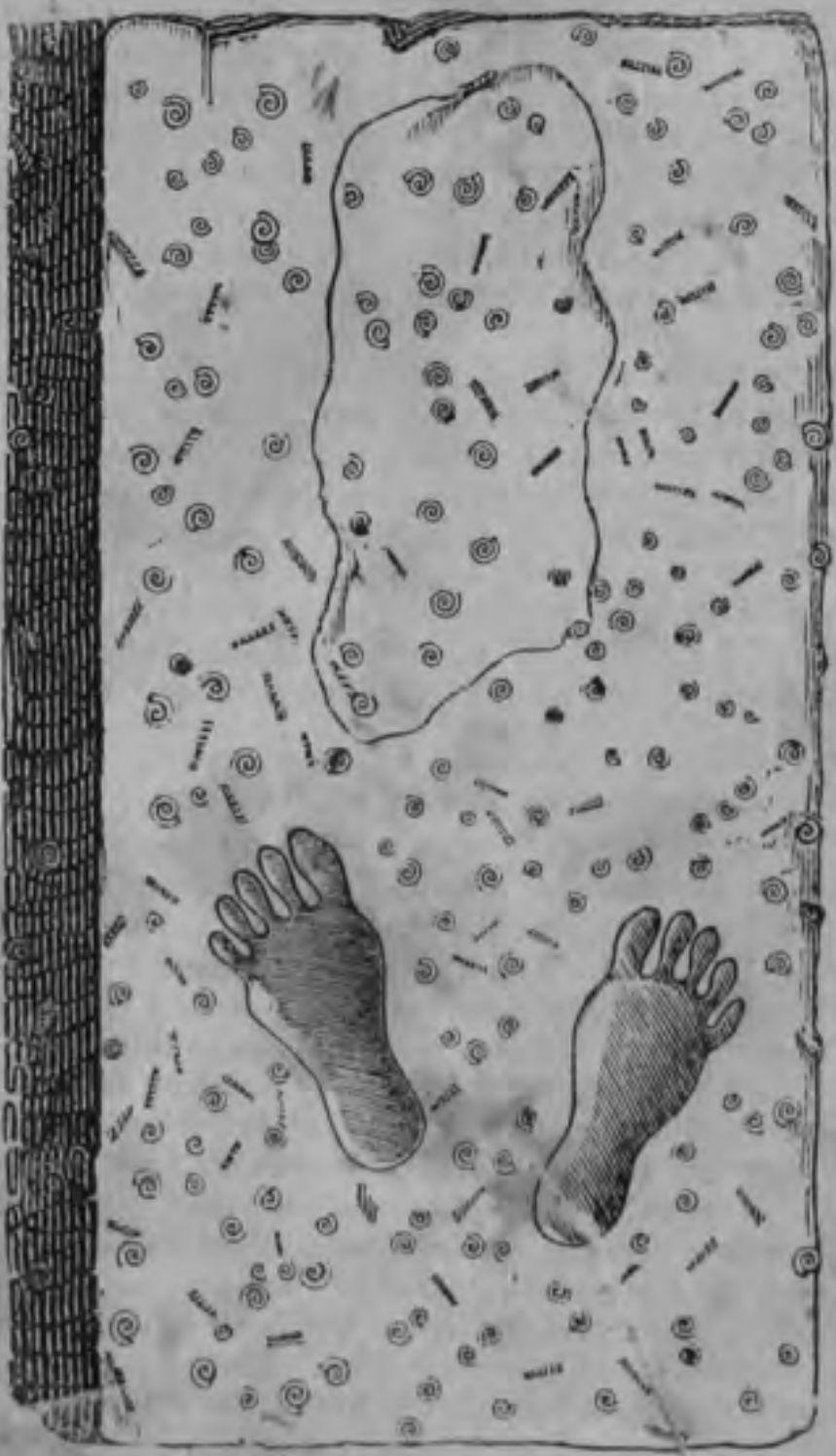
How beautifully simple, yet forcible, is the following account of the futility of those merely sensual pursuits, which have occupied the time and attention of those we have been accustomed to call the Great! In the book of the Maccabees, we read, that "Alexander, son of Philip the Macedonian, made many wars, took many strong holds, went through the ends of the earth, took spoils of many nations: the earth was quiet before him. After these things he fell sick, and perceived that he should die."

THE PHYSICIAN OF MOHAMMED.

One of the kings of Persia sent a very eminent physician to Mohammed; who remaining a long time in Arabia himself before the Prophet, he thus addressed him: "Those who had a right to command me, sent me here to practice physic, but since I came I have had no opportunity of showing my eminence in this profession, as no one seems to have any occasion for me." Mohammed replied, *We never eat but when we are hungry; and we always leave off while we have an appetite for more.*" The physician answered, "That is the way to render my services useless;" and so saying, he took his leave and returned to Persia.

Mohammed's favorite wife appears to have been a very sensible and virtuous woman. Among many excellent maxims she left her children, is the following.—

"My sons, never despise any person,
Consider your superior as your father;
Your equal as your brother;
And your inferior as your son."



NATURAL CURIOSITY.

PRINTS OF HUMAN FEET IN ROCKS.

In "Schoolcrafts' Travels in the central portions of the Mississippi valley," page 173, we find the following interesting description of two apparent prints or impressions of the human foot in a tabular mass of limestone at New Harmony, Indiana. The stone had been previously conveyed from the banks of the Mississippi, at St. Louis, and carefully preserved in an open area. "Being aware of the conclusions which must result to geology from a fact of this nature, and that all former notices of the organic impressions of our species in well-consolidated strata, have been deemed apocryphal, we were induced to examine the subject with particular attention. To obtain an exact drawing of these interesting prints, we moistened a sheet of paper to a degree that permitted its being pressed by the palm of the hand into the most minute indentations. While thus pressed in, we drew the outlines in pencil. From this drawing the accompanying plate, by Mr. Inman, is a faithful transcript, on a reduced scale. We present it to the public as being more minutely accurate than our own figure of the subject, published in the American Journal of Science.

"The impressions are, to all appearance, those of a man, standing in an erect posture, with the left foot a little advanced and the heels drawn in. The distance between the heels, by accurate measurement, is six and a quarter inches, and between the extremities of the toes, thirteen and a half. But, by a close inspection, it will be perceived, that these are not the impressions of feet accustomed to the European shoe; the toes being much spread, and the foot flattened, in the manner that is observed in persons unaccustomed to the close shoe. The probability, therefore, of their having been imparted by some individual of a race of men who were strangers to the art of tanning skins, and at a period much anterior to that to which any traditions of the present race of Indians reaches, derives additional weight from this peculiar shape of the feet.

"In other respects, the impressions are strikingly natural, exhibiting the muscular marks of the foot with great precision and faithfulness to nature. This circumstance weakens, very much, the supposition that they may, *possibly*, be specimens of antique sculpture, executed by any former race of men inhabiting this continent. Neither history nor tradition has preserved the slightest traces of such a people. For it must be recollected, that, as yet, we have no evidence that the people who erected our stupendous western tumuli possessed any knowledge of masonry, far less of sculpture,* or that they had even invented a chisel, a knife, or an axe, other than those of porphyry, hornstone, or obsidian.

"The average length of the human foot in the male subject may, perhaps, be assumed at ten inches. The length of each foot, in our subject, is ten and a quarter inches: the breadth, taken across the toes, at right angles to the former line, four inches; but the greatest spread of the toes is four and a half inches, which diminishes to two and a half at the heel. Directly before the prints, and approaching within a few inches of the left foot, is a well-impressed and deep mark, having some resemblance to a scroll, whose greatest length is two feet seven inches, and greatest breadth twelve and a half inches.

"The rock containing these interesting impressions is a compact limestone of a grayish-blue colour.† It was originally quarried on the left bank of the Mississippi at St. Louis, and is a part of the extensive range of calcareous rocks upon which that town is built. Foundations of private dwellings at St. Louis, and the military works erected by the French and Spaniards,

* The carvings of pipe bowls out of stratite, indurated clay, and other soft materials, executed by the Indians of the present day, do not, perhaps, merit the name of sculpture: but even of these, there is, we believe, no evidence that this simple art was practised before we had made them acquainted with the use of iron.

† Geologists teach us that the character and relative age of rocks may be determined with considerable certainty, from the fossil organic remains which they disclose in the most solid parts. They infer from the shells, plants, and other traces of organic structure,

from this material, sixty years ago, are still as solid and unbroken as when first laid.

now found in solid strata, that these rocks were once soft and pliable, so as to be capable of admitting these bodies. They point also to these substances, some of which are derived from the land and others from the ocean, as evidences of the dominion which the latter has formerly exercised over the surface of extensive portions of the earth, which are now dry and elevated; and as the most indubitable proofs of the physical revolutions which have, at remote periods, devastated its surface, involving these genera of shells, plants, &c. in the general catastrophe. The bones of several large quadrupeds, some of which are of extinct or non-descript species, and the osseous and enduring remains of birds, fishes, and reptiles, which are often found, not only in alluvial deposite, but also in well consolidated strata, sufficiently indicate these changes, and point to several distinct submersions; some of which were manifestly produced by *salt*, and others by *fresh* water. Most of these disturbances and reproductions of strata, have, we believe, been attributed to causes operating in a very remote period of the world. We wish only to discover the osseous or petrified remains of man, in situations similar to those in which we find the brute tribes of the creation, to bring the revolutions, to which we have adverted, down to a much later period of history. If we suppose the present marks to be genuine, we here perceive some evidences of this nature. And they are found, as we should naturally expect, not upon those elevated mountains of granites and mica slates, which may be supposed to be sufficiently firm and well-based to have resisted the elemental shock; but in the central portions of a low and kindly valley, on the surface of one of those strata which are confessedly reproductions or resolutions from pre-existing species.

It is not our design to pursue this speculation into those details which it is calculated to invite. But we are naturally led to inquire; —are these marks natural or factitious? If genuine, at what period of the world were they impressed? Whether by the present race of Indians, or by any other nations who have inhabited this continent during its primeval age! Have the calcareous rocks of the Mississippi Valley been in a state sufficiently soft to receive such impressions, since their original formation? Were these rocks deposited during the Noachian deluge, or at any subsequent time? If deposited at that period, is there any reason to conclude that this continent was then *inhabited*? Finally, were these tracks not impressed at a comparatively modern period, probably by that race of men who erected our larger mounds? May we not suppose a barrier to have existed across the lower part of the Mississippi, converting its immense valley into an interior sea, whose action was adequate to the production and deposition of calcareous strata? We do not consider such a supposition incompatible with the existence of *transition* rocks in this valley, the position of the latter being beneath the secondary. Are not the great northern lakes the remains of such an ocean? And did not the sudden demolition of this ancient barrier, enable this powerful stream to carry its banks, as it has manifestly done, a hundred miles into the Gulf of Mexico?

CIRCLE OF THE SCIENCES, WITH SUITABLE REFLECTIONS.

ASTRONOMICAL SKETCHES.—NO. VIII.

The principal division of the year is into months, which are of two sorts, namely, astronomical and civil. The astronomical month is the time in which the moon runs through the zodiac, and is either periodical or synodical. The periodical month is the time spent by the moon in making one complete revolution from any point of the zodiac to the same again, which is 27 days 7 hours 43 min. The synodical month, called a lunation, is the time contained between the moon's parting with the sun at a conjunction, and returning to him again, which is 29 days, 12 hours, 44 min. The civil months are those framed for the use of civil life, and are different as to their names, number of days, and times of beginning, in several different countries.

A month is divided into four parts, called weeks, and a week into seven parts, called days; so that in a Julian year there are 13 months, or 52 weeks, and one day over.

A day is either natural or artificial. The natural day contains 24 hours; the artificial, the time from sunrise to sunset. The natural day is either astronomical or civil. The astronomical day begins at noon, because the increase and decrease of days terminated by the horizon, are very unequal among themselves; which inequality is likewise augmented by the inconstancy of the horizontal refraction; and therefore the astronomer takes the meridian for the limit of diurnal revolutions, reckoning noon, that is, the moment when the sun's centre is on the meridian, for the beginning of the day. The British, French, Dutch, Germans,

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We think such an hypothesis much more probable than that this remarkable prolongation of its valley, has been caused by the comparatively limited every-day deposites of recent times. We have been acquainted with the mouths of the Mississippi, like the Falls of Niagara, for more than a century; and yet its several channels, the distance from known points above, and all its essential grand features, like the cataract of Niagara, remain to all observation, essentially the same as when first discovered.

Spaniards, Portuguese, and Egyptians, begin the civil day at midnight; the Greeks, Jews, Bohemians, Silesians, with the modern Italians, and Chinese, begin it at sunset; and the ancient Babylonians, Persians, Syrians, with the modern Greeks, at sunrise.

A natural day is divided into 24 equal parts, called hours, as shown by well-regulated clocks and watches; but those hours are not equal, as measured by the returns of the sun to the meridian, because of the obliquity of the ecliptic, and the Earth's unequal motion in her orbit.

An hour is divided into 60 equal parts, called minutes; and these are subdivided into 60 equal parts, called seconds. But the Jews, Chaldeans, and Arabians divided the hour into 1080 equal parts, called scruples.

Besides the measure of time by years, &c., it was found convenient to introduce the use of Cycles; that is, a circulation of the time between the returns of the same event. The cycle of the sun is a space of 28 years; in which time the days of the month return again to the same days of the week; and the sun's place to the same degrees of the ecliptic on the same days, so as not to differ 1° in 100 years; and the leap-years again in respect to the days of the week on which the days of the month fall.

PHILIP GARRETT.

NATURAL HISTORY.

ANTS.*

THE history of this insect presents examples of an industry which has become proverbial, and traits of affection and feeling which would do honour to our own species. Love and courage, patience and perseverance, almost all the higher virtues of human nature, when arrived at the highest pitch of earthly perfection, seem to be the ordinary springs of action in the ant. Of ants, as of other social insects, the largest portion of the community consists of neuters; beings possessing the most exquisite sentiments of maternity unalloyed by passion;

* See notice of recent publications, page 368.

so that from their birth to their death they live, think, and act only for the offspring of another. The instincts of this insect are, indisputably, more extraordinary than those of any other in the whole range of animated nature. The real habits and proceedings of these insects are so extraordinary, that they would stagger our belief, if not confirmed by such observers as Huber and Latreille. Their nests contain three kinds of individuals —males; females, which have wings; and neuters, which are destitute of these appendages.

"In the warm days which occur from the end of July to the beginning of September, and sometimes later, the habitations of the various species of ants may be seen swarming with winged insects; these are the males and females, preparing to quit for ever the scene of their nativity and education. Every thing is in motion; and the silver wings, contrasted with the jet bodies which compose the animated mass, add a degree of splendour to the interesting scene. The bustle increases, till at length the males rise, as it were, by general impulse into the air, and the females accompany them: the whole swarm alternately rises and falls with a slow movement, to the height of about ten feet; the males flying obliquely with a rapid zigzag motion, and the females, though following the general movement of the column, appearing suspended in the air, like balloons; and having their heads turned towards the wind."

Sometimes the swarm of a whole district unite their infinite myriads, and seen at a distance, says Mr. Gliditsch,* produce an effect very much resembling an aurora borealis, when from the border of the cloud appear several columns of flame and vapour, attended

* A species of ant, called by Linnæus the *formica sacchivora*, appeared in such torrents in the island of Granada, and destroyed the sugar-canes so completely by undermining their roots, that a reward of £20,000 was offered to any one who should discover an effectual mode of destroying them. They descended from the hills in a flood, and filled not only the plantation, but the roads for miles. Domestic quadrupeds perished; and rats, mice, and reptiles, were devoured by them, and even birds were so harrassed when they alighted as quickly to die. Nothing opposed their march: they blindly rushed into the streams and were drowned in such countless myriads, that

with a variety of luminous rays and lines, resembling forked lightning confined in its brilliancy. The noise emitted by the countless myriads of these creatures is not so loud as the hum of a single wasp, and the slightest breath scatters them abroad.

Attachment to the female is not the only instance of affection evinced by these insects; they, as well as bees, appear to recognise each other even after a long absence. Huber, having taken an ant-hill from the woods, placed it in his glass hive; finding that he had a superabundance of ants, he allowed some of them to escape, and these formed a nest in his garden. Those which were in the hive he carried into his study, and observed their habits for four months, after which period he placed the hive in the garden within fifteen paces of the natural nest. Immediately, the ants established in it recognised their former companions, with whom they had held no communication for four months; they caressed them with their antennæ, and taking them up in their mandibles, led them to their own nest. Presently others arrived in crowds and carried off the fugitives in a similar manner; and venturing into the artificial ant-hill, in a few days caused such a desertion that it was wholly depopulated.

The above anecdote seems to prove that ants have a language of dumb signs, of which the organs are the antennæ. As yet, the proofs of this antennal language have been drawn from the affections of these creatures, but more striking ones are derived from their passions. For there are few animals in which the passions assume a more deep and threatening aspect; they unite them in myriads for the purposes of war and extermination.

It would perhaps be too much to say, that the warfare which takes place among ants calls forth bright traits of character, and occasions the exercise of virtues,

the aggregation of their tiny carcasses dammed up the waters, and formed a bridge for others to pass over. The large fires lighted in their paths were speedily extinguished by the rush of their masses, and had not Providence swept them away in the torrents of a terrible hurricane in 1780, every thing must have fallen before them.—*Introduction to Entomology*, vol. i. p. 185.

which under no other combination of circumstances could be exhibited. Yet Latreille, after he had cut off the antennæ of an ant, saw another approach it as if compassionating the loss of a member as dear to the owner as the pupil of our eye to us, and after caressing the sufferer, pour into the wound a drop of a liquid from its own mouth.

The causes which give rise to their wars are, no doubt, as important to them as those which urge human monarchs to devastate, and human heroes to struggle for victory. The ants will dispute furiously about a few square feet of dust; and such an object is of equal magnitude and importance to them, as a river, or a mountain, to an emperor. Sometimes a straw, the carcass of a worm, a single grain of wheat, will cause myriads to engage in deadly strife, and leave the miserable inches of surrounding earth thickly strewed with the pigmy dead. Sometimes a nobler aim will cause them to defend to the uttermost their homes and their young, from the marauding ambition of a neighbouring hill. "Alas!" says Bacon, "the earth with men upon it will not seem much other than an ant-hill, where some ants carry corn, and some carry their young, and some go empty, and all to and fro around a little heap of dust."

"If we wish to behold," says P. Huber, "regular armies wage war in all its forms, we must visit the forests in which the fallow ants establish their dominion over every insect within their territory: we shall there see populous and rival cities and regular roads, diverging from the ant-hill, like so many radii from a centre, and frequented by an immense number of combatants; wars between hordes of the same species, for they are naturally enemies, and jealous of any encroachment upon the territory which surrounds their capital. It is in these forests I have witnessed the inhabitants of two large ant-hills engaged in a spirited combat; two empires could not have brought into the field a more numerous or more determined body of combatants.

"Both armies met half-way from their respective habitations, and the battle commenced: thousands of

ants took their stations upon the highest ground, and fought in pairs, keeping firm hold of their antagonists by their mandibles; while a considerable number were engaged in the attack, others were leading away prisoners; the latter made several ineffectual endeavours to escape, as if aware that upon reaching the camp a cruel death awatied them. The field of battle occupied a space of about three feet square: a penetrating odour exhaled on all sides; and numbers of dead ants were seen covered with venom. The ants composing groups and chains laid hold of each others legs and pincers, and dragged their antagonists on the ground; these groups formed successively. The fight usually commenced between two ants, who, seizing each other by the mandibles, raised themselves upon their hind-legs, to allow of their bringing their abdomen forward, and spurting their venom upon their adversary: they were frequently so wedged together, that they fell on their sides, and fought a long time in that situation in the dust; shortly afterwards they raised themselves, when each began dragging its adversary; but when their force happened to be equal, the wrestlers remained immoveable, and fixed each other to the ground, until a third came to decide the contest. It more commonly happened that both ants received assistance at the same time, when the whole four, keeping firm hold of a foot or antenna, made ineffectual attempts to win the battle. In this way they sometimes formed groups of six, eight, or ten, firmly locked all together; the group was only broken, when several warriors from the same republic advanced at the same time, and compelled the enchained insects to let go their hold, and then the single combats were renewed: on the approach of night, each party retired gradually to their own city.

"On the following day, before dawn, the ants return to the field of battle—the groups again formed—the carnage recommenced with greater fury than on the preceding evening, and the scene of combat occupied a space of six feet by two: the event remained for a long time doubtful; about midday the contending armies had removed to the distance of a dozen feet from

one of their cities, whence, I conclude, that some ground had been gained: the ants fought so desperately, that they did not even perceive my presence, and though I remained close to the armies, not a single combatant climbed up my legs.

The ordinary operations of the two cities were not suspended, and in all the immediate vicinity of the ant-hills order and peace prevailed; on that side on which the battle raged alone were seen crowds of these insects running to and fro, some to join the combatants, and some to escort the prisoners. This war terminated without any disastrous results to either of the two republics; long-continued rains shortened its duration, and each band of warriors ceased to frequent the road which led to the enemy's camp."

The astonishing part of this singular detail is, the instinct which enables each ant to know its own party. Of the same species, alike in form, size, faculties, and arms, it yet rarely happens that two of the same side attack each other; and when this takes place, says Huber, "those which are the objects of this temporary error caress their companions with their antennæ, and readily appease their anger." We can comprehend the existence of an instinct which shall, at all times, cause an animal to build its habitation after a distinct fashion, but a spontaneous combination of faculties seems to take place in the conduct of these wars. The insects march, countermarch, take prisoners, distinguish each other, retreat; in short, do all that man would do under similar circumstances. Nothing like the fatality of instinct is perceptible. These wars were accidental, might never have happened, and perhaps only happen in one community out of ten. Neither are they conducted alike in all cases, but are obviously modified according to the varying circumstances of time and place. These very fallow ants, when they attack the sanguine ants, for example, adopt a system of ambuscade and stratagem; and the sanguine ants, if too hardly pressed, send off a courier to their ant-hill for farther assistance, and immediately, says Huber, a considera-

ble detachment leaves the sanguine city, advances in a body, and surrounds the enemy.

The strength and perseverance of ants are perfectly wonderful. Kirby states, that he once saw two or three horse-ants hauling along a young snake not dead, which was of the thickness of a goose-quill. St. Pierre relates, that he saw a number of ants carrying off a Patagonian centipede: they had seized it by all its legs, and bore it along as workmen do a large piece of timber. Nothing can divert them from any purpose which they have undertaken to execute. In warm climates they may be frequently seen marching in columns which exceed all power of enumeration; always pursuing a straight course, from which nothing can cause them to deviate: if they come to a house or other building, they storm or undermine it; if a river cross their path, they will endeavour to swim over it, though millions perish in the attempt.

It is related of the celebrated conqueror Timour, that being once forced to take shelter from his enemies in a ruined building, he sat alone many hours: desirous of diverting his mind from his hopeless condition, he fixed his observation upon an ant which was carrying a grain of corn (probably a pupa) larger than itself, up a high wall. Numbering the efforts that it made to accomplish this object, he found that the grain fell sixty-nine times to the ground; but the seventieth time it reached the top of the wall. "This sight," said Timour, "gave me courage at the moment, and I have never forgotten the lesson it conveyed."

TERMITES, OR WHITE ANTS.

Almost all that we know concerning the habits and instincts of these curious animals is derived from an account published by Smeathman, in the "Philosophical Transactions" for 1781. The proceedings of this insect-tribe, as detailed in that paper, are so singular, that they cannot fail to prove interesting to the reader.

The termites are represented by Linnæus as the greatest plagues of both Indies, and indeed, between

the Tropics, they are justly so considered, from the vast damages and losses which they cause: they perforate and eat into wooden buildings, utensils, and furniture, with all kinds of household stuff, and merchandise; these they totally destroy, if their progress be not timely stopped. A person residing in the equinoctial regions, although not incited by curiosity, must be very fortunate if the safety of his property do not compel him to observe their habits.

"When they find their way," says Kirby, "into houses or warehouses, nothing less hard than metal or glass escapes their ravages. Their favorite food, however, is wood, and so infinite is the multitude of assailants, and such the excellence of their tools, that all the timber work of a spacious apartment is often destroyed by them in a night. Outwardly, every thing appears as if untouched; for these wary depredators, and this is what constitutes the greatest singularity of their history, carry on all their operations by sap or mine, destroying first the inside of solid substances, and scarcely ever attacking their outside, until first they have concealed it and their operations with a coat of clay."

An engineer having returned from surveying the country, left his trunk on a table; the next morning he found not only all his clothes destroyed by white ants or cutters, but his papers also, and the latter in such a manner, that there was not a bit left of an inch square. The black lead of his pencils was consumed, the clothes were not entirely cut to pieces and carried away, but appeared as if moth-eaten, there being scarcely a piece as large as a shilling that was free from small holes; and it was farther remarkable, that some silver coin, which was in the trunk, had a number of black specks on it, caused by something so corrosive, that they could not be rubbed off, even with sand. "One night," says Kemper, "in a few hours, they pierced one foot of the table, and having in that manner ascended, carried their arch across it, and then down, through the middle of the other foot, into the floor, as good luck would have it, without doing any damage to the papers left there."*

* Hist. Japan, vol. ii. p. 127

The destructiveness of these insects is, perhaps, one of the most efficient means of checking the pernicious luxuriance of vegetation within the tropics; no large animals could effect in months what the white ant can execute in weeks; the largest trees which, falling, would rot, and render the air pestilential, are so thoroughly removed, that not a grain of their substance is to be recognised. Not only is the air freed from this corrupting matter, but the plants destroyed by the shade of these bulky giants of the vegetable world are thus permitted to shoot.

The nests of these insects are usually termed hills by natives, as well as strangers, from their outward appearance, which, being more or less conical, generally resemble the form of a sugar-loaf; they rise about ten or twelve feet in perpendicular height above the ordinary surface of the ground.

They continue quite bare till they reach the height of six or eight feet; but in time the dead barren clay of which they are composed becomes fertilized by the

genial influence of the elements in these prolific climates; and in the second or third year, the hillock, if not overshaded by trees, becomes like the rest of the earth, almost covered with grass and other plants; and in the dry season, when the herbage is burnt up by the rays of the sun, it appears not unlike a very large hay-cock. "But of all extraordinary things I observed," says Adanson, "nothing struck me more than certain eminences, which, by their height and regularity, made me take them at a distance for an assemblage of negro huts, or a considerable village, and yet they are only the nests of certain insects."*

Smeathman has drawn a comparison between these labours of the termes and the works of man, taking the termes' labourer at one-fourth of an inch long, and man at six feet high. When a termes has built one inch, or four times its height, it is equivalent to twenty-four feet, or four times the height of man. One inch of the termes' building being proportionate to twenty-four feet of human building, twelve inches, or one foot, of the former must be proportionate to twelve times twenty-four, or two hundred and eighty-eight feet, of the latter; consequently, when the white ant has built one foot, it has, in point of labour, equalled the exertions of a man who has built two hundred and eighty-eight feet; but as the ant-hills are ten feet high, it is evident that human beings must produce a work of two thousand eight hundred and eighty feet in height, to compete with the industry of their brother insect. The Great Pyramid is about one-fifth of this height; and as the solid contents of the ant-hill are in the same proportion, they must equally surpass the solid contents of that ancient wonder of the world.

Every one of these hills consists of two distinct parts, the exterior and the interior.

The exterior consists of one shell formed in the manner of a dome, large and strong enough to enclose and shelter the interior from the vicissitudes of the weather, and the inhabitants from the attacks of natural or ac-

* Voyage to Senegal.

cidental enemies. It is, therefore, in every instance, much stronger than the interior of the building, which, being the habitable part, is divided, with a wonderful degree of regularity and contrivance, into an amazing number of apartments for the residence of the king and queen, and the nursing of their numerous progeny; or appropriated as magazines, to hold provisions.

These hills make their first appearance above ground by a little turret or two in the shape of sugar-loaves, rising a foot or more in height. Soon after, at some little distance, while the first turrets are increasing in height and size, the insects raise others, and so go on, increasing their number, and widening their bases, till the space occupied by their under-ground works becomes covered with a series of these elevations; the centre turret is always the highest; the intervals between the turrets are then filled up, and the whole collected, as it were, under one dome. These interior turrets seem to be intended chiefly as scaffolding for the dome; for they are, in a great part, removed when that has been erected.

When these hills have reached somewhat more than half their height, they furnish a convenient stand, where the wild bulls of the district may be seen to station themselves, while acting as sentinels and watching the rest of the herd reposing and ruminating below; they are sufficiently strong for this purpose. The outward shell, or dome, is not only of use to protect the interior buildings from external violence and heavy rains, but to collect and preserve a regular supply of heat and moisture, which seems indispensable for hatching the eggs and rearing the young ones.

YOUNG LADIES' GARLAND.

TO YOUNG LADIES.

If a young lady cannot bear reproof without sullenness, and disappointment without repining, what are we to expect of her when placed at the head of a family; to guide and direct its concerns? Truly the education

of females, at the present day, seems diametrically opposed to all that advances the happiness of domestic life. To attract admiration, and shine abroad, appears to be the principal object; as though they were destined for no higher purpose, like the ephemeral fly, they flutter awhile and are seen no more. What a lamentable circumstance, that the admirable picture drawn by Solomon should not have been more frequently imitated! All the refinements which wealth and luxury have introduced since the foundation of society, will never have power to do away the influence of those domestic virtues which the inspired penman has so beautifully delineated in the last chapter of Proverbs. One reason why the domestic virtues are so much neglected, is the love of show and external parade.—When once a love of fashionable pleasure steals upon the affections, it is in vain to look for the growth of those virtues which require a keeping at home. Fashion dethrones judgment, and lays her empire in the dust. When once the affections begin to entwine around the idol, the soul is fascinated with a kind of enchantment, which it seems impossible to resist, until it becomes a prey to the most violent passions; which, like a garden grown up with weeds, presents a most gloomy prospect for a future day. S. L.

INFLUENCE OF THE FEMALE CHARACTER.

Compare the condition and pursuits of the mass of men with those of women, and tell me on which side lies the inferiority. While the greater part of our sex are engaged in turning up the clods of the earth, fashioning the materials which are to supply the physical wants of our race, exchanging the products of industry of different countries, toiling amidst the perils of war or the tumults of politics,—to you is committed the nobler task of moulding the infant mind; it is for you to give their character to succeeding ages; it is yours to control the stormy passions of man, to inspire him with those sentiments which subdue his ferocity, and make his heart gentle and soft; it is yours to open to him the

truest and purest sources of happiness, and prompt him to the love of virtue and religion. *A wife, a mother!* How sacred and venerable these names! What nobler objects can the most aspiring ambition propose to itself than to fulfil the duty which these relations imply! Instead of murmuring that your field of influence is so narrow, should you not rather tremble at the magnitude and sacredness of your responsibility? When you demand of man a higher education than has hitherto been given you, and claim to drink from the same wells of knowledge as himself, should it not be that you may be thus enabled, not to rush into that sphere which nature has marked for him, but to move more worthily and gracefully within your own?—*Thatcher.*

YOUNG GENTLEMEN'S DEPARTMENT.

THE VALUE OF CHARACTER.

It is ever to be kept in mind, that a good name, is in all cases the fruit *of personal exertion.* It is not inherited from parents, it is not created by external advantages, it is no necessary appendage of birth, or wealth, or talents, or station; but the result of one's own endeavours—the fruit and reward of good principles, manifested in a course of virtuous and honourable action. This is the more important to be remarked, because it shows the attainment of a good name, whatever be your external circumstances, is entirely within your power. No young man, however humble his birth, or obscure his condition, is excluded from the invaluable boon. He has only to fix his eye upon the prize, and press towards it in a course of virtuous and useful conduct, and it is his. And it is interesting to notice how many of our worthiest and best citizens have risen to honour and usefulness by dint of their own persevering exertions. They are to be found in great numbers in each of the learned professions, and in every department of business; and they stand forth bright and animating examples of what can be accomplished by resolution and effort. Indeed, my friends, in the formation

of character, personal exertion is the first, the second, and the third virtue. Nothing great or excellent can be acquired without it. A good name will not come without being sought. All the virtues of which it is composed are the result of untiring application and industry. Nothing can be more fatal to the attainment of a good character than a treacherous confidence in external advantages. These, if not seconded by your own endeavours, will "drop you mid way, or perhaps you will not have started when the diligent traveller will have won the race."

Thousands of young men have been ruined by relying for a good name on their honourable parentage, or inherited wealth or the patronage of friends.—Flattered by these distinctions, they have felt as if they might live without plan and without effort, merely for their own gratification and indulgence. No mistake is more fatal. It always issues in producing an inefficient and useless character. On this account it is, that character and wealth rarely continue in the same family more than two or three generations.—The younger branches placing a deceptive confidence in an hereditary character, neglect the means of forming one of their own, and often exist in society only a reproach to the worthy ancestry whose name they bear.

NOTICE OF RECENT PUBLICATION.

Natural History of Insects. 12 mo pp. *being No. X. of Harpers' Family Library.* New-York: J. & J. Harper, 1830.

As often as, in the course of our reading, we chance to light upon volumes connected with the lower animal world, our astonishment is renewed, that the wonderful subjects of which they treat, receive so little attention from the mass of mankind. There have been, in all periods, a few persons, the chosen priests of nature, who have worshipped her with a holy enthusiasm, who have explored her mysteries through all her favourite haunts, and claimed, for her productions, the admiration to which they are so abundantly entitled. But from the days of Pliny, to the present hour, naturalists have made but a partial impression upon the minds of men, in seeking to attract them for a while from the busy paths of life, to the wilderness and the mountain, the forest and the river,—there to see not only innumerable proofs of the active superintendance and power of an Almighty Being, but also models of ingenuity, which, if pro-

perly attended to, might be turned to practical advantage in almost every branch of science and art.

Few of our readers, who have not made themselves conversant with the history of insects, will, perhaps, believe, that among them are to be found miners, masons, carpenters, and upholsterers, who were perfect in their different trades six thousand years ago! The common spider has made every body familiar with his proficiency in the art of weaving: a similar insect, who has taken up his abode in the water, might have suggested the idea of the diving bell many centuries before it was discovered: and if we had our senses about us, when wandering in the fields of a fine evening in summer, the honour of inventing the air balloon would not have belonged to the French; we might have derived the principle of it from the little spider, who lifts himself into the air upon his tiny web of gossamer, an elevation which he could not otherwise have any chance of attaining. The bees have, perhaps, been more frequently observed and watched in our gardens, than any other creature of the insect race. Yet how few have followed them into the hive, and there learned how much may be done in a given time by division of labour; how by ingenuity of contrivance, many mansions and storehouses may be erected with the greatest possible economy of space, and how, by mutual assistance and general subordination, thousands may live together in affluence and peace. Before Babylon was thought of, the social tribes of ants had constructed towers, and cities, and domes; had raised fortresses, and built covered ways, with all the art of an experienced engineer. The vulgar idea is that those insects feed upon corn. They do no such thing. They take it to their habitations, and break it up amongst the other materials of their edifices, but their food is of a much more select description. Some of the ant tribes feed chiefly upon liquor, which is yielded to them by the aphis, whole flocks of which insect, if we may use the expression, they appropriate to themselves, tend and support, as we do our flocks of sheep and our herds of cattle. But what, perhaps, is not the least surprising passage in the history of ants is this, that there are races of them which have their negro slaves: regular whites, who, reposing in indolence themselves, compel the less fortunate nation of blacks to do for them all the drudgery which they require. The wasp, who is pursued with unrelenting hostility by every body that see him,—the terror of all nurses,—is, nevertheless, a most industrious and most excellent manufacturer of paper.

These are a few of the curiosities of history, belonging to insects, which would repay, in the way of amusement, the attention of the most careless reader. But the transformations which insects undergo, furnish materials for reflection of a still more important kind. A deformed, leaf-devouring, loathsome looking thing crawls along our path in the spring, and if we do not extinguish the little spark of life that warms him, he sports about our garden before the summer is over, in the form of a beauteous butterfly, decorated with a pair of wings so tastefully painted, that no artist can rival the splendour of their colouring. There is in the South of Europe an insect called the ant-lion, which, though apparently the most helpless of

all creatures, has a most formidable appearance. It contrives, by laying pit-falls, to live the life of a murderer for two years, during which period it resembles a wood-louse. This, however, is but its state of probation, as a larva. When the appointed time arrives, it repents of all its former habits, and retires into the earth, where it surrounds itself with a case, the inside of which it ornaments with a pearl-coloured satin, of the most exquisite delicacy and beauty, the produce of its own silk and loom. In this elegant hermitage the penitent remains about two months, when not only his form, but his nature, is completely metamorphosed; he puts on four wings, and re-visits the world, a creature of purity, innocence, and gaiety, as a fly of a very brilliant description. Assuredly there are, in these changes, a pledge and a warning for man, of that great transformation that awaits him when his appointed moment arrives. If it be said that this death and burial and resurrection, under another form, of insects, be necessary to the propagation of their race, we must only therefore the more admire the goodness of Him who has ordained such a law, from which man cannot fail to derive the hope that he, also, after descending to the earth, may rise a newly-formed and purified creature, and destined for higher worlds than that from which, in *his* larva state, he now draws his support.

We have only room here to say that this work is of the most interesting character, and ought to be universally read.

POETRY.

(*For the Repository.*)

"TIME'S BUT THE PASSAGE TO A BETTER WORLD."

BY REV. JOSEPH RUSLING.

MAN is not destined long to stay
Where first he breathes, perhaps a day,
Or hour alone!
This life is but a *passing* place,
To *worlds beyond*, we run the race
And *soon* 'tis done.

Why should we then indulge a sigh
If *ills* we meet, or *pleasures* fly,
These *cannot* last!
'Tis but a *momentary* strife,
We breathe, and then we end our life,
And *all is past*.

As flow the rivers to the sea,
So *time* glides swift from you and me,
'Tis gone how soon!
Ourselves, and more, a hapless race,
Shall lowly lie in death's embrace,
Perhaps e'er noon,

This world is but the wreck of souls,
Where the rough sea in tumult rolls
Its fearful waves,
But heaven a house for us hath reared,
Rich with celestial bloom prepared,
Beyond the grave!

Life's genial current, stay it must,
And earth again reclaim our dust,
"Till time shall cease;"
Then, ah! how sweet, the sound I hear,
"Good tidings," such as angels bear
From realms of peace—

That when we shall resign our breath,
And in submission bow to death,
We hope to find
A *pure* and *happier* scene of bliss,
Where we shall greet the *sons of peace*,
Of heav'nly mind.

Why then complain of transient things,
Time lends to life his wide spread wings,
To waft us on;
Thus by strong sweeping pinions borne,
More fleet than dews of early morn,
We soon are gone.

Fly then ye moments, swifter far,
Than the pale gleam when shoots a star,
There's naught to lose;
Life, in ethereal grandeur waits,
And when we pass the Empyrean gates,
THERE, is repose.

TO THE EDITOR OF THE MONTHLY REPOSITORY.

BY REV. JOHN DOW.

THE incipient numbers of your work, design'd
To please, to comfort, and improve the mind,
Have met my eye—and from a brief review,
I'm led to say, "Your good design pursue:"
To give a relish to the mind of youth,
For useful reading and for love of truth,
Is nobly done—such labours justly claim
A grateful tribute, meed of modest fame.
Knowledge, deriv'd from *entertaining* facts,
Inspires pleasure, and a zest contracts,
Gives an impetus to the expanding mind,
And prompts to virtuous acts of ev'ry kind:
Hence stores of various matter, cull'd with care,

Compose a cabinet of *jewels*, where
The mental pow'rs, if virtuously inclin'd,
Behold their lustre, and a treasure find.
From the first pages of the work in view,
I think 'twill greatly please, and profit too,
Will illustrate the noble object sought,
And prove, that "reading is the food of thought,"
I recommend to all who books explore,
This cheap appendage to their fam'ly store,
May its contents reverbrate from the tongue,
And prove a blessing to both old and young!

EDUCATION.

BY JOHN BOWRING.

A child is born—Now take the gem and make it
  A bud of moral beauty. Let the dews
Of knowledge, and the light of virtue, wake it
  In rich fragrance and in purest hues;
When passion's gust and sorrow's tempest shake it,
  The shelter of affection ne'er refuse,
For soon the gathering hand of death will break it,
  From its weak stem of life—and it shall lose
All power to charm; but if that lovely flower
  Hath swelled one pleasure, or subdued one pain,
O who shall say that it has lived in vain,
  However fugitive its breathing hour?
For virtue leaves its sweets wherever tasted,
  And scattered truth is never, never wasted.

SUNBEAMS AND SHADOWS.

"Oh! life is like the summer rill, where weary daylight dies;
We long for morn to rise again, and blush along the skies.
For dull and dark that stream appears, whose waters, in the day,
All glad in conscious sunniness, went dancing on their way.
But when the glorious sun hath woke and looked upon the earth,
And over hill and dale there float the sounds of human mirth;
We sigh to see day hath not brought its perfect light to all,
For with the sunshine on those waves, the silent shadows fall.
Oh! like that changeful summer rill, our years go gliding by,
Now bright with joy, now dark with tears, before youth's eager eye.
And thus we vainly pant for all the rich and golden glow,
Which young hope, like an early sun, upon its course can throw.
Soon o'er our half-illumin'd hearts the stealing shadows come,
And every thought that woke in light receives its share of gloom.
And we weep while joys and sorrows both are fading from our view,
To find, wherever sunbeams fall, the shadow cometh too!"

ROCK BRIDGE IN VIRGINIA.

MONTHLY REPOSITORY,

AND LIBRARY OF

Entertaining Knowledge.

VOL. I. FEBRUARY, 1831. No. 9.

ROCK BRIDGE IN VIRGINIA.

The annexed engraving is said to be a correct representation of this great natural curiosity. It is situated in the county of Rockbridge, to which it has given name, and is viewed as one of the most sublime and imposing productions of nature. It is on the ascent of a hill, which appears to have been cloven through its length by some mighty convulsion. The following account will, we presume, be read with much interest.

On a lovely morning, towards the close of Spring, I found myself in a very beautiful part of the Great Valley of Virginia. Spurred onward by impatience, I beheld the sun rising in splendour, and changing the blue tints on the tops of the lofty Alleghany mountains into streaks of the purest gold, and nature seemed to smile in the freshness of beauty. A ride of about fifteen miles, and a pleasant woodland ramble of two, brought myself and companion to the great *Natural Bridge*.

Although I had been anxiously looking forward to this time, and my mind had been considerably excited by expectation, yet I was not altogether prepared for the visit. This great work of nature is considered by many as the second great curiosity in our country, *Niagara Falls* being the first. I do not expect to convey a very correct idea of this bridge, for no description can do this.

The natural bridge is entirely the work of God. It is of solid limestone, and connects two huge mountains together by a most beautiful arch, over which there is a great wagon road. Its length from one mountain to the other, is nearly 80 feet, its width about 35, its thick

ness about 44, and its perpendicular height over the water is not far from 220 feet. A few bushes grow on its top, by which the traveller may hold himself as he looks over.—On each side of the stream, and near the bridge, are rocks projecting ten or fifteen feet over the water, and from 200 to 300 from its surface, all of limestone. The visiter cannot give so good a description of this bridge as he can of his feelings at the time.

He softly creeps out on a shaggy projecting rock, and looking down a chasm of from 40 to 60 feet wide, he sees nearly 300 feet below, a white stream foaming and dashing against the rocks beneath, as if terrified at the rocks above. This stream is called Cedar Creek. The visiter here sees trees under the arch, whose height is 70 feet, and yet to look down upon them, they appear like small bushes of perhaps two or three feet in height.

I saw several birds fly under the arch; they looked like insects. I threw down a stone and counted 34 before it reached the water. All hear of heights and depths, but they here *see* what is high, and they tremble and *feel* it to be deep. The awful rocks present their everlasting butments, the water murmurs and foams far below, and the two mountains rear their proud heads on each side, separated by a channel of sublimity. Those who view the sun, the moon, and the stars, and allow that none but God could make them, will here be fully impressed, that none but Almighty God could build a bridge like this.

The view of the bridge from below, is as pleasing as the top is awful. The arch from beneath would seem to be about two feet in thickness. Some idea of the distance from the top to the bottom may be formed from the fact, that as I stood on the bridge and my companion beneath, neither of us could speak loud enough to be heard by the other. A man from either view, does not appear more than four or five inches in height.

As we stood under this beautiful arch, we saw the place where visiters have often taken the pains to engrave their names upon the rock. Here Washington climbed up 25 feet and carved his name, where it still remains. Some wishing to immortalize their names,

have engraved them deep and large, while others have tried to climb up and insert them in the book of fame.

A few years since a young man, being too ambitious to place his name above all others, came very near losing his life in the attempt. After much fatigue, he climbed up as high as possible, but found that the person who had before occupied his place was taller than himself, and consequently had placed his name above his reach; but he was not thus to be discouraged.—He opens a large jack-knife, and in the soft lime stone, began to cut places for his hands and feet. With much patience and difficulty, he worked his way upwards, and succeeded in carving his name higher than the most ambitious had done before him. He could now triumph, but his triumph was short, for he was placed in such a situation, that it was impossible to descend unless he fell upon the ragged rocks beneath him.

There was no house near, from whence his companions could get assistance. He could not long remain in that condition, and, what was worse, his friends were too much frightened to do any thing for his relief. They looked upon him as already dead, expecting every moment to see him dashed to pieces. Not so with himself. He determined to ascend. Accordingly, he plies himself with his knife, cutting places for his hands and feet; and gradually ascended with incredible labour. He exerts every muscle. His life was at stake, and all the terrors of death rose before him. He dared not to look downwards, lest his head should become dizzy; and perhaps on this circumstance his life depended.—His companions stood on the top of the rock, exhorting and encouraging him. His strength was almost exhausted; but a bare possibility of saving his life still remained, and hope, the last friend of the distressed, had not forsaken him. His course upwards was rather oblique than perpendicular.—His most critical moment had not arrived. He had ascended considerable more than 200 feet, and had still further to rise, when he found himself fast growing weak. He thought of his friends and all his earthly joys, and he could not leave them. He thought of the grave, and dared not meet

it. He now made his last effort and succeeded.—He had cut his way not far from 250 feet from the water, in a course almost perpendicular; and in little less than two hours, his anxious companions reached him a pole from the top and drew him up. They received him with shouts of joy; but he himself was completely exhausted. He immediately fainted away on reaching the spot; and it was sometime before he could be recovered.

It was interesting to see the path up these awful rocks and to follow in imagination, this bold youth, as he thus saved his life. His name stands far above all the rest, a monument of hardihood, of rashness and of folly.

NATURAL DREAD OF DEATH.

It seems to us strange, it seems as if all were wrong, in a world where, from the very constitution of things death must close every scene of human life, where it hath reigned for ages over all generations, where the very air we breathe and the dust we tread upon was once animated life—it seems to us most strange and wrong, that this most common, necessary expedient, and certain of all events, should bring such horror and desolation with it; that it should bring such tremendous agitation, as if it were some awful and unprecedented phenomenon; that it should be more than death—a shock, a catastrophe, a convulsion; as if nature, instead of holding on its steady course, were falling into irretrievable ruins.

And that which is strange, is our strangeness to this event. Call sickness, we repeat, call pain, an approach to death. Call the weariness and failure of the limbs and senses, call decay, dying. It is so; it is a gradual loosening of the cords of life, and a breaking up of its reservoirs and resources. So shall they all, one and another, give way.—"I feel"—will the thoughtful man say—"I feel the pang of suffering, as it were, piercing and cutting asunder, one by one, the fine and invisible bonds that hold me to the earth. I feel the gushing current of life within me to be wearing away its own channels. I feel the sharpness of every keen emotion,

and of every acute and far penetrating thought, as if it were shortening the moments of the soul's connexion and conflict with the body." So it is, and so it shall be, till at last, "the silver cord is loosened, and the golden bowl is broken, and the pitcher is broken at the fountain, and the wheel is broken at the cistern, and the dust returns to the earth as it was, and the spirit returns unto God who gave it."

No; it is not a strange dispensation. Death is the fellow of all that is earthly; the friend of man alone. It is not a monster in the creation. It is the law and not an anomaly; it is the lot of nature.

> Not to thy eternal resting place,
> Shalt thou retire alone.
> Thou shalt lie down
> With patriarchs of the infant world, with kings,
> The powerful of the earth, the wise and good,
> Fair forms and hoary seers of ages past;
> All in one mighty sepulchre. The hills,
> Rock ribbed and ancient as the sun: the vales,
> Stretching in pensive quietness between;
> The venerable woods, rivers that move
> In majesty, and complaining brooks,
> That make the meadows green, and pour'd round all
> Old Ocean's gray and melancholy waste—
> Are but the solemn decorations all,
> Of the great tomb of man.—[*Bryant.*]

But of what is it—the tomb? Does the spirit die? Do the blest affections of the soul go down into the dark and silent grave? Oh! no. "The narrow house, and pall, and breathless darkness," and funeral train—these belong not to the soul. They proclaim only the body's dissolution. They but celebrate the vanishing away of the shadow of existence. Man does not die, though the forms of popular speech thus announce his exit. He does not die. We bury, not our friend, but only the form, the vehicle in which, for a time, our friend lived. That cold impassive clay, is not the friend, the parent, the child, the companion, the cherished being. No, it is not; blessed be God that we can say—*It is not!* It is the material world only that earth claims. It is "dust" only that "descends to dust." The grave!—let us break its awful spell, its dread dominion. It is the

place where man lays down his weakness, his infirmity; his diseases and sorrowing, that he may rise up to a new and glorious life. It is the place where man ceases —in all that is frail and decaying—ceases to be man that he may be, in glory and blessedness, an angel of light!

Why, then, should we fear death, save as the wicked fear, and must fear it? Why dread to lay down this frail body in its resting place, and this weary aching head on the pillow of its repose? Why tremble at this—that in the long sleep of the tomb, the body shall suffer disease no more, and pain no more, and hear no more the cries of want nor the groans of distress—and far retired from the turmoil of life, that violence and change shall pass lightly over it, and the elements shall beat and the storms shall sigh unheard around its lowly bed? Say, ye aged and infirm, is it the greatest of evils to die? Say, ye children of care and toil! say, ye afflicted and tempted! is it the greatest of evils to die?

Oh! no. Come the last hour, in God's own time?—and a good life and a glorious hope shall make it welcome—Come the hour of re-union with the loved and lost on earth! and the passionate yearnings of affection, and the strong aspiration of faith, shall bear us to their blessed land. Come death to this body—this burdened, tempted, frail, failing, dying body! and to the soul, come freedom, light, and joy unceasing!—come the immortal life!—'He that liveth'—saith the conquerer over the Devil—'he that liveth and believeth on me, shall *never die*.'

ON MUSIC.

(Written for the Repository by Rev. George Coles.)

Music is *one of the ornamental branches of science*, or, as it is sometimes called, *one of the fine arts*.

It is the science of harmonical sounds, and the art of combining those sounds, in a manner agreeable to the ear.

This science is called *Music*, either from the Latin word *musa*, which signifies a song; or from the Greek

word *Moùsa*, which signifies a *Muse*, the goddess of song.

Sounds may be either *simultaneous* or *successive*. In the first case they constitute *harmony*, in the latter *melody*.—These two united form music.

In music *a simple air* is the *melody* of the piece, and the *different parts combined* is the *harmony*.

The *air* or *melody*, is the *subject* of the piece.

The *Bass* and other parts are the *accompaniments*.

The science of music may be divided into *speculative* and *practical*.

Speculative Music is the knowledge of the nature and use of those materials which compose it.

Practical is the art of reducing and applying to practice, those principles which constitute the theory. This is called *composition*. The practice of singing, or playing on an instrument, is called the *performance*.

Music also is either *vocal* or *instrumental*.

That which is performed by the *voice* is *vocal*.

That is *instrumental* which is performed on an *instrument*.

The most agreeable is that which unites instruments and voices together. The instrument sustains the voice, and keeps it in the proper pitch; and the voice, by articulating the words, conveys the sense, through the medium of the ear, to the soul.

Music is a *science*, because it is something which may be *known*; and it is an *art* because it is founded on *principles*, and taught by precepts.

It is one of the *fine arts*, and ranks with *poetry*, as *sculpture* ranks with painting.

It is remarkable also, that, while the scriptures give no intimation of the need, or use of any of the arts or sciences in the Heavenly state, music alone excepted, they uniformly represent *that* as the employment of the unfallen and the redeemed, from creation's birth to endless ages. It was no doubt designed by Heaven as a pleasing auxiliary to devotion, and to "calm the tumult of the mind," and "tranquillize the soul," amidst earthly cares.

When reduced to writing, certain characters are used

to express it, and the proper arrangement and disposition of these characters constitute the *Grammar* of music, whilst the tasteful and elegant combination of sounds constitute the *Rhetoric* thereof.

It is pitiful to observe how the grammar and rhetoric of music, are neglected and abused in the present day, especially in that music which is not written, and by those murderers of music, who attempt to sing without any knowledge of the science.

It is high time that there should be a *reformation* in that part of divine service *called singing*, and a *revival* of the knowledge of the rules by which it ought to be conducted.—The subsequent remarks will afford those who wish to learn, considerable help in these particulars.

Hartford, Dec. 20, 1830.

A MOTHER'S LOVE.

Deep is the fountain of a mother's love. Its purity is like the purity of the "sweet south that breathes upon a bank of violets." The tear-drop speaks not half its tenderness. There is language in a mother's smile, but it betrays not all her nature. I have sometimes thought, while gazing on her countenance—its dignity slightly changed by the inelegant accents of her young child, as it repeated, in obedience, some endearing word—that the sanctuary of a mother's heart is fraught with untold virtues. So fondly—so devotedly she listens to its accents, it would seem she catches from them a spirit that strengthens the bonds of her affection. I have seen the mother in almost every condition of life. But her love seems every where the same. I have heard her bid, from her bed of straw, her darling child come and receive the impress of her lips; and as her feeble strains mingled in the air, I have thought there was loneliness in them not unlike the loneliness of an angel's melody.—And I have seen the mother at her fire-side deal out her last morsel to her little ones so pleasantly, that her own cravings seemed appeased by the pleasure she enjoyed. But who that

is not a mother can feel as she feels? We may gaze upon her as she sings the lullaby to her infant, and in her eye read the index to her heart's affections—we may study the demure cast of her countenance, and mark the tenderness with which she presses her darling to her bosom, but we cannot feel the many influences that operate upon her nature.—Did you ever mark the care with which she watches the cradle where sleeps her infant? How quick she catches the low sound of an approaching footstep! With what fearful earnestness she gazes at her little charge as the sound intrudes! Does it move? Does its slumber break? How sweet the voice that quiets it! Surely, it seems that the blood of but one heart sustains the existence of both mother and child. And did you ever behold the mother as she watched the receding light of her young babe's existence? It is a scene for the pencil. Words cannot portray the tenderness that lingers upon her countenance. When the last spark has gone out, what emotions agitate her!—When hope has expired, what unspeakable grief overwhelms her!

I remember to have seen a sweet boy borne to his mother with an eye closed for ever. He had strayed silently away at noon-day, and ere nightfall death had clasped him in its embrace. The lifeless tenement of that dear boy, as it burst upon the mother's vision, seemed to convey an arrow to her heart. When the first paroxysm of grief had subsided, she laid her ear to his lips, as if unwilling to credit the tale his pale countenance bore. She put her hand upon his breast, but she felt no beating there. She placed the ends of her soft fingers upon his brow, but it was cold. She uttered aloud his name—she listened—but the echoing of that name elicited no responding voice. "Then came the misgiving that her child was dead."—She imprinted many a kiss upon his cheek, and her tears mingled with the cold moisture upon his brow. Her actions betrayed a fear that she could not do justice to her feelings—that she could not express half the anguish of her bosom. The silence that followed that scene was like the silence of the sepulchre. It seemed of too holy a nature to disturb. There was a charm

in it—it was a charm hallowed by the unrestrained gushes of a mother's love.

Did you ever awaken, while on a bed of sickness, and find a mother's hand pressed closely upon your forehead? It is pleasant thus to break from a dream even when affliction is on you. You are assured that you have at least one friend, and that *that* friend is a true one. You are assured that if you never again go forth in the world, you will die lamented; and when pain and distress are on you, such an assurance is consoling. At such a time, you can read more fully a mother's feelings than her tongue can express them. The anxiety with which she gazes upon you—the tenderness with which she sympathises with you—the willingness with which she supplies your wants—all serve to represent the secret workings of her heart. But a mother's love is unceasing. Her children as they advance in years, go out one by one into the world, and are soon scattered in the directions of the four winds of heaven. But though rivers may separate them from her, they separate not the bonds of her affection. Time and distance rather increase her anxieties. She knows not the strength of her own attachments until she becomes separated from her offspring. Until she bids a child farewell, her nature remains untried. But at the dread moment of separation, she feels the influences of her love—she feels the full weight of the many treasures of affection she has unconsciously imbibed.

Who can look coldly upon a mother? Who, after the unspeakable tenderness and care with which she has fostered him through infancy—guided him through childhood, and deliberated with him through the perplexities of opening manhood, can speak irreverently of a mother? Her claims to his affections are founded in nature, and cold must be the heart that can deny them. Over the grave of a friend—of a brother, or of a sister, I would plant the primrose, for it is emblematical of youth: but over that of a mother, I would let the green grass shoot up unmolested; for there is something in the simple covering which nature spreads upon the grave, that well becomes the abiding place of decaying age.

ANCIENT SEPULCHRES.

The Repository for December, contains an engraving of one of the ancient Sepulchres, with an interesting account from Emerson's Letters from the Ægean. The Sepulchres there spoken of are of two distinct kinds. The engraving referred to, represent those *erected upon* the surface of the cliffs. At some short distance from these are the places of sepulchre *excavated in* the cliff, and of which the above cut is said by Mr. Emerson, and others, to be a correct representation. The latter consist generally of a small chamber, with one *or more* divisions for the reception of bodies, and not unfrequently the front of the rock, above the low entrance to the vault, is formed into a facade, with pilasters and a pediment, the capitals being shaped like the volutes of the Ionic order.

"These two species of sepulchres are amply illustrative of the various texts throughout the Bible, which speak of the ancients. The first, from their elevation and profusion of ornament, are evidently those referred to in the text. 'Wo unto you, Scribes and Pharisees, hypocrites, because ye *build* the tombs of the prophets, and *garnish* the sepulchres of the righteous;' while the low apertures of those which are subterraneous, explain the *stooping down* of Mary to look into the sepulchre of Christ. Their capacious chambers would readily ad-

mit of the *entering in* of three or more individuals; as when Mary Magdalen, and Mary the mother of James, entered into the tomb of Jesus, and found a third person sitting. And one of these gloomy apartments would form no unsuitable residence for the maniacs, whom the Saviour met '*coming out of the tombs*,' in the country of the Gergesenes.

"The ranges, too, of depositories for the dust of the dead, explain the frequent phrase of one person being buried beside another in the same grave; as when the old Prophet, returning from entombing the man of God who came from Judah, charges his son, saying, 'When I am dead, then bury *me* in the Sepulchre where the man of God is buried, and let my bones rest *beside* his.' May not the external architectural embellishments of these excavations likewise serve to illustrate the words of Isaiah, 'As he that heweth out a sepulchre on high, and *graveth* an habitation for himself in a rock.'

"On the way from the landing place to the Theatre, we passed some ancient walls of beautiful masonry, and near them, on a rising ground, the site of the ancient city—the Antiphellus of Strabo, and still called by the neighbouring islanders Antiphilo. All around it the ground is partially levelled for the houses, and steps are cut from rock to rock, for the purpose of forming a mutual communication; similar to those of the Pynx at Athens."

"The theatre is constructed of stone from the spot, the back of the scena fronting the sea, and thus affording to the spectators a prospect of unrivalled magnificence. As usual with the Greeks, advantage has been taken of the rising ground to hollow out the retiring seats, and twenty-six of the twenty-seven rows of benches of which it originally consisted still exist, almost uninjured; but the proscenium, and parts connected with the stage, have disappeared, merely a few walls, probably part of a terrace, remaining towards the sea. The whole diameter of the theatre, fronting the scena, was 165 feet, and 36 feet 6 inches—that of the orchestra, from whence four passages to the summit of the edifice gave access to each row of seats.

These, with the *debris* of some unknown building, a few reservoirs for water, and some crumbling walls, are all that have survived the decay of Antiphellus.

"A lofty pedestal rises in the midst of the ruins; but it bears neither effigy nor legend; and from its oblong shape alone we can conjecture that it once supported an equestrian figure; all besides is a blank, a waste, a wilderness. Her port and her harbour are desolate: the waves now dash unheeded over the barriers once raised to curb them. Her streets are abandoned to the fox, and her sepulchres are open to the winds. The voice of the multitude is mute: the ceaseless sea alone disturbs her silence; and so deep is the stillness of the scene, that the most trifling sound, the falling of a stone, or the scream of a restless sea-bird, re-echoes for along the solitary shore."

BEAUTIES OF HEBREW POETRY.

Where can another history be found like that contained in the Pentateuch of Moses—so sweetly unaffected, yet so full of dignity; so concise, and yet so comprehensive; so rich in poetry, yet so chaste and simple in its style; so affecting in its pathetic recitals, and so vivid and powerful in its solemn and terrific scenes; and presenting throughout, a picture so graphic of the life and manners of the ancient Oriental world? The Pentateuch closes with the book of Deuteronomy, the last testimony of the Jewish legislator to his countrymen, containing a brief but vivid recapitulation of their past history, and a second concise declaration of the law. The nation had now gained a lasting experience of God's dealings with his people, and the generation had passed away on whose souls and bodies the blight of effeminacy and slavery had descended during their long residence in Egypt. Aaron had been gathered to his fathers, Moses was about to die, and the tribes were just upon the eve of a happy entrance into the long promised land of Canaan.—Under these circumstances, the words of Moses must have carried a thrilling impression into the hearts of the Israelites. How power

fully does he appeal to their experience of the judgments and mercies of Jehovah—with what mingled encouragements and threatenings, what fearful curses on the disobedient, what tender admonitions, what eloquent entreaties! Nor is the voice of prophecy silent; it speaks plainly of the coming Messiah; it predicts their own defection and consequent wretchedness; it almost relates the destruction of Jerusalem. The eight closing chapters of the book of Deuteronomy are perhaps the most sublime portion of the Scriptures. They contain the tremendous curses denounced against transgressors, and the unequalled blessings pronounced upon the obedient; the glowing historical song which Moses at the command of God, wrote for the people of Israel, to be for ever in their memories, a witness against them when they should turn from the Lord their God; the animated and prophetic blessing upon the twelve tribes, and the short but striking history of the death of Moses, when he had viewed from the top of Pisgah, with an eye which old age had not dimmed, the land "*flowing with milk and honey*," stretched out before him in all its compass and luxuriance.

Through all this short but perfect and comprehensive history—the storehouse of poetic imagery to the prophets and psalmists—where is the page that is not full of materials to arrest the eye, and excite the imagination of the poet? What books could be more crowded with energetic recollections, sublime and picturesque events, instructive and terrible warnings? From the first interposition of Jehovah, to the moment when His presence is revealed to Moses upon Nebo, His glorious agency is every where visible. It is He who accompanies the patriarchs in all their journeyings, and makes trial of their faith; it is He who gives wisdom to Joseph, and makes the children of Israel to increase in Egypt; it is He who brings them out with His mighty hand and His outstretched arm; who reveals His glories at the Red Sea, on Mount Sinai, and through the wilderness; who dwells between the cherubim, and leads His people like a flock. Throughout, it is the purpose of the inspired historian to stamp upon

the minds of his countrymen the most impressive sense of their peculiar dependence upon God; he closes with the declaration, so literally fulfilled, that they shall be invincible and glorious, if obedient to their divine Sovereign, but cursed, rejected, and miserable, whenever they forsake Him.—*N. A. Review.*

THE ANCIENT AND MODERN HISTORY OF NATIONS.

OF THE GRECIAN STATES.

We have already seen in what manner Athens came under the dominion of Sparta, which was the next most renowned state of Greece, and was even prior to it in the date of its institution.

Sparta or Lacedæmon, as we have seen, was first governed by kings; it afterwards admitted, instead of one king, two to reign with equal authority; a mode of government which lasted several centuries, though the one was almost continually at variance with his associate on the throne. During this succession an attempt was made to impose a tribute upon the peasants, to which all acceded except the *Helotes*, who excited an insurrection, for the purpose of vindicating their rights; they were, however, subdued, and, with their posterity, condemned to perpetual slavery, and a decree was passed that all other slaves should go by the general name of Helotes.

There is nothing more remarkable in history, yet nothing better attested, than what relates to the laws and government instituted by Lycurgus in Lacedæmonia. In forming the constitution Lycurgus had as much respect to the business of war as he had to internal and political institutions. With this view he proscribed all kinds of luxury, all the arts of elegance, and, in short, every thing that tended to soften and debilitate the human mind. The Spartans were forbidden the use of money, they lived at public tables, and on the coarsest fare; the young people were taught to pay the utmost reverence to those who were more advanced in years; and all ranks capable of bearing

arms, were daily accustomed to the most painful exercises, so that, to the Spartans, the time of war was the period of relaxation. At that time many indulgences were allowed them, by which the camp might be regarded as a scene of ease and luxury.

He forbade the Spartans to surround their city with a wall, lest security should lead them to remit their vigilance in its defence: he enjoined them not to pursue a flying foe after battle: he made it shameful for them to turn their backs upon an enemy, however superior in force; so that, in battle, death or victory was the lot of every Lacedæmonian; or a fate worse than death, disgrace! an infamy that excluded them from all civil and military employments.

The minds of the Spartan youth were improved by a constant habit of reasoning in short pithy sentences, for which they were very celebrated. Thus, in modern times, a *laconic** sentence, is one that is short but expressive.

Marriage, as at Athens, was esteemed honourable also in Sparta. After a certain age unmarried people were scarcely to be met with. A young man refused to rise up at the approach of an illustrious general, because he had never been married: "You have no children," said he, "who may show me the same respect, and rise up at my approach."

Besides the two kings, whom Lycurgus continued at the head of the government, he instituted a *senate*, composed of twenty-eight members, whose policy chiefly consisted in siding with the kings, when the people were grasping at too much power; and, on the other hand, in espousing the interests of the people, whenever the kings attempted to carry their authority beyond the bounds assigned to the office. The senators were persons chosen on account of their great virtue; but none, however excellent in other respects, were eligible till sixty years of age. These formed the supreme court of judicature; and though there lay

* From *Laconia* the general name for the Lacedæmonian province.

an appeal from them to the people, yet for several ages, such was their caution, and such the integrity of this tribunal, that none seemed desirous of seeking farther justice, and both parties acquiesced in the equity of their decrees. The great power of which the senate was possessed, was, about a century after, tempered by the formation of a superior court, called the court of the Ephori, which consisted of but five in number, and the members were chosen annually into their office. They were elected from the people and possessed the power of arresting and imprisoning even the persons of their kings, if they acted unbecoming their station.

The people also had a nominal share in the government. They had their assemblies, consisting of citizens only; and also their great convention of all persons who were free of the state; these were called upon to approve or reject the decrees of the senate, but without the liberty of debating any subject. They were not permitted to hold any of the offices of the state, and were considered merely as machines, which their wiser fellow citizens were to conduct and employ.

To reconcile the people to the small degree of power granted to them, Lycurgus boldly resolved to give them a share in those lands of which, by dissipation and other causes, they had been deprived. To keep the people in plenty, but in a state of entire dependance, appears to have been one of the most refined strokes in his system of legislation. He accordingly divided all the lands of Laconia into thirty thousand parts, and those of Sparta into nine thousand, which he portioned out to the respective inhabitants of each district. Each portion was sufficient to maintain a family with frugality; and though the kings had a larger share assigned to them to support their dignity, yet their tables had rather the air of competency than of superfluity and profusion. With so much judgment did Lycurgus carry this plan into effect, that, at the end of several years, he was able to appeal to his fellow citizens, "whether Laconia had not the appearance of an estate, which several brothers had been dividing among themselves."

This measure, however, at first, created a violent opposition, and the legislator narrowly escaped with his life. In his attempt to take refuge in a temple he was pursued by Alcander, a young nobleman, who, on Lycurgus's looking back, beat out one of his eyes; the legislator immediately stopt, and, showing his face covered with blood, the people were at once so struck with their own ingratitude and his danger, that, with one consent, they asked his pardon, and delivered up the offender to his revenge. Instead, however, of punishing or upbraiding him harshly, he caused him to wait upon his person: this instance of forbearance greatly conciliated the people's esteem and affection.

After Lycurgus had established every thing agreeably to his wishes, his next care was how to secure a perpetual observance of the laws which had been instituted. For this purpose he pretended a necessity of going to Delphos, and required an oath from the senate and people to adhere to his regulations until he returned. Upon this he imposed upon himself a voluntary banishment, in which he died.

The Spartans were long distinguished for a strict and rigid observance of the laws, which was not so much a compliance with the orders of individuals, as a respect for established customs, and a regard for their country. Private affections and interest gave way to, and were absorbed in, a desire of promoting the public good.

(*To be continued.*)

CABINET OF NATURE.

VARIETY OF NATURE.

In every region on the surface of the globe, an endless multiplicity of objects, all differing from one another in shape, colour, and motion, present themselves to the view of the beholder. Mountains covered with forests, hills clothed with verdure, spacious plains adorned with vineyards, orchards, and waving grain: naked rocks, abrupt precipices, extended vales, deep dells, meandering rivers, roaring cataracts, brooks and

rills; lakes and gulfs, bays and promontories, seas and oceans, caverns and grottoes—meet the eye of the student of Nature, in every country, with a variety which is at once beautiful and majestic. Nothing can exceed the variety of the *vegetable kingdom*, which pervades all climates, and almost every portion of the dry land, and of the bed of the ocean. The immense collections of Natural History which are to be seen in the Museum at Paris, show, that Botanists are already acquainted with nearly fifty-six thousand different species of plants.* And yet, it is probable, that these form but a very small portion of what actually exists, and that several hundreds of thousands of species remain to be explored by the industry of future ages. For, by far the greater part of the vegetable world still remains to be surveyed by the scientific botanist. Of the numerous tribes of vegetable nature which flourish in America, in the interior of Africa, in the immense islands of New Holland, New Guinea, Borneo, Sumatra, Java, Ceylon, Madagascar, and Japan; in the vast regions of Tartary, Tibet, Siberia, and the Birman empire; in the Philippines, the Moluccas, the Ladrones, the Carolinas, the Marquesas, the Society, the Georgian, and in thousands of other Islands which are scattered over the Indian and Pacific oceans—little is known by Naturalists; and yet it is a fact which admits of no dispute, that every country hitherto explored, produces a variety of species of plants peculiar to itself; and those districts in Europe which have been frequently surveyed, present to every succeeding explorer a new field of investigation, and reward his industry with new discoveries of the beauties and varieties of the vegetable kingdom. It has been conjectured by some Naturalists, on the ground of a multitude of observations, that "there is not a square league of earth, but what presents some one plant peculiar to itself, or, at least, which thrives there better, or appears more beautiful than in any other part of the world." This would make the number of species of vegetables to amount to

* Edinburgh Philosophical Journal, July, 1823, p. 48.

as many millions as there are of square leagues on the surface of the earth.

Now, every one of these species of plants differs from another, in its size, structure, form, flowers, leaves, fruits, mode of propagation, colour, medicinal virtues, nutritious qualities, internal vessels, and the odours it exhales. They are of all sizes, from the microscopic mushroom, invisible to the naked eye, to the sturdy oak and the cedar of Lebanon, and from the slender willow to the Banian tree, under whose shade 7000 persons may find ample room to repose. A thousand different shades of colour distinguish the different species. Every one wears its peculiar livery, and is distinguished by its own native hues; and many of their inherent beauties can be distinguished only by the help of the microscope. Some grow upright, others creep along in a serpentine form. Some flourish for ages, others wither and decay in a few months; some spring up in moist, others in dry soils; some turn towards the sun, others shrink and contract when we approach to touch them. Not only are the different species of plants and flowers distinguished from each other, by their different forms, but even the different individuals of the same species. In a bed of tulips or carnations, for example, there is scarcely a flower in which some difference may not be observed in its structure, size, or assemblage of colours; nor can any two flowers be found in which the shape and shades are exactly similar. Of all the hundred thousand millions of plants, trees, herbs, and flowers, with which our globe is variegated, there are not, perhaps, two individuals precisely alike, in every point of view in which they may be contemplated; yea, there is not, perhaps, a single leaf in the forest, when minutely examined, that will not be found to differ, in certain aspects, from its fellows. Such is the wonderful and infinite diversity with which the Creator has adorned the vegetable kingdom.

His wisdom is also evidently displayed in this vast profusion of vegetable nature—in adapting each plant to the soil and situation in which it is destined to flourish—in furnishing it with those vessels by which

it absorbs the air and moisture on which it feeds—and in adapting it to the nature and necessities of animated beings. As the earth teems with animated existence, and as the different tribes of animals depend chiefly on the productions of the vegetable kingdom for their subsistence, so there is an abundance and a variety of plants adapted to the peculiar constitutions of every individual species. This circumstance demonstrates, that there is a pre-contrived relation and fitness between the internal *constitution* of the animal, and the *nature of the plants* which afford it nourishment; and shows us, that the animal and the vegetable kingdoms are the workmanship of *one* and the same Almighty Being, and that, in his arrangements with regard to the one, he had in view the necessities of the other.

(To be continued.)

NATURAL HISTORY.

HIVE BEES—INSECT ARCHITECTURE.

Bees have, in all ages of the world, excited the attention of mankind; as well for the honey they produce in such marvellous abundance, as for the indefatigable industry by which they uniformly appear to be animated in their excursions beyond the place of their habitation. Hyliscus, the philosopher, we are informed by Cicero and Pliny, appears to have been one of the first who made the habits of this insect an object of study. For this purpose he retired into the desert. The ancients had a popular notion that bees were endowed with moral qualities. Virgil and others of his day, it is well known, paid great attention to bees. But it may be justly said, that nothing was known of their domestic economy until Réaumur and Huber rendered it the object of their study. The latter could not be said to have made it the object of his contemplation, for, strange to say, he was blind when he took to this pursuit, and only saw through the eyes of an affectionate wife, who attended on all his labours, and participated in his enthusiasm.

In the "History of Insects,"* we are furnished with a full account of the hive bee. To this work we are indebted for the following facts and observations, as well as for the history of the ant tribe, contained in our last number. We must however refer the reader to the work itself—it is replete with interest, and will amply compensate, by way of amusement and instruction, the time devoted to its examination.

The scene presented by the interior of a bee-hive has seldom failed to interest even the most incurious observer, while it fills with astonishment the mind of the enlightened and profound philosopher. When the day is fine, and the sun shining brightly, the habitation of these marvellous little creatures exhibits the aspect of a populous and busy city. The gates are crowded with hundreds of industrious workers—some on the wing in search of sustenance; others returning from the fields laden with food—some earnestly engaged in building—some in tending the young—others employed in cleansing their habitation—while four or five may be seen dragging out the corpse of a companion, and, as it would appear, scrupulously paying the last honours to the dead. At one moment the entrances of the little city are comparatively free; at another, crowds of its inhabitants may be seen struggling at the gates, making the best of their way to escape from the rain, which, by some peculiar sensation, they have discovered to be at hand.

A community or swarm of bees consists, first, of workers (fig. 2); these are of no sex; amount generally to many thousands in number, and are easily recognized by their industry, and by the smallness of their size: 2dly, of males (fig. 3); of which several hundreds belong to each community; these are larger than the working bee, and live idly: over all presides a queen, the most important member of the whole of this little commonwealth (fig. 1.) A person may keep hives for

* Natural History of Insects, 1 vol. 18 mo. pp. 292, embellished with numerous wood cuts. This work is an interesting and entertaining number of Harpers' valuable Family Library.

years, and never see this insect, about which more extraordinary things have been seen and written, than the reader would be disposed to believe.

Like every other animal living in society, bees have a medium of communication. The effects produced upon them by the loss of their queen will furnish proof of this fact. In a well-peopled and thriving hive, each bee is employed in its appropriate avocation, some in attending the young, some in making cells. At first, when the queen has been abstracted, every thing goes on well for about an hour; after this space of time, some few of the workers appear in a state of great agitation; they forsake the young, relinquish their labour, and begin to traverse the hive in a furious manner. In their progress, wherever they meet a companion, they mutually cross their antennæ,* and the one which seems to have first discovered the national loss, communicates the sad news to its neighbour, by giving it a gentle tap with these organs. This one in its turn becomes agitated, runs over the cells, crossing and striking others. Thus in a short time the whole hive is

* Feelers.

thrown into confusion, every thing is neglected, and the humming may be heard at a distance. This agitation lasts from four to five hours, after which the bees are calmed, and begin to adopt the measures which are necessary to repair their loss. That the agitation of the bees arises from the loss of the queen scarcely admits of a doubt. "I cannot doubt," says Huber, "that the agitation arises from the workers having lost their queen; for on restoring her, tranquillity is instantly re-established among them, and, what is very singular, they recognise her. This expression must be interpreted literally—for the substitution of another queen is not attended with the same effect, if she be introduced into the hive within the first twenty-four hours after removal of the reigning one. Here the agitation continues, and the bees treat the stranger just as they do when the presence of their own queen leaves them nothing to desire. But if twenty-four hours have elapsed before substituting the stranger queen, she will be well received, and reign from the moment of her introduction into the hive."

In order to observe the habits of this insect-world, the best plan is either to have several glass hives, or overturn some common ones, that a comparative view may be taken of the works carrying on in the interior.

"It is absolutely necessary," says Reaumur, "that more than one hive should be thus exposed; for then we shall see the disposition of the combs to be various in the different ones. They are not restricted to a uniform mode of constructing their cells, but accommodate the structure to circumstances."

The combs do not touch each other, but are separated by intervals sufficiently wide to permit the bees to work at the surface of each contiguous comb, and approach any cell without quite touching each other—besides these highways, the little city contains also narrower passages, by which the communication between one cake and another is materially shortened. The honey-comb is placed vertically in the hive. Each comb is composed of two layers of six-sided cells, united by their bases.

There are three sorts of cells; the first are for the larvæ of workers; the second for those of the males or drones, which are larger than the former, and are usually situated in the middle of the comb; the third are the royal cells. An inattentive observer might perhaps be led to infer, that the various cells composing a cake are little habitations in which the workers might repose themselves after the labours of the day, each in its own house. This, however, is not the fact: for some of these are filled with honey, and others closed up. On a more careful inspection, it will be seen that most of the cells contain a little worm: the young of the bee—an object evidently of the most anxious care and attention to those appointed to watch and feed them. But although indefatigably industrious, even these insects, when tired with labour, require repose, and cease to work when the ordinary motive for exertion is withdrawn. It is curious to observe their mode of rest; four or five cling to a part of the hive, and extend their hind legs, whence others suspend themselves by their fore feet. These do the same neighbourly turn for another line, and thus at all times either bunches (fig. 1) or festoons (fig. 2) of bees may be seen reposing. Huber,

however, has seen the workers retiring sometimes to a cell, and remaining motionless for twenty minutes.

The sting by which this little animal defends itself and its property from its natural enemies, is composed

of three parts; the sheath and two darts, which are extremely small and penetrating. Both the darts are furnished with small points or barbs, like that of a fish-hook, which, by causing the wound inflicted by the sting to rankle, renders it more painful. Still the effect of the sting itself would be but slight, if the insect were not provided with a supply of poisonous matter, which it injects into the wound. The sheath, which has a sharp point, makes the first impression; this is followed by that of the darts, and then the venomous liquor is poured in. The sheath sometimes sticks so fast to the wound, that the insect is obliged to leave it behind; this considerably augments the inflammation of the wound, and to the bee itself the mutilation proves fatal. Were it not for the protection of its sting, the bee would have too many rivals in sharing the produce of its labours. A hundred lazy animals, fond of honey and hating labour, would intrude upon the sweets of the hive, and for want of armed guardians to protect it, this treasure would become the prey of worthless depredators.

In Mungo Park's last mission to Africa, some of his people, having disturbed a colony of these animals, were so furiously attacked, that both man and beast were put to instant flight. The list of the killed and missing amounted to one horse and six asses—a serious loss to a white man in the midst of inhospitable deserts.

Lesser tells us, that in 1525, during the confusion occasioned by a time of war, a mob of peasants, assembling in Hoherstein, attempted to pillage the house of the minister of Elende, who having in vain employed all his eloquence to dissuade them from their design, ordered his domestics to fetch his bee-hives, and throw them into the middle of the infuriated multitude. The effect answered his expectations: they were immediately put to flight, and happy were those who escaped unstung.

It sometimes happens that a young swarm choose to enter a hive already occupied; when a most desperate conflict ensues, which will last for hours, and even for days, and the space around will be found covered with

the slain. These desperate conflicts not only take place between strangers, but also between inhabitants of the same hive—offspring of the same mother. The causes which bring division into so united a society have not been hitherto ascertained.

YOUNG LADIES' GARLAND.

AMERICAN LADIES.

Perhaps there is no country in the world, where the women are more completely *domestic*, than they are in our own: and none where female influence is more generally felt. This is a most happy circumstance. And it affords a powerful argument in favour of female education. It is trite, I know, but very important to remark, that when ladies are distinguished for domestic habits and virtues, their maternal influence is very great. They mould the hearts, and to a great degree form the understandings of the future fathers and mothers in our country. Now they, who have in their hands so great a part of *early education*, certainly ought to receive that cultivation of heart and mind, which would fit them for the discharge of the very important duties of their station. This is no easy work. It demands skill and judgment as well as attention. Surely preparation ought to be made for it, that it may be done well. Look at the majority of girls of 18, in the country, and see what are their qualifications for a place at the head of a household. But female influence is not only felt in domestic life:—it reaches to every part of society. Every where it ought to be salutary. Our ladies ought to be intellectual as well as sensitive; intelligent as well as affable; *good* as well as *pretty*. No where, indeed are they more modest, more pure and delicate than among ourselves; but if to these graces of the female character, were added suitable mental improvement, the effect on the whole community would be most happy. A higher spirit of literature would pervade our state; and young men would spend that time in study, which now they waste in dissipation. A loftier tone of

moral feeling would be awakened, and we might hope to witness the purity, without the extravagance of chivalry.

THE LOVELINESS OF WOMAN.

It is not the smiles of a pretty face, nor the tint of thy complexion, nor the beauty and symmetry of thy person, nor yet the costly robes and decorations that compose thy artificial beauty; no, nor that enchanting glance, which thou dartest with such lustre on the man thou deemest worthy of thy affection.—It is thy pleasing deportment—thy chaste conversation—thy sensibility, and the purity of thy thoughts—thy affable and open disposition—sympathising with those in adversity—comforting the afflicted—relieving the distressed—and, above all, that humility of soul, that unfeigned and perfect regard for the precepts of Christianity. These virtues constitute thy *Loveliness.* Adorned with but those of nature and simplicity, they will shine like the refulgent sun, and display to man that the loveliness of thy person is not to be found in the tinsel ornaments of the body, but in the reflection of the rectitude and serenity of a well spent life, that soars above the transient vanities of this world. And when thy days are ended here upon earth, thy happy spirit shall be wafted to the regions of eternal bliss.

BEAUTIFUL QUOTATION.

The Rev. Dr. Griffin, in his speech before the American Education Society, appealed to "the sex, who like ministering angels, love to hover about the chambers of sickness"—who owe so much to Christianity; and introduced this beautiful quotation—

> Not she with trait'rous kiss her Saviour stung,
> Not she denied him with unholy tongue;
> She, when apostles shrunk, could daggers brave,
> Last at the cross, and earliest at the grave.

INTERESTING AND INSTRUCTIVE EXTRACTS.

THE CAPTIVE PRINCE.

Cyrus, the renowned conqueror of Babylon, had, in his Armenian war, taken captive the young prince of Armenia, together with his beautiful and blooming princess, whom he had lately married, and of whom he was passionately fond. When both were brought to the tribunal, Cyrus asked the prince what he would give to be reinstated in his kingdom? He answered, with an air of indifference, "That as for his crown and his own liberty, he valued them at a very low rate. But if Cyrus would restore his beloved princess to her native dignity and hereditary possession, he should greatly rejoice, and would [this he uttered with tenderness and ardour] willingly pay his life for the purchase."

When all the prisoners were dismissed with freedom, it is difficult to express how much they were pleased with their royal benefactor. Some celebrated his martial accomplishments; others applauded his social virtues. All were prodigal of their praises, and lavish in grateful acknowledgements.—"And you," said the Prince, addressing himself to his bride, "what think you of Cyrus?" "I did not observe him," replied the Princess. "Not observe him! Upon what then was your attention fixed?" "Upon that dear and generous man who declared he would purchase my liberty at the expense of his very life."

If this lady was so deeply affected by the love of him who only offered to die for her temporal good, how much more strongly ought we sinners to be affected by the remembrance of the love of Christ, who actually died to obtain our everlasting salvation.

A VALUABLE JEWEL.

Behold the road to happiness!—rows of trees on each side, uniting at the top, form a beautiful arbour. See! woman is strewing it with flowers—how sweet—how refreshing the smell—see, too, the temple of happi-

ness—built of the purest alabaster—its white columns rise amidst the green foliage—it stands upon a foundation of adamant. Its interior is one large and spacious dome, around which are set many jewels of uncommon lustre, namely,—virtue, truth, love, affection, friendship, and innumerable others. But in the centre is one far brighter than all the rest—it sheds no single ray—but one vast volume of uncreated light, surpassing in brilliancy the sun itself—yet mild as the moon beam: It penetrates, fills, and surrounds every part of the spacious dome—and reflecting all the colours of the rainbow, flit, quiver, and stream with flickering radiance. This jewel is RELIGION—under its power, age assumes the freshness of youth—new beauties are added to the blush of love—contentment sports around—and the placid smile of real pleasure sits upon every lip, and lightens every countenance.

KNOWLEDGE.

DIG the earth for knowledge, search for it in the ocean, extract it from minerals, get it from vegetables, and obtain it from birds, beasts, and the lowest insect: finally, read the wisdom of God in all things

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NOTICES OF RECENT PUBLICATIONS.

Discovery and Adventures in the Polar Seas and Regions, with engravings. 1 vol. 12 mo. pp. 374. *Being No. XIV of Harpers' Family Library.* New-York: J. & J. Harper, 1831.

WE have rarely, indeed, met with a work more interesting and deservedly popular than "Harpers'" valuable "Family Library." In its wide range it embraces all subjects, of interest to the great mass of the reading community, while the great and varied amount of popular talent brought in requisition to its compilation, is a sufficient guarantee, that the several works of which it is composed will amply repay the reader for the time devoted to their perusal. The object of the Messrs. Harpers is to form an American Family Library, embracing all that is valuable in those branches of knowledge, which most happily combine amusement with instruction; and in the prosecution of their design, they have made arrangements for enhancing the value of the series by adding to it works of an American character—the productions of writers of eminence. The work will embrace every thing calculated to confirm the most salutary impressions, to the exclusion of whatever may have an injurious tendency on the mind.

The volume, (the title of which is prefixed) is replete with interest—its design is to exhibit a succinct, yet complete and connected view of the successive voyages made to the Arctic regions. In those climates, says the preface, "nature is marked by the most stupendous features, and the forms which she assumes differ from her appearances in our milder latitudes almost as widely as if they belonged to another planet. There the scenery is awful and dreary, yet abounds in striking, sublime, and even beautiful objects. The career of the navigators, who at various times have traversed the northern seas, amid tempest, darkness, and mountains of floating ice, presents such a series of peril and vicissitude, and has given rise to so many extraordinary displays of intrepidity and heroism, as cannot fail to render most interesting the story of their several adventures. The narrative of these Voyages has been carefully drawn from the most authentic sources, by Mr. Hugh Murray; and the most distinguished men of science in Scotland have lent their aid to illustrate that wonderful order of nature which prevails within the Arctic Circle. Professor Leslie has commenced the volume with a full examination of the Climate and its Phenomena,—subjects so prominent in those high latitudes, that, without a preliminary knowledge of them, the progress of discovery would be but imperfectly understood. A general Survey of all that is known of the Geological Structure of the same interesting regions is given by Professor Jameson. The chapter on Natural History, though it treats the subject rather in a popular than in a scientific manner, has received the careful revision of a distinguished naturalist. The Whale-fishery forms an essential branch of the present work. Of its daring operations, and its various perils—as they occur in the depth of the Polar seas—the description here introduced may be the more acceptable, as it is presumed to be the only one hitherto attempted within a moderate compass.

Eulogy on Dr. Godman, by Thomas Sewall, M. D. Washington, (D. C.) 1831.

Though the late Dr. Godman had none of the advantages of an early education, and though he died at the age of 32, he was one of the most distinguished scientific men, which our country has ever produced. He indeed fell a victim to his ardor in his favorite pursuits. From the works of French philosophers he early imbibed a spirit of infidelity; but the death of a pupil led him to reflection, and the consequent serious study of the New Testament was the means of his thorough conversion to Christianity. His religion ever after appeared to be of the most spiritual and evangelical kind. His only hope was in the merits and atonement of the Redeemer; this hope cheered him through a life of unusual toil and sickness, and made his death triumphant. Dr. Sewall, by the very faithful and perspicuous manner in which he has developed the religious character of his friend, in the pamphlet before us, has rendered an important service to the medical profession and to the cause of evangelical piety.

POETRY.

For the Monthly Repository and Library of Entertaining Knowledge.

STANZAS ON TIME.

I saw, and lo! a mingled throng;
Age with its hopes were there,
And loud and joyous swell'd the song,
Of youth and beauty fair;
There vivid thought, flew on through vistas far,
And call'd life's future hopes, a beacon star.

I turn'd again to see that band,
The look'd-for bliss possess,
And saw a lone one trembling stand,
In age's dreariness,
All else he said, long since had pass'd away,
Swept off, by an all powerful, viewless sway.

I saw the lofty mountain oak,
Bleak tempests proudly dare,
In stately pride its branches spoke,
And birds of song dwelt there;
From thence the zephyr often caught the lay,
It sung upon the breezes far away.

I turn'd again and still'd my breath,
Those carollings to hear;
Ah! there sat stillness hush'd as death—
That home of song was sear;
And all around prov'd a destroyer bold
Had there a desolating conquest told.

I saw so strongly rear'd a tower,
That nature's thunder came,
And vented all its angry power,
And yet it stood the same;
Men call'd it strength's strong fortress, for its age
Had more than number'd many an ancient sage.

I turn'd again, it disappear'd,
Touch'd by an unseen hand,
And all by man though strongly rear'd,
Pass'd as a magic wand;
Amazed I sought to know the noiseless path
Of one so desolating in his wrath.

I ask'd whence this so mighty spell?
Or where began its pow'r?
And listening gazed for one to tell;
When lo! a dark'ning low'r
Of fearfulness, fell o'er all earthly things,
And vision shrunk 'neath its awe-pinion'd wings.

Then came a gloom pall cover'd one,
On devastation's car,
And hast'ning said, "my course begun
With yonder morning star;
Since then decay has been my footstep, prest
On man, his works, and all earth's loveliest."

Where shall its bearing end, I sigh'd?
And tyrant like it said,
"When all earth's hopes have been defy'd,
And sunk beneath my tread,
And turn'd the limpid ocean into blood,
And dipt the moon into the crimson'd flood:

And roll'd away yon orb of fire,
And wrap'd the skies in night,
And seen mortality expire,
Then, then I take my flight;
A seraph then, from vast eternity,
Shall cry aloud, 'TIME may no longer be.'"

THE SHEPHERDESS.

THE FADED ONE.

WRITTEN BY W. G. CLARKE.

GONE to the slumber which may know no waking,
Till the loud requiem of the world shall swell;
Gone! where no sound thy still repose is breaking
In a lone mansion, through long years to dwell!
Where the sweet gales, that herald bud and blossom,
Pour not their music, or their fragrant breath,
A seal is set upon that mouldering bosom—
A bond of loneliness—a spell of Death!

Yet, 'twas but yesterday, that all before thee
Shone in the freshness of Life's morning hours;
Joy's radiant smile was playing briefly o'er thee,
And thy light feet impress'd but vernal flowers;—
The restless spirit charmed thy sweet existence
Making all beauteous in Youth's pleasant maze;
While gladsome Hope illumed the onward distance,
And lit with sunbeams thy expected days.

How have the garlands of thy Childhood withered
And Hope's false anthem died upon the air!
Death's cloudy tempests o'er thy way have gathered,
And his stern bolts have burst in fury there:
On thy pale forehead sleep the shades of Even—
Youth's braided wreath lies stained in sprinkled dust—
Yet looking upward in its grief to Heaven,
Love should not mourn thee, save in hope we trust!

REMEMBRANCES.

When unto dust, like sunny flowers departed,
From our dim paths the bright and lovely fade;
The fair of form—the free and gentle hearted,
Whose looks within the breast a Sabbath made:—
How like a whisper on the inconstant wind,
The memory of their voices stirs the mind!

We hear the song—the sigh—the joyous laughter,
That from their lips of old were wont to flow;—
When hope's beguiling plume they hurried after,
Ere their pale temples wore the locks of snow;
When joy's bright harp to sweetest lays was strung,
And poured rich numbers for the loved and young!

When the pale stars are burning high in heaven,
When the low night winds kiss the flowering tree,
And thoughts are deepening in the hush of Even,
How soft those voices on the heart will be!
They breathe of raptures which have bloomed and died—
Of sorrows by remembrance sanctified!

Yet, from our pathway when the loved have vanished,
What powerful magic can their smiles restore?
Like a rich sun burst by the tempest banished,
They passed in darkness—they will come no more!
Unlike the day beams when the storm hath fled—
No light renewed, breaks on their lowly bed!

Yet if their bosoms, in this brief existence!
Glowed with the worship of an humble soul,
How should we gaze upon that upward distance
Where the clear rivers of Salvation roll?
There, in green pastures, rise their anthems high—
Why should we mourn them, when in peace they die?

EVENING HYMN FOR DOMESTIC WORSHIP.

This night may the incense of prayer
From the family altar arise;
And the angel of covenant bear
Our wishes and wants to the skies!

May the savour to thee ascend sweet,
Through merits far more than our own,
And our every offering meet
Acceptance to-night at thy throne.

The sacrifice thou wilt accept,
And bless with the light of thy face,
Is the spirit which, contrite, has wept,
And sought thy forgiveness and grace.

BRIDGE OF HIDE ROPES OVER THE RIVER LA PLATA.

MONTHLY REPOSITORY,

AND LIBRARY OF

Entertaining Knowledge.

VOL. I. MARCH, 1831. No. 10

THE RIVER LA PLATA.

La Plata is the name of a very great river in South America, running through the province of Paraguay; on which account the whole country is sometimes called Plata, though this name is usually given only to a part of Paraguay. In the latter sense it comprehends all that country which is bounded on the east and south-east by the Atlantic ocean; on the south by Terra Magellanica; on the west by Tucuman; and on the north by the provinces of Paraguay proper and Parana. The great river La Plata, from which the country has its name, was first discovered in the year 1515, by Juan Diaz de Solis, but denominated La Plata by Sebastian Gabato, from the great quantity of precious metals he procured from the adjacent inhabitants, imagining that they were the produce of the country, though, in fact, they were brought from Peru.

The climate is pleasant and healthy. The winter is in May, June, and July, when the nights are very cold, but the days are moderately warm. The frost is neither violent nor lasting, and the snows are very inconsiderable. The country consists mostly of plains of a vast extent, and exceeding rich soil, producing all sorts of European and American fruits.

The river La Plata rises in Peru, and receives many others in its course, the chief of which is the Paraguay. The water of it is said to be very clear and sweet, and to petrify wood. It contains such plenty and variety

of fish, that the people catch large quantities of them without any other instrument than their hands. It runs mostly to the south and southeast, and is navigable the greatest part of its course by the largest vessels, and is full of delightful islands. All along its banks are seen the most beautiful birds, of all kinds; but it sometimes overflows the adjacent country to a great extent, and is infested with serpents of a prodigious size. From its junction with the Paraguay to its mouth, the distance is above two hundred leagues. Some judgment may be formed of its magnitude, when it is said that its mouth is about seventy leagues in width.

The manner in which individuals are conveyed across some parts of this majestic river, is curious, and to those who are accustomed to bridges and boats, somewhat alarming. Of this subject, the following account is given by Mollien, in his travels in Colombia.

"The following day, leaving the banks of the Pai, I proceeded along those of the Rio de la Plata, which falls into it, and before two o'clock in the afternoon, arrived in sight of the town of that name. We could not immediately enter it, on account of the bridge of communication not being sufficiently commodious for the number of persons going to and from La Plata. On each side of the river, leather bands are made fast to stakes, driven into the ground, and upon this tarabita, (for thus they call this singular sort of a bridge,) is placed a piece of wood, furnished with leather straps, by which the traveller is fastened, and according to whichever side he wishes to go, he is drawn across. The passage, at first, seems rather alarming; and one cannot, without shuddering, find himself suspended over an abyss by a few hide-ropes, which are very liable to be injured by the rain, and consequently, to break. Accidents, however, seldom happen. Animals are made to swim across."

Ambition travels on a road too *narrow* for *friendship*,—too *steep* for *safety*.

For the Repository and Library of Entertaining Knowledge.

BOOKS FOR CHILDREN.

Early impressions made upon the mind of a child are like characters written upon moistened clay. While in this state it will receive almost any impression, which, if permitted to remain until it has become hardened, it will be very difficult to erase. It is therefore highly important that these impressions be *good*. *Much* depends upon the *character* of the books that are put into the hands of the child to read. What impressions would it be like to receive from reading some of the popular novels of the day, where the hero of the tale is represented as a deceiver, and perhaps a murderer—where the most vicious and malignant principles of depraved nature are applauded and extolled as the greatest of virtues? It is certain that a bad impression is more easily made than a virtuous one. Hence the importance of furnishing children with such books as will be calculated to instill into their minds pure and virtuous principles. When the mind is just beginning to expand, instead of having presented to its intellect a groupe of distorted and unsubstantial images as the groundwork of its future progress in wisdom and knowledge, it should be irradiated with the beams of unadulterated *truth*. But what is the general tendency of most of the novels and popular romances that are so eagerly sought after and read, especially by the younger part of the community? "To distort and carricature the facts of real history; to gratify a romantic imagination; to pamper a depraved mental appetite; to excite a disrelish for the existing scenes of nature, and for the authenticated facts that have occurred in the history of mankind; to hold up venerable characters to derision and contempt; to excite admiration of the exploits and malignant principles of those rude chieftains and barbarous heroes, whose names ought to descend into everlasting oblivion; to revive the revengeful spirit of the dark ages; to undermine that sacred regard for *truth* and moral principle, which forms the basis of the

happiness of the intellectual universe; and to throw a false glory over scenes of rapine and bloodshed, and devastation. To such works and their admirers we might apply the words of the ancient prophet, 'He feedeth on *ashes;* a deceived heart hath turned him aside, that he cannot say, Is there not a lie in my right hand.'

> 'For sure, to hug a fancied case,
> That never did, and never can take place,
> And for the pleasures it can give,
> Neglect the *facts of real life,*
> Is madness in its greatest height,
> Or I mistake the matter quite.'"

The minds of young persons, who spend their time in reading fiction, generally become completely dissipated;—they lose a relish for facts connected with the system of nature and the history of mankind when represented in their true light. They are like the man that has become addicted to the use of strong drink, who is not satisfied with the refreshing and healthy beverage nature has freely supplied, but requires some thing of a stimulating nature to excite and elevate his feelings. There is sufficient *variety* in the *existing scenes* of creation and providence, without having recourse to *scenes of fiction* to instruct and *gratify* a rational mind. "If we survey the Alpine scenes of nature; if we explore the wonders of the ocean; if we penetrate the subterraneous recesses of the globe; if we investigate the structure and economy of the animal and vegetable tribes; if we raise our eyes to the rolling orbs of heaven; and if we contemplate the *moral* scenery which is every where displayed around us —shall we not find a sufficient variety of every thing that is calculated to interest and improve the mind?" Parents, therefore, who permit their children to more than waste their time in reading fictitious narratives, (the wild vagaries of an unbridled imagination,) or neglect to furnish them with suitable books—such as will be calculated to interest and instruct them, are certainly very censurable. Do they feel the responsibility that rests upon them to "train up their child in the way

he should go" as they ought? Are they sensible of the duties they owe to their children, who are looking up to and depending upon them for advice and instruction —to the community with which they are to associate and a part of which they are soon to become—and to God who has placed them for a season under their care, and who will call them to an account for the manner in which they train them up? If they did they would not be indifferent to this important subject. Youth is emphatically the seed-time of life. Much care should be taken therefore in the selection of the seed to be sown.

"'Tis education forms the common mind:—
Just as the *twig* is bent the tree's inclined."

F. Merrick.

February 16th, 1831.

LITERATURE OF THE JEWS.

The Spanish and Portuguese Jews, from whom the most distinguished of the Dutch Hebrew families are descended, were renowned among their nation for superior talents and acquirements, and we believe maintain even to this day an almost universally admitted pre-eminence. Under the tolerant and comparatively enlightened Mohamedan conquerors of Spain, their property was protected, their toleration was encouraged, and their persons loaded with favors. Their writers boast with delight and enthusiasm of "the glory, splendor and prosperity in which they lived."

Their schools in the south of the Peninsula were the channels through which the knowledge of the East was spread over western and northern Europe. Abenezra, Maimonides and Kimki, three of the most illustrious ornaments of the Synagogue, rank among the Spanish Jews.—Throughout the twelfth and thirteenth centuries, while knowledge among Christians seemed at the lowest ebb, the catalogue of Hebrew writers is most extensive and most varied. Mathematics, medicine, and natural philosophy, were all greatly advanced under their auspices; while the pursuits of poetry and oratory adorned their pages. They

obtained so much consideration, that the ancestors of almost every noble family in Spain may be traced up to a Jewish head.

The fifteenth and sixteenth centuries are crowded with every calamity that could afflict a nation, pursued by all the blindness of ignorance and all the hatred of infatuated and powerful malevolence. Their sacred books were destroyed; their dwellings devastated; their temples razed, themselves visited by imprisonment and tortures; by private assassinations and extensive massacres. When the infamous Ferdinand Fifth established or re-organized the Inquisition in Spain, the Jews were among its earliest victims. Two hundred thousand wretches were pursued by fire, sword, famine and pestilence, and he who should offer them shelter, food, or clothing, was to be punished as a felon. Of those who fled to the mountains many were murdered in cold blood, and others died miserably of hunger. Of those who embarked, thousands perished with their wives and children on the pitiless ocean.

Some reached the more hospitable regions of the North, and preserved the language and literature of their fathers; yet the epoch of their glory seemed departed, and the Arbabanels, the Cordozos, the Spinozas, and a few others, glimmer only amidst the general obscurity. The Jews, as a people, appeared wholly occupied in selfish worldliness, scarcely producing such a man as Mendelsohn, even in a century, and claiming for him then no renown in his *Hebrew* character.

The Jews seem to have partaken of the general character of the age; and scepticism and incredulity took their stand where ignorance and superstition had existed before. Yet the changes which had been extensively in action in the religious and political world, could not but produce some effect upon their situation. They had become too important a part of society to be passed by without notice; while their wealth and their great financial operations gave them extraordinary weight.—They have been courted by kings, ennobled by emperors. All the concerns of states have

been obliged to turn upon their individual will. They have become in a word the very monarchs of the earth, deciding the great question of peace or war—the arbiters, in truth of the destinies of man.

But it is not in this point of view that we mean to consider the Jews; nor are these 'lords of the ascendant' the individuals among them that interest our affections or excite our regard. The revival which we contemplate with delight is the revival of those old and holy associations which seemed buried in the abyss of worldliness, of that enlightened, that literary spirit which gives the promise and is the pledge of brighter and better days. We see the young tree of truth and inquiry springing up in the waste. Its roots strike deep, its branches spread widely, it shall gather the people under its shade.

We know of nothing more touching, nothing more sublime, than the feelings with which an intelligent Hebrew must review the past and present, while he anticipates the future history of his race. That history begins, as he deems it will end, in triumph and in glory. Yet mists and chilling desolation envelope all the intermediate records. With what proud and glowing emotions must he trace the origin and progress of that religion, which he and his fathers have professed through trials sharper than the fiery furnace, for which all of them have suffered, and millions have died.

With Israel the living God condescended to covenant, and called them 'his chosen, his peculiar people.' Miracles and signs and wonders cover all their early wanderings with light, fair as the milky way across the arch of heaven. For them the cloudy pillar was raised in the desert; for them the column of fire dissipated the gloom and the terrors of night. Amidst thunderings and lightnings, and the voice of the trumpet and the presence of God, their law was promulgated; the bitter waters of Marah were made sweet to them; and manna fell from heaven as the nightly dew—Well might they shout with their triumphant leader, 'The Lord is our strength, and our song, and our salvation.'

Then come the days of darkness—and they are many. The glory of the temple is departed. They are scattered like chaff among the nations. Opprobrium and insult hunt them through the earth. Shame and suffering bend them to the very dust, till degradation drags them to the lowest depth of misery—All the cruelties that ferocity can invent; all the infatuation that furious blindness can generate; all the terrors that despotism can prepare, are poured out upon their unsheltered heads. Warrants go forth for their extirpation; yet the race is preserved. Those who most hate and persecute one another, all unite to torture them. Exile, imprisonment, death—these are the least of their woes. Why should the picture be drawn?—the soul is lacerated with the contemplation. Those generations are gathered to their fathers. Stilled are their sorrows and their joys.

Next a few dim rays play across the path of time. Civilization and freedom gathering the human race beneath their wings, and protecting them all by the generous influence of a widely pervading benevolence, raise the race of Israel to their rank among the nations. —Then hidden in the deeper recesses of futurity, what visions of splendor are unveiled! The gathering of the tribes, Jerusalem, the glorious temple, their own Messiah;—but the thoughts falter, the spirit is troubled.—Yet 'the mouth of the Lord hath spoken it.'

Under the influence of thoughts like these Da Costa must have composed the hymn, of which we venture to give a translation. It breathes, it burns with all the blended emotions of pride and indignation; of hope deferred that sickeneth the heart; of confidence; of despair; of virtue wounded by contumely and true nobility insulted by contempt: there is a spirit roused by a contemplation of injustice, and a sense of wrong soaring from eloquence to sublimity.

ISRAEL.

[EXTRACT FROM THE TRANSLATION.]

Yes! bear—confide—be patient ever
My brethren of the chosen race!
Whose name oblivion blighted never,
Whose glories time shall ne'er efface:

Vanish the Atheist's desperate boldness,
  Shame the presumptuous threats of hell!
The age's apathy and coldness—
  Ye are the race of Israel.

Their blood who were, in years long faded,
  Allied to God, ye bear within;
And ye are still, although degraded,
  Ennobled by your origin;
Ye o'er all nations elevated,
  God's earthly treasure, hope and claim,
His favorites, his first created—
  O let us still deserve his name!

O sunk in shame! in sorrow straying!
  Ye sinned—now suffer and atone!
In agony and exile praying
  For that bright land you called your own
Ye from God's beaten track departed:
  Poor homeless pilgrims wandering here;
His arm abandoned you, proud hearted!
  To trembling helplessness and fear.

What prophets have foretold comes o'er us;
  The sceptre from our grasp is torn;
Our rank and glory fade before us,
  Our god-like kingdom given to scorn:
We chosen cast from chosen nations,
  Now writhe beneath the scoffer's rod;
Bare to the meanest slave's vexations,
  We who were subjects once of—God;

Ah! safety, comfort, all are reft us,
  Exiled by God's almighty hand;
Nought of the glorious orient left us,
  Our true—our only father's land!
Far from our sire's remains—ill-fated,
  The abject race of Abraham weeps;
His blood, in us degenerated;
  Now thro' a crumbling ruin creeps.

Redeemer! Sire! be our defender!
  O, turn not from our prayers away,
Give Israel to her early splendor,
  Or let her joyless name decay!
No! hopes deferr'd and memories vanish'd,
  Our trust in thee could never bow!
We are the Hebrews still—tho' banish'd,
  Thou art the Hebrew's God—e'en now!

Yes! the Messiah, soon appearing,
  Shall burst these bonds of slavery;
Thine anger-mists again are clearing,
  Our day of victory is nigh.

A heavenly flame is brightly soaring,
  Behind the clouds of earthly wo:
Shout, Israel! shout, with joy adoring,
  Your Prince's—Saviour's advent show.

Lion of Judah, roar and greet him,
  Hail his majestic march once more:
Come Adam's race! with blessings meet him
  And rank again, as rank'd of yore.
Announce him from on high thou thunder!
  Bend your proud heads, ye hills around!
Fall, kingdom of deceit, asunder,
  In ruins at our trumpet's sound.

Behold the long expected gladness!
  Salvation's morn again appears;
The meed for suffering, scorn, and sadness,
  The citadel 'gainst foes and fears.
With hope like this to live or perish,
  Is our redemption—duty—joy!
Which when our souls shall cease to cherish,
  Those guilty souls, O God, destroy!

Vol. I. 30—36

FIDELITY.

A faithful friend is the repository of our secrets, and is like a precious stone, which has no spots, and which is not to be purchased but by the returns of the same nature.—Happy he who finds such a friend; for to him he can trust his most secret thoughts, and in him find a consolation at all times.

Diodorus, the Sicilian, says, that among the Egyptians it was a criminal matter, to discover a secret with which they were entrusted, and one of their priests, being convicted of this offence was banished his country. Certainly, nothing can be more just, than that a secret entrusted to a friend, under the sanction of good faith and secrecy, should be considered as a sacred thing, and that to divulge it, under any pretence whatever, is a profanation of the most sacred duties.

Plutarch remarks, that the Albanians, being at war with Philip, king of Macedon, one day intercepted a letter, which he had written to Olympia, his wife. They sent it back to him unopened, that they might not be obliged to read it in public, saying, that their laws forbid them to betray a secret.

THE HERMITAGE AT ST. PETERSBURG.

We have given above a very spirited engraving of the Hermitage, or winter palace of the Emperor of Russia. It is situated at the west end of the Admiralty, and near the centre of the town. This huge edifice of stuccoed brick work, forms a square, each side representing a front, and lost in a confusion of pillars and statues of almost every description. The royal gallery of paintings is in this building; a part is also devoted to mineralogy. Johnstone, in his description of St. Petersburg, says that within the palace or hermitage are artificial gardens, denominated the winter and summer gardens. The first is roofed with glass, laid out in gravel walks, planted with orange trees, and several parterres of flowers, and filled with birds of various countries. The summer garden is exposed to the air, and placed on the top of the palace.

In front of the palace is the largest square in the city. One of its sides is formed by a magnificent building, erected by the late empress Catharine for her favorites, but which is now changed to a private club

house by the English and German merchants, and on each side terminated by the public hotels.

To the west of the Hermitage, and fronting the river, is the palace of the grand duke, partly built of hewn granite, and partly of red Siberian marble: it is probably one of the chastest buildings in St. Petersburg. In the vicinity of this palace are laid out extensive gardens, in every corner of which are exhibited statues, which are condemned to be buried six months in the year under snow. Between the garden and the river is one of the finest and most superb iron railings perhaps to be found in any part of Europe. It is supported by between thirty and forty massive columns of granite, upwards of twenty feet in height, surmounted by large urns. Between the granite columns the iron spears are placed, of the same height, and gilded at the top.

At the south end of these gardens is the palace of the late emperor Paul, wherein he was strangled. This colossal and clumsy edifice was one of the many eccentric labors of that unfortunate monarch. To avoid inhabiting the same palace which his royal mother had occupied, and as a secure asylum against the too just suspicions which he entertained against his nobles, he raised this building in the short space of three years. From this palace he hurled out mandates which menaced the very existence of his empire. Here his eccentricities rose to the highest pitch, and here he met with that fate which must always endanger the madness of despotism. It is said that his death might have been prevented, had he not forgotten to pull a bell wire which communicated under ground with the room where his body guards were assembled.

When the artist, Falconet, had finished his statue of Peter the Great, though as admirable a specimen of the art as ever graced the followers of a Phidias or Praxiteles, yet from the rudeness of its pedestal it could not but be rendered too minute in its general outline; he, therefore, in order to assimilate their dimensions, mutilated the rock, and thus gave an imaginary measure of bulk to the figure. The attitude of the statue represents the monarch as having gained the summit

of the precipice, and restraining the violence of his horse, which is seen rearing on its hind legs, with a full and flowing tail, touching the writhing body of a serpent, on which the horse tramples. The head of the figure is crowned with laurel, and a loose flowing robe is thrown over its body. The left hand holds the reins, while the other is stretched out in the act of giving benediction to his subjects. On the rock, the following short but expressive inscription is fixed in golden letters, both in the Latin and Russian language:

CATHARINE II. TO PETER I.

THE EXILE'S DIRGE.

(By Mrs. Hemans.)

"I attended a funeral where there were a number of the German settlers present. After I had performed such service as is usual on similar occasions, a most venerable looking old man came forward and asked me if I were willing that he should perform some of their peculiar rites. He opened a very ancient version of Luther's hymns, and they all began to sing in German so loud that the woods echoed the strain. There was something affecting in the singing of these ancient people, carrying one of their brethren to his last home, and using the language and rites which they had brought with them over the sea from the *Vaterland*—a word which often occurred in his hymn. It was a long, slow, and mournful air, which they sang as they bore the body along. The words '*mein Gott!*'—'*mein Bruder*,' and '*Vaterland*' died away in distant echoes amongst the woods. I shall long remember that funeral hymn."—*Flint's Recollections of the Valley of the Mississippi.*

There went a dirge through the forest's gloom:
An exile was borne to a lonely tomb.

"Brother!" (so the chant was sung
In the slumberer's native tongue)
"Friend and brother! not for thee
Shall the sound of weeping be;
Long the exile's wo hath lain
On thy life a withering chain;
Music from thine own blue streams
Wandered through thy fever dreams;

Voices from thy country's vines
Met thee 'midst the alien pines,
And thy true heart died away,
And thy spirit would not stay."

So swell'd the chant; and the deep wind's moan
Seemed through the cedars to murmur—"*gone!*"

"Brother! by the rolling Rhine
Stands the home that once was thine;
Brother! now thy dwelling lies
Where the Indian's arrow flies!
He that blessed thine infant head
Fills a distant greensward bed!
She that heard thy lisping prayer
Slumbers low beside him there;
They that earliest with thee played,
Rest beneath their own oak-shade,
Far, far hence!—yet sea nor shore
Haply, brother! part you more;
God hath call'd thee to that band
In thine immortal father-land!"

"The father-land!"—with that sweet word
A burst of tears 'midst the strain was heard.

"Brother! were we there with thee,
Rich would many a meeting be!
Many a broken garland bound
Many a mourn'd one lost and found!
But our task is still to bear,
Still to breathe in changeful air;
Lov'd and bright things to resign
As ev'n now this dust of thine;
Yet to hope!—to hope in heaven,
Though flowers fall, and trees be riven;
Yet to pray—and wait the hand
Beckoning to the father-land."

And the requiem died in the forest's gloom—
They had reached the exile's lonely tomb.

CABINET OF NATURE.

VARIETY OF NATURE.

(*Continued.*)

When we direct our attention to the tribes of *animated nature*, we behold a scene no less variegated and astonishing. Above fifty thousand species of animals have been detected and described by naturalists, besides several thousands of species which the naked eye cannot discern, and which people the in-

visible regions of the waters and the air. And, as the greater part of the globe has never yet been thoroughly explored, several hundreds, if not thousands, of species unknown to the scientific world, may exist in the depths of the ocean, and in the unexplored regions of the land. All these species differ from one another in colour, size, and shape; in the internal structure of their bodies, in the number of their sensitive organs, limbs, feet, joints, claws, wings, and fins; in their dispositions, faculties, movements, and modes of subsistence. They are of all sizes, from the mite and the gnat, up to the elephant and the whale, and from the mite downwards to those invisible animalculæ, a hundred thousand of which would not equal a grain of sand. Some fly through the atmosphere, some glide through the waters, others traverse the solid land. Some walk on two, some on four, some on twenty, and some on a hundred feet.

Some have eyes furnished with two, some with eight, some with a hundree, and some with eight thousand distinct transparent globes, for the purposes of vision.*

* The *eyes* of beetles, silk-worms, flies, and several other kinds of insects, are among the most curious and wonderful productions of the God of nature. On the head of a fly are two large protuberances, one on each side; these constitute its organs of vision. The whole surface of these protuberances is covered with a multitude of small hemispheres, placed with the utmost regularity in rows, crossing each other in a kind of lattice work. These little hemispheres have each of them a minute transparent convex lens in the middle, each of which has a distinct branch of the optic nerve ministering to it; so that the different lenses may be considered as so many distinct eyes. Mr. Leeuwenhoek counted 6,236 in the two eyes of a silk-worm, when in its *fly* state; 3,180 in each eye of a beetle; and 8,000 in the two eyes of a *common fly*. Mr. Hook reckoned 14,000 in the eyes of a *drone fly;* and in one of the eyes of a *dragon fly*, there have been reckoned 13,500 of these lenses, and, consequently, in both eyes, 27,000, every one of which is capable of forming a distinct image of any object, in the same manner as a common convex glass; so that there are twenty-seven thousand images formed on the retina of this little animal. Mr. Leeuwenhoek having prepared the eye of a fly for the purpose, placed it a little farther from his microscope than when he would examine an object, so as to leave a proper focal distance between it and the lens of his microscope; and then looked through both, in the manner of a telescope, at the steeple of a church,

Our astonishment at the variety which appears in the animal kingdom, is still farther increased, when we consider not only the diversities which are apparent in their external aspect, but also in their internal structure and organization. When we reflect on the thousands of movements, adjustments, adaptations, and compensations, which are requisite in order to the construction of an animal system, for enabling it to perform its intended functions;—when we consider, that every species of animals has a system of organization peculiar to itself, consisting of bones, joints, blood vessels, and muscular motions, differing in a variety of respects from those of any other species, and exactly adapted to its various necessities and modes of existence;—and when we consider still farther, the incomprehensibly delicate contrivances, and exquisite borings, polishings, claspings, and adaptations, which enter into the organization of an animated being ten thousand times less than a mite; and that the different species of these animals are likewise all differently organized from one another,—we cannot but be struck with reverence and astonishment, at the *Intelligence* of that Incomprehensible Being who arranged the organs of all the tribes of animated nature, who "breathed into them the breath of life," and who continually upholds them in all their movements!

Could we descend into the subterraneous apartments of the globe, and penetrate into those unknown recesses which lie towards its centre, we should doubtless, behold a variegated scene of wonders even in those dark and impenetrable regions. But all the labor and industry of man have not hitherto enabled him to penetrate farther into the bowels of the earth than

which was 299 feet high, and 750 feet distant, and could plainly see through every little lens, the whole steeple inverted, though not larger than the point of a fine needle; and then directing it to a neighboring house, saw through many of these little hemispheres, not only the front of the house, but also the doors and windows, and could discern distinctly, whether the windows were open or shut.—Such an exquisite piece of Divine mechanism transcends all human comprehension.

the six thousandth part of its diameter; so that we must remain for ever ignorant of the immense caverns and masses of matter that may exist, and of the processes that may be going on about its central regions. In those regions, however near the surface, which lie within the sphere of human inspection, we perceive a variety analogous to that which is displayed in the other departments of nature. Here we find substances of various kinds formed into strata, or layers of different depths —earths, sand, gravel, marl, clay, sand-stone, free-stone, marble, lime-stone, fossils, coals, peat, and similar materials. In these strata are found metals and minerals of various descriptions—salt, nitrate of potash, ammonia, sulphur, bitumen, platina, gold, silver, mercury, iron, lead, tin, copper, zinc, nickel, manganeze, cobalt, antimony, the diamond, rubies, sapphires, jaspers, emeralds, and a countless variety of other substances, of incalculable benefit to mankind. Some of these substances are so essentially requisite for the comfort of man, that, without them, he would soon degenerate into the savage state, and be deprived of all those arts which extend his knowledge, and which cheer and embellish the abodes of civilized life.

If we turn our eyes upward to the regions of the atmosphere, we may also behold a spectacle of variegated magnificence. Sometimes the sky is covered with sable clouds, or obscured with mists; at other times it is tinged with a variety of hues, by the rays of the rising or the setting sun. Sometimes it presents a pure azure, at other times it is diversified with strata of dappled clouds. At one time we behold the rainbow rearing its majestic arch, adorned with all the colours of light; at another, the Aurora Borealis illuminating the sky with its fantastic coruscations. At one time we behold the fiery meteor sweeping through the air; at another, we perceive the forked lightning darting from the clouds, and hear the thunders rolling through the sky. Sometimes the vault of heaven appears like a boundless desert, and at other times adorned, with an innumerable host of stars, and with themoon

"walking in brightness." In short whether we direct our view to the vegetable or the animal tribes, to the atmosphere, the ocean, the mountains, the plains, or the subterranean recesses of the globe, we behold a scene of beauty, order, and *variety*, which astonishes and enraptures the contemplative mind, and constrains us to join in the devout exclamations of the Psalmist, "*How manifold are thy works*, O Lord! In wisdom hast thou made them all, the earth is full of thy riches; so is the great and wide sea, wherein are things creeping *innumerable*, both small and great beasts."

A PETRIFIED FOREST.

One of the most curious discoveries of the present day, is the "petrified forest" on the Missouri river. A letter to the editor of the Illinois Magazine states, that the petrifactions of stumps and limbs of trees are abundant for the distance of thirty miles, over an open prairie, on the western bank of the Missouri. The topography of this section of the country is hilly, and much broken into deep ravines and hollows. On the sides and summits of the hills, at an elevation of several hundred feet above the level of the river, and at an estimated height of some thousand feet above the ocean, the earth's surface is literally covered with stumps, limbs, and roots of petrified trees; presenting the appearance of a 'petrified forest,' broken and thrown down by some powerful convulsion of nature, and scattered in all directions in innumerable fragments.

Some of the trees appear to have been broken off in falling, close to their roots; while others stand at an elevation of many feet above the surface. Some of the stumps when measured proved upwards of fifteen feet in circumference.

As these formations are supposed to be produced by the agency of water and of mineral substance, it is natural to conjecture that this region has at some day been submersed in water. But when? Are they Antediluvian remains; or was this region covered at a period subsequent to the general deluge? They must

have proceeded from such causes, unless it is granted that pretrifaction may be produced by the simple action of the atmosphere. These are interesting topics of inquiry.

A petrified forest! a vast wilderness changed to stone! Was it the gradual work of ages; and did the hand of gray-headed Time deposit the stony particles in the grains of the wood, sand by sand; or was it rather an instantaneous transformation from vegetable life to mineral death, like the sudden change of Lot's wife into a pillar of salt? Did the great process of petrifaction commence at the day when Noah's vessel of old was tossed in the boundless and overwhelming waters of the Deluge, or not till ages afterwards, after some great inundation, in the prairies of the West! Has there ever taken place in those extensive regions, some mighty unrevealed flood, laying waste 'the fair hunting grounds' of the wandering aboriginal, sweeping away his cabin on the hill! compelling him to trust his life to his birchen canoe; destroying the buffalo and the mammoth; uprooting forests, and tearing them limb from limb; and plunging all nature into chaos. Could these things be, and if so, may not an all wise Providence direct their recurrence?

A beautiful object must be that "petrified forest," either when the mid-day sunshine sets its diamond particles in a blaze; or when the twilight colors it with a rosy flush, or the moonlight endues it with a marble-like whiteness. You might fancy yourself in Aladdin's garden, but that the *trees*, as well as the fruit, are like diamonds and precious stones. You might fancy yourself in a winter forest in New-England, whose massy branches and trunks are heavily encrusted with ice and sparkling snow. You might fancy yourself among the sparry grottos of fairy-land; but there is little need for the exercise of fancy, when it can hardly surpass the simple and substantial fact. What a scene for the pen or pencil of a master—a vast forest, with its inhabitants, savage men, beast and bird—at a moment transformed and petrified—animated nature changed into inanimate matter—life to silent and unchanging death.

EXAMPLES FROM HISTORY.

EARLY APPLICATION TO WISDOM.

SENTIMENTS.

CICERO (than whom no man was a better judge, for no man more earnestly sought, or better understood, the true nature of wisdom; no man, I mean, of the heathen world) has given nearly this definition of wisdom. "What, (says he) is more desirable than wisdom; what more excellent in itself; what more useful to man, or more worthy his pursuit? They who earnestly seek for it are called philosophers; for philosophy, in the strict meaning of the word, is no other than the love of wisdom; but wisdom, as defined by the ancient philosophers, is the knowledge of things divine and human, and of their efficient causes: the study of which whoever despises, I know not what he can think worthy of his approbation. For whether you seek for an agreeable amusement, or a relaxation from care, what can be comparable to those studies which are always searching out for something that may tend to make life more easy and happy? Are you desirous of learning the principles of fortitude and virtue? This, or none beside, is the art by which you may acquire them. They who affirm that there is no art in things of the greatest moment, while nothing, even the most trifling, is attained without the aid of art, are men of no reflection, and guilty of the grossest error: but if there is any science of virtue, where shall it be learned, if not in the school of this wisdom?"

An ignorant, idle man, is a dead weight on society: a wicked, profligate man, is a pest, is a nuisance to society; but a wise and virtuous man, who labours by all means in his power to advance the universal good, to improve the knowledge and the happiness of mankind, is at once an ornament of his nature, and a blessing to the community; a good planet, shining with a benign influence on all around him; the truest resemblance of his God, whose goodness is continually displaying itself through the whole extent of being, and, like that God, seeking pleasure in conferring good. He will feel

happiness according to the degree in which he communicates it.

EXAMPLES.

Antisthenes being asked, what he got by his learning, answered, "That he could talk to himself, could live alone, and needed not go abroad and be beholden to others for delight." The same person desired nothing of the gods to make his life happy, but the spirit of Socrates; which would enable him to bear any wrong or injury, and to continue in a quiet temper, whatever might befal him.

Count Oxenstiern, the Chancellor of Sweden, was a person of the first quality, rank, and abilities, in his own country, and whose care and success, not only in the chief ministry of affairs there, but in the greatest negotiations of Europe, during his time rendered him no less considerable abroad. After all his knowledge and honors, being visited in his retreat from public business, by Commissioner Whitelocke, at the close of their conversation, he said to the ambassador, "I, sir, have seen much, and enjoyed much of this world; but I never knew how to live until now. I thank God, who has given me time to know him, and likewise myself. All the comfort I take, and which is more than the whole world can give, is the knowledge of God's love in my heart, and the reading of this blessed book, (laying his hand on the Bible.) You are now, sir, (continued he,) in the prime of your age and vigor, and in great favor and business; but this will all leave you, and you will one day better understand and relish what I say to you. Then you will find that there is more wisdom, truth, comfort, and pleasure, in retiring and turning your heart from the world in the good spirit of God, and in reading his sacred word, than in all the courts and all the favors of princes."

The Romans, we are told, built their temple of Virtue immediately before that sacred to Honor, to teach that it was necessary to be virtuous before being honoured. St. Augustine observes, that though these temples were contiguous, there was no entering that of Honour, until after having passed through that of Virtue.

Seneca, after a serious study of all the philosophy in

his time in the world, was almost a Christian in his severe reproofs of vice, and commendations of virtue. His expressions are sometimes divine, soaring far above the common sphere of heathen authors. How beautiful is that sentence of his in the preface to his Natural Questions: "What a pitiful thing would man be, if his soul did not soar above these earthly things!" And though he was sometimes doubtful about the future condition of his soul, yet he tells his dear Lucilius with what pleasure he thought of its future bliss; and then goes on to argue, that the soul of man hath this mark of divinity in it, that it is most pleased with divine speculations, and converses with them as with matters in which it is most nearly concerned. "When this soul (saith he) hath once viewed the vast dimensions of the heavens, it despises the meanness of its former little cottage. Were it not for these contemplations, it had not been worth our while to have come into this world, nor would it make us amends for any pains and care we take about this present life."

The Spartans, we find, paid a particular attention to the peculiar genius and disposition of their youths, in order the better to adapt them to such employments as were most suitable to their capacities, and wherein they might be most beneficial to society. Among them it was not lawful for the father himself to bring up his children after his own fancy. As soon as they were seven years old, they were all enrolled in several companies, and disciplined by the public. The old men were spectators of their performances, who often raised emulations among them, and set them at strife one with the other, that by those early discoveries they might see how their several talents lay, and, without any regard to their quality, dispose of them accordingly for the service of the commonwealth. By this means Sparta soon became the mistress of Greece, and famous through the whole world for her civil and military discipline.

Agesilaus, king of Sparta, being asked, "what he thought most proper for boys to learn?" answered, "What they ought to do when they come to be men."

Thus a wiser than Agesilaus has inculcated: "Train up a child in the way he should go, and when he is old he will not depart from it."

Simonides, an excellent poet, the better to support himself under narrow circumstances, went the tour of Asia, singing from city to city the praises of their heroes and great men, and receiving their rewards. By this means having at last become wealthy, he determined to return to his own country, by sea, being a native of the island Ceos. Accordingly he went on board a vessel which had not been long on the voyage before a terrible tempest arose, and reduced it to a wreck in the midst of the sea. Upon this, some of the people packed up their treasures, others their most valuable merchandise, and tied them around their bodies, as the best means of supporting their future existence, should they escape the present dangers. But amidst all their solicitude, a certain inquisitive person observing Simonides quite inactive, and seemingly unconcerned, asked him, "What! don't you look after any of your effects?" "No, (replied the poet calmly,) all that is mine is with me." Then some few of them, and he among the rest, took to swimming; and several got safe ashore; while many more perished in the waves, wearied and encumbered with the burdens they had bound about them. To complete the calamity, some plunderers soon after came down upon the coast, and seized all that each man had brought away with him, leaving them naked. The ancient city of Clazomene happened to be near at hand, to which the shipwrecked people repaired. Here a certain man of letters, who had often read the verses of Simonides, and was his great admirer, hearing him one day speak in the market-place, inquired his name, and finding it was he, gave him a welcome reception to his own house, and supplied him with clothes, money, and servants to attend him; while the rest of the company were forced to carry a letter about this foreign city, setting forth their case, and begging bread. The next day Simonides met with them in his walks, and thus addressed them: "Did I not tell you, my friends, that all which I had

was with me? but you see all that which you could carry away with you perished." Thus wisdom is proved to be the most durable possession, and the best security amidst every want and trial.

The famous Torquato Tasso, by his poem entitled Rinaldo, extended his reputation throughout all Italy, but greatly chagrined his father, who thought it might seduce him from studies more advantageous. Accordingly he went to Padua, where his son then was, to remonstrate against his apparent purpose of devoting himself to philosophy and poetry, and made use of many very harsh expressions; all which Tasso heard with patience and tranquillity which made the old gentleman still more angry. At last, "of what use, (cried he) is that philosophy on which you value yourself so much?" "Sir, (replied Tasso calmly,) it has enabled me to endure patiently the harshness even of your reproofs."

Sir Thomas Smith, Secretary of State to Queen Elizabeth, a few months before he died, sent to his friends the bishops of Winchester and Worcester, entreating them to draw up for him, out of the word of God, the plainest and best directions for making his peace with him; adding, "That it was great pity men knew not to what end they were born into the world till they were just at the point of quitting it."

Sir John Mason was born in the reign of Henry VII. and lived in high esteem with Henry VIII., Edward VI., Queen Mary, and Queen Elizabeth, having been a privy counsellor to each of the four last, and an accurate observer of all the various revolutions and vicissitudes of those times. When he lay on his death-bed he called his family together, and addressed them in the following terms: "Lo! here I have lived to see five princes, and have been a counsellor to four; I have seen the most remarkable things in foreign parts, and been present at most state transactions for thirty years together: and I have learned this, after so many years experience, That seriousness is the greatest wisdom, temperance the best physician, and a good conscience the best estate. And were I to live again,

I would exchange the court for a cloister; my privy-counsellor's bustles for a hermit's retirement: and the whole life I have lived in the palace, for one hour's enjoyment of God in my closet. All things else forsake me, except my God, my duty, and my prayers."

CIRCLE OF THE SCIENCES WITH SUITABLE REFLECTIONS.

ASTRONOMICAL SKETCHES.—NO. IX.

THE MOON.

The contemplation of the works of an infinitely wise, powerful, and good Being, are fully calculated to produce in our minds sentiments of reverence, delight, and love. These works are infinitely diversified, and afford a never-failing source of mental pleasure to all who delight in them. "The works of the Lord are great, sought out by all them that have pleasure therein."

Among these amazing and multiplied productions, some are more conspicuous than others, and strike our senses at once with their magnitude, lustre, and beauty.

The Sun that shines daily upon the Earth is at once beautiful and glorious. The stars that shine by night afford the most delightful prospects to the eye, and endless employment for our most soaring thoughts. And the pale Moon that rules the night, affording light to millions by sea and land, influencing our atmosphere, and governing the mighty deep, is, next to the great orb of day, the most interesting of the celestial bodies, and affords to the studious mind full scope for all its powers.

The Moon is the nearest of all the heavenly bodies to our Earth. She is its faithful companion and attendant through its mighty round from year to year, from century to century, accomplishing all the designs of the great Creator of the universe.

The Moon is the first heavenly body that seems to arrest the attention of little children. Shining amidst the heavens, and diffusing her mild and silvery beams, she can be gazed at for any length of time without

inconvenience to the sight. This naturally leads children to view her as an object of wonder and delight. And it is highly probable that, in most cases, this luminary is the first celestial object that excites in the youthful mind inquiries relating to the visible heavens, and their glorious Maker.

To the eye of the observer, the Moon appears diversified by bright, and dark or dusky parts; but when viewed through a telescope, the sight is at once grand and surprising. Here we clearly observe large and extensive ranges of very high mountains, and their projecting shadows, by which astronomers have attempted to measure their height. And besides these extensive chains of mountains, we discover valleys, rocks, and plains, in every variety of form and position; and numberless bright and beautiful parts, as if the Sun shone upon rocks of diamond. In other parts are seen extensive tracts, of a dusky or dark aspect, which reflect but little light; as if the Sun shone either upon water, or land. But the most singular features of the Moon are those circular ridges which diversify every portion of her surface. A range of mountains of a circular form, rising two or three miles above the level of the adjacent district, surrounds, like mighty ramparts, an extensive plain; and in the middle of this plain or cavity, an insulated conical hill rises to a considerable elevation. Several hundreds of these circular plains, most of which are considerably below the level of the surrounding country, may be perceived with a good telescope, on every region of the lunar surface. They are of all dimensions, from two or three miles to forty in diameter.

That there are prodigious inequalities on her surface is proved by looking at her through a telescope, at any other time than when she is in full; for then there is no regular line bounding light and darkness; but the confines of these parts appear, as it were, toothed, and cut with innumerable notches and breaks; and even in the dark part, near the borders of the lucid surface, there are seen some small spaces enlightened by the Sun's beams. Upon the fourth day after the new Moon, and

for several days afterwards, there may be perceived some shining points, like rocks, or small islands within the dark body of the moon; but not far from the confines of light and darkness, there are observed other little spaces, which join to the enlightened surface, but run out into the dark side, and, by degrees, change their figure, till at last they come wholly within the illuminated face, and have no dark parts around them at all. Afterwards (in the space of a few minutes or hours) more shining spaces are observed to arise by degrees, and to appear within the dark side of the Moon; which, before they drew near to the confines of light and darkness, were invisible, being without any light, and totally immersed in the shadow. The contrary is observed in the decreasing phases, where the lucid spaces which joined the illuminated suface by degrees recede from it; and after they are quite separated from the confines of light and darkness remain for some time visible, till at last they also disappear. Now, it is impossible that this should be the case, unless these shining points were higher than the rest of the surface, so that the light of the Sun may reach them sooner.

As the Moon has on her surface mountains and valleys, in common with the Earth, some modern astronomers have discovered a still greater similarity, viz., that some are really volcanoes, emitting fire as those on the Earth do.

Different conjectures have been formed concerning the spots on the Moon's surface. Dr. Keill, and the greater part of our present astronomers, are of opinion, that the very bright parts are only the tops of mountains; which, by reason of their elevation, are more capable of reflecting the Sun's light than others which are lower. The dusky parts, the Doctor says, cannot be seas, nor any thing of a liquid substance; because, when examined by a telescope, they appear to consist of an infinity of caverns and empty pits, whose shadows fall within them, which never can be the case with seas, or any liquid substance; but even within these spots brighter places are observed, which appear to be points of rocks standing within the cavities.

NATURAL HISTORY.

THE WHITE BEAR OF THE POLAR REGIONS.

In the caves of the rocks, or in the hollows of the ice, dwells the most formidable of arctic quadrupeds, the Greenland or Polar bear. This fierce tyrant of the cliffs and snows of the north, unites the strength of the lion with the untameable fierceness of the hyena. A long shaggy covering of white soft hair, and a copious supply of fat, enable him to defy the winter of this rigorous climate. Under the heat of Britain he suffers the most painful sensations; Pennant saw one, over whom it was necessary, from time to time, to pour large pailfuls of water. Another, kept for some years by professor Jameson, evidently suffered severely from the heat of an Edinburgh summer. The haunt of the bear is on the dreary Arctic shores, or on mountains of ice, sometimes two hundred miles from land; yet he is not, strictly speaking, amphibious. He cannot remain under water above a few moments, and he reaches his maritime stations only by swimming from one icy fragment to another. Mr. Scoresby limits the swimming reach to

three or four miles; yet Parry found one in the centre of Barrow's strait, where it was forty miles across. This bear prowls continually for his prey, which consists chiefly of the smaller cetacea and of seals, which, unable to contend with him, shun their fate by keeping strict watch, and plunging into the depths of the waters. With the walrus he holds dreadful and doubtful encounters; and that powerful animal, with his enormous tusks, frequently beats him off with great damage. The whale he dares not attack, but watches anxiously for the huge carcass in a dead state, which affords him a prolonged and delicious feast: he scents it at the distance of miles. All these sources of supply being precarious, he is sometimes left for weeks without food, and the fury of his hunger then becomes tremendous. At such periods, man, viewed by him always as his prey, is attacked with peculiar fierceness.

The annals of the north are filled with accounts of the most perilous and fatal conflicts of the Polar bear. The first, and one of the most tragical, was sustained by Barentz and Heemskerke, in 1596, during their voyage for the discovery of the north-east passage. Having anchored at an island near the strait of Waygatz, two of the sailors landed, and were walking on shore, when one of them felt himself closely hugged from behind. Thinking this a frolic of one of his companions, he called out in a corresponding tone, "Who's there? pray stand off." His comrade looked, and screamed out, "A bear! a bear!" then running to the ship, alarmed the crew with loud cries. The sailors ran to the spot, armed with pikes and muskets. On their approach, the bear very coolly quitted the mangled corpse, sprang upon another sailor, carried him off, and, plunging his teeth into his body, began drinking his blood at long draughts. Hereupon, the whole of that stout crew, struck with terror, turned their backs, and fled precipitately to the ship. On arriving there, they began to look at each other, unable to feel much satisfaction with their own prowess. Three then stood forth, undertaking to avenge the fate of their countrymen, and to secure for them the rites of

burial. They advanced, and fired at first from so respectful a distance that they all missed. The purser then courageously proceeded in front of his companions, and, taking a close aim, pierced the monster's skull immediately below the eye. The bear, however, merely lifted his head, and advanced upon them, holding still in his mouth the victim whom he was devouring; but seeing him soon stagger, the three rushed on with sabre and bayonet, and soon dispatched him. They collected and bestowed decent sepulture on the mangled limbs of their comrades, while the skin of the animal, thirteen feet long, became the prize of the sailor who had fired the successful shot.

The history of the whale-fishers records a number of remarkable escapes from the bear. A Dutch captain, Jonge Kees, in 1668, undertook, with two canoes, to attack one, and with a lance gave him so dreadful a wound that his immediate death seemed to them inevitable. Anxious, therefore, not to injure the skin, Kees merely followed the animal close, till he should drop down dead. The bear, however, having climbed a little rock, made a spring from the distance of twenty-four feet upon the captain, who, taken completely by surprise, lost hold of the lance, and fell beneath the assailant, who, placing both paws on his breast, opened two rows of tremendous teeth, and paused for a moment, as if to show him all the horrors of his situation. At this critical instant, a sailor, rushing forward with only a scoop, succeeded in alarming the monster, who made off, leaving the captain without the slightest injury.

In 1788, captain Cook of the Archangel, when near the coast of Spitzbergen, found himself suddenly between the paws of a bear. He instantly called on the surgeon, who accompanied him, to fire, which the latter did with such admirable promptitude and precision, that he shot the beast through the head, and delivered the captain. Mr. Hawkins of the Everthorpe, in July, 1818, having pursued and twice struck a large bear, had raised his lance for a third blow, when the animal sprang forward, seized him by the thigh, and threw

him over its head into the water. Fortunately, it used this advantage only to effect its own escape. Captain Scoresby mentions a boat's crew which attacked a bear in the Spitzbergen sea; but the animal having succeeded in climbing the sides of the boat, all the sailors threw themselves for safety into the water, where they hung by the gunwale. The victor entered triumphantly, and took possession of the barge, where it sat quietly, till it was shot by another party. The same writer mentions the ingenious contrivance of a sailor, who, being pursued by one of these creatures, threw down successively, his hat, jacket, handkerchief, and every other article in his possession, when the brute, pausing at each, gave the sailor always a certain advantage, and enabled him finally to regain the vessel.

Though the voracity of the bear is such, that he has been known to feed on his own species, yet maternal tenderness is as conspicuous in the female as in other inhabitants of the frozen regions. There is no exertion which she will not make for the supply of her progeny. A she-bear, with her two cubs, being pursued by some sailors across a field of ice, and finding that, neither by example, nor by a peculiar voice and action, she could urge them to the requisite speed, applied her paws, and pitched them alternately forward. The little creatures themselves, as she came up, threw themselves before her to receive the impulse, and thus they effected their escape.

Bears are by no means devoid of intelligence. Their schemes for entrapping seals, and other animals on which they feed, often display considerable ingenuity. The manner in which the Polar bear surprises his victim, is thus described by captain Lyon: On seeing his intended prey, he gets quietly into the water, and swims to a leeward position, from whence, by frequent short dives, he silently makes his approaches, and so arranges his distance, that at the last dive, he comes to the spot where the seal is lying. If the poor animal attempts to escape by rolling into the water, he falls into the paws of the bear; if, on the contrary, he lies still, his destroyer makes a powerful spring, kills

him on the ice, and devours him at leisure. Some sailors, endeavouring to catch a bear, placed the noose of a rope under the snow, baited with a piece of whale's flesh. The bear, however, contrived, three successive times, to push the noose aside, and to carry off the bait unhurt. Captain Scoresby had half-tamed two cubs, which used even to walk the deck; but they showed themselves always restless under this confinement, and finally effected their escape.

According to Pennant and other writers, the bear forms chambers in the great ice-mountains, where he sleeps the long winter night, undisturbed by the roar of the northern tempest; but this regular hibernation is doubted by many recent observers.

POETRY.

For the Repository.

ODE TO THE MOON.

[*Written at midnight, by E. Y. R. of Baltimore, aged* 14 *years.*]

Hail! orb of gentleness, thy silver beams
Bid the thick clouds of darkness take their flight;
And to my sight, my wondering sight, displays
The captivating scenery of night:
The wind-god gently skipping through the vale,
The glimmering stars that light thee on thy way,
The osiers bending to the pleasant gale,
Exceed, by far, the beauty of the day.

The noise of busy day has ceased,
The city hum is still;
All nature sleeps, while I alone,
List to the river's solemn moan,
Or ripple of the rill;
Or turn mine eye
Up to the sky,
Where thou dost ride in cloudless majesty.

Yes—I have left my weary bed,
Whilst others are at rest;
For midnight is the silent hour,
When contemplation, heavenly power,
Is wont to fill the breast;
And Fancy too,
Adds charms anew,
Which poesy alone can picture to the view.

But stay—methinks 'twas on a night like this,
When the blue concave of the heaven above
Was decked with many a star, and thou didst lend
Thine aid, to cheer lone shepherds as they talked
Of ancient kings and prophets, long ago
Laid under ground, and looked with joy unto
The day of Jesus' birth,—I say, methinks
'Twas on a night like this, that in the heaven
A light, more brilliant far than noonday saw,
Arose; and a sweet voice was heard, which said,
"Fear not, glad tidings bring I unto you,"
Of joy ecstatic, "for to you this day
Is born a Saviour, who is Christ the Lord."

ADDRESS TO AN INFANT.

Sweet infant, when I gaze on thee,
And mark thy spirit's bounding lightness,
Thy laugh of playful ecstacy,
Thy glance of animated brightness,—
How beautiful the light appears
Of Reason in her first revealings,
How blest the boon of opening years,
Unclouded hopes, unwithered feelings!

Thou hast not felt Ambition's thrall,
Thou dost not sigh for absent treasures,
Thy dark eye beams in joy on all,
Simple and ardent are thy pleasures;
And should a tear obscure thy bliss,
I know the spell to soothe thy sadness,
The magic of thy father's kiss
Can soon transform thy grief to gladness.

The world, my fair and frolic boy,
May give thy feelings new directions,
But may its changes ne'er destroy
The fervour of thy warm affections!
Still may thy glad, contented eyes
Smile on each object they are meeting,
Yet, most of earthly blessings, prize
A parent's look—a parent's greeting!

And, oh! may He, whose boundless love
Excels the ken of human blindness,
The wisest Father's care above—
Beyond the fondest mother's kindness—
Teach thy young heart for Him to glow,
Thy ways from sin and sorrow sever,
And guide thy steps in peace below,
To realms where peace endures for ever!

FIRST AND LAST HOURS.

Lov'st thou the hour, the first of day,
  When the dewy hours are opening bright,
When through the curtains of morning gray,
  Are stealing streaks of crimson light?
Hath it not a power, a spell?
Doth it not to thy warm heart tell
Of life, freak, sparkling, new-born life,
And scenes as yet too young for strife?

Lov'st thou the hour in twilight time,
  When every flower is closing round,
When fainter and fainter the far bell's chime
  Comes with a soothing, dying sound?
Hath it not a spell, though it be
Differing from the first for thee?
Doth it not tell of visions deep,
And a gradual dropping down to sleep?

These hours are types and signs of thine:
  Thy first hour brought both smiles and tears,
And called forth feelings half divine,
  In those who looked to future years,
And watched how grew each feature's mould,
And saw their little buds unfold,
And trusted strife should never come,
To cast on heart and brow a gloom.

And thy last hour—'tis thine to make
  It calm as twilight's lovely time,
A blessed sleep, from which to wake,
  Will be to the better world to climb;
Remember, now 'tis thine to choose,
If storms take place of stars and dews,
Or if thy spirit shall have a power
To make its parting like day's last hour.

A REFLECTION AT SEA.

BY THOMAS MOORE.

See how beneath the moon-beam's smile,
  Yon little billow heaves its breast,
And foams and sparkles for awhile,
  And murmuring then retires to rest.

Thus man, the sport of bliss and care,
  Rises on time's eventful sea,
And having swelled a moment there,
  He melts into eternity.

ROCK FORT ON THE ILLINOIS RIVER

MONTHLY REPOSITORY,

AND LIBRARY OF

Entertaining Knowledge.

VOL. I. APRIL, 1831. No. 11.

ROCK FORT ON THE ILLINOIS RIVER.

This is an elevated cliff on the left bank of the Illinois, consisting of parallel layers of white sandstone. It is not less than two hundred and fifty feet high, perpendicular on three sides, and washed at its base by the river. On the fourth side it is connected with the adjacent range of hills by a narrow peninsular ledge, which can only be ascended by a precipitous, winding path. The summit of this rock is level, and contains about three-fourths of an acre. It is covered with a soil of several feet in depth, bearing a growth of young trees. Strong and almost inaccessible by nature, this natural battlement has been still further fortified by the Indians, and many years ago was the scene of a desperate conflict between the Pottowattomies, and one band of the Illinois Indians. The latter fled to this place for refuge from the fury of their enemies. The post could not be carried by assault, and tradition says that the besiegers finally succeeded, after many repulses, by cutting off the supply of water. To procure this article the besieged let down vessels attached to ropes of bark, from a part of the precipice which overhangs the river, but their enemies succeeded in cutting off these ropes as often as they were let down. The consequence was a surrender, which was followed by a total extirpation of the band.*

On gaining the top of this rock we found says Schoolcraft, a regular entrenchment, corresponding to the edge of the precipice, and within this other excava-

* Charlevoix.

tions, which, from the thick growth of brush and trees, could not be satisfactorily examined. The labour of many hands was manifest, and a degree of industry which the Indians have not usually bestowed upon works of defence. We found upon this elevation broken muscle shells, fragments of antique pottery, and stones which had been subjected to the action of heat, resembling certain lavas.

From this elevated spot an extensive and diversified view of prairie scenery is presented, and the objects about our encampment appeared reduced to a diminutive size.

> "How fearful
> And dizzy 'tis, to cast one's eye so low!
> The crows and choughs, that wing the midway air
> Show scarce so gross as beetles."

The soil which results from the gradual disintegration of this rock, is nearly a pure sand. On descending we found the prickly pear (cactus) covering a considerable portion of this soil, where scarcely any other plant is hardy enough to vegetate.

Of the height of this cliff, the estimate which we have given is merely conjectural. The effect upon the observer is striking and imposing. But we are disposed to think the effect of loftiness produced by objects of this nature is not so much the result of the actual, as of the comparative height. We have often felt, as we have on the present occasion, an impression of grandeur produced by a solitary precipice two or three hundred feet high, rising abruptly above a flat alluvial country or lake, more striking and imposing than at other times in traversing a region more elevated, and where "Alps on Alps arise." In the latter case, the eye constantly measures one elevation by another; in the former we have no standard of this kind, and hence undoubtedly overrate. Philosophically considered, the height of prominent points of a country is estimated above the level of the nearest sea. But the effect produced on the eye or the imagination begins to be felt only from that part of a mountain where it first makes a striking angle with the plain. The annexed view of this modern Oxus is taken from a position on the opposite side of the river, directly in front of the most precipitous face of the rock.

CIRCLE OF THE SCIENCES WITH SUITABLE REFLECTIONS.

ASTRONOMICAL SKETCHES.—NO. X.—THE MOON.

The opinions of astronomers are at variance with respect to the existence of a lunar atmosphere. Philosophers often reason from analogy; and because the surface of the Moon bears a striking resemblance to the Earth, in having valleys, mountains, hills, dales, volcanoes, &c. they conclude that the Moon has an atmosphere, and, consequently, rain, hail, snow, and winds. Various are the arguments advanced on each side of this question by astronomers of the greatest fame.

But if we may be allowed to judge from the appearance of the Moon when our nights are clear, we may conclude that the Moon has no atmosphere. No person ever perceived either clouds or vapours on her disk, or any thing resembling them; and these must have been seen in every age by millions of mankind, if lunar clouds, &c., existed: unless we believe that there may be an atmosphere without vapours.

Mr. Ferguson observes, "If there were seas in the Moon, she could have no clouds, rains nor storms, as we have; because she has no atmosphere to support the vapours which occasion them. And every body knows that when the Moon is above our horizon in the night-time, she is visible, unless the clouds of our atmosphere hide her from our view; and all parts of her appear constantly with the same clear, serene, and calm aspect. But those dark parts of the Moon, which were formerly thought to be seas, are now found to be only vast deep cavities, and places which reflect not the Sun's light so strongly as others, having many caverns and pits whose shadows fall within them, and are always dark on the sides next the Sun, which demonstrates their being hollow: and most of these pits have little knobs, like hillocks, standing within them, and casting shadows also, which cause these places to appear darker than others that have fewer or less remarkable caverns. All these appearances show that there are no seas in the Moon; for if there were any,

their surfaces would appear smooth and even, like those on the Earth."

Dr. Brewster observes, "The arguments adduced by Mr. Ferguson to prove that there is no sea in the Moon are very far from being conclusive. The existence of a lunar atmosphere is completely ascertained; and the little pits and eminences which appear in the dark parts of the Moon, which are extremely even and smooth may be regarded as rocks or islands. By observations, however, on *Mare Crisium*, when the line which sepa rates the enlightened from the obscure segment of the Moon passed through the large and apparently level spot, I have found that the shaded parts of the Moon, however smooth they may appear, are not level surfaces, and therefore, cannot be seas. If there were seas in the Moon, there would be particular times when the reflected light of the Sun would render them more brilliant than any other part of her surface; and the light would acquire that property called *polarization*, which is, however, found not to be the case."

It would appear, therefore, from these facts, that there is no water in the Moon, neither rivers, nor lakes, nor seas; and hence we are entitled to infer that none of those atmospherical phenomena which arise from the existence of water in our own globe, will take place in the lunar world.

Every particular connected with the disk of the Moon is interesting, and in many respects, astonishing. Her mountainous scenery is awfully grand. Huge masses of rock rise perpendicularly from the plains, tower to an immense height, and reflect the rays of the Sun as from a steel mirror. These rocks appear perfectly naked, or destitute of any kind of soil and vegetation. In these stupendous and terrific rocks are discovered rents and ravines, as if split or separated asunder by some tremendous earthquake or volcano: and numberless large fragments of rocks are seen near the base of these frightful eminences, as if they had been detached by some extraordinary shock or convulsion.

The surface of the Moon is admirably calculated to reflect the light of the Sun upon the Earth. If her

surface were smooth and level, the reflected light would not have been so luminous and diffusive, and the Earth would have been but indifferently supplied with light in the absence of the Sun. But owing to her surface, this inconvenience is prevented. Her stupendous range of mountains, whose summits rise to an immense height; her lofty, rugged, bare, perpendicular, and in some parts bold and projecting rocks; her numerous, deep and extensive hollows or cavities, containing insular mountains, whose towering tops receive the first rays of the Sun, lofty ridges, or rather mountains, encircling these deep hollows or cavities; all contribute to reflect the rays of the Sun to all sides, and to diffuse light to every part of the Earth in the course of every lunation.

The diameter of the Moon is two thousand one hundred and sixty-one miles; and as solid bodies are to each other as the cubes of their diameters, the magnitude of the Moon is to that of the Earth as one to forty-one.

The Moon is twenty-four thousand miles from the centre of the Earth; and moves from any fixed star to the same star, in twenty-seven days, seven hours, forty-three minutes, and eleven seconds. This is called her sideral revolution.

Her periodical revolution is the time in which she passes through the twelve signs of the zodiac; or from the equinoctial point to her return to the same. This is performed in twenty-seven days, seven hours, forty-three minutes, and four seconds. The difference between her sideral and periodical revolution is caused by the precession of the equinoxes.

Her synodical revolution is the time in which she passes through her different changes, or from one conjunction with the Sun to the other. This is performed in twenty-nine days, twelve hours, forty-four minutes, and two seconds.

PHILIP GARRETT.

Moderation may be considered as a tree of which the root is contentment and the fruit repose.

CABINET OF NATURE.

(*Continued.*)

VARIETY OF NATURE.

To convey an adequate conception of the *number* of ideas, as exhibited on the globe in which we live, would baffle the arithmetician's skill, and set his numbers at defiance. We may, however, assist our conceptions a little, by confining our attention to one department of nature; for example, the ANIMAL KINGDOM. The number of the different species of animals, taking into account those which are hitherto undiscovered, and those which are invisible to the naked eye, cannot be estimated at less than 300,000. In a human body there are reckoned about 446 muscles, in each of which, according to anatomists, there are at least ten several intentions, or due qualifications to be observed—its proper figure, its just magnitude, the right disposition of its several ends, upper and lower, the position of the whole the insertion of its proper nerves, veins, arteries, &c. so that in the muscular system alone, there are 4,460 several ends or aims to be attended to.—The bones are reckoned to be in number about 245, and the distinct scopes or intentions of each of these are above 40; in all, about 9,800; so that the system of bones and muscles alone, without taking any other parts into consideration, amounts to above 14,000 different intentions or adaptations. If now, we suppose, that all the species of animals above stated, are differently constructed, and, taken one with another, contain, at an average, a system of bones and muscles as numerous as in the human body—the number of species must be multiplied by the number of different aims or adaptations, and the product will amount to 4,200,000,000. If we were next to attend to the many thousands of blood vessels in an animal body, and the numerous ligaments, membranes, humours, and fluids of various descriptions—the skin with its millions of pores, and every other part of an organical system, with the aims and intentions of each, we should have another sum of many hundreds of millions to be multiplied by the

former product, in order to express the diversified ideas which enter into the construction of the animal world. And, if we still farther consider, that of the hundreds of millions of individuals belonging to each species, no two individuals exactly resemble each other—that all the myriads of vegetables with which the earth is covered, are distinguished from each other, by some one characteristic or another, and that every grain of sand contained in the mountains, and in the bed of the ocean, as shown by the microscope, discovers a different form and configuration from another—we are here presented with an *image* of the *infinity* of the *conceptions* of Him in whose incomprehensible mind they all existed, during countless ages, before the universe was formed.

To overlook this amazing scene of Divine intelligence, or to consider it as beneath our notice, as some have done—if it be not the characteristic of impiety, is, at least, the mark of a weak and undiscriminating mind. That man who disregards the visible displays of Infinite Wisdom, or who neglects to investigate them, when opportunity offers, acts as if he considered himself already possessed of a sufficient portion of intelligence, and stood in no need of such sensible assistances to direct his conceptions of the Creator. Pride, and false conceptions of the nature and design of true religion, frequently lie at the foundation of all that indifference and neglect with which the visible works of God are treated, by those who make pretensions to a high degree of spiritual attainments. The truly pious man will trace with wonder and delight, the footsteps of his Father and his God, wherever they appear in the variegated scene of creation around him, and will be filled with sorrow, and contrition of heart, that, amidst his excursions and solitary walks, he has so often disregarded "the works of the Lord, and the operation of his hands."

In fine, the variety which appears on the face of nature, not only enlarges our conceptions of Infinite Wisdom, but is also the foundation of all our discriminations and judgments as rational beings, and is of the most essential utility in the affairs of human society.

Such is the variety of which the features of the human countenance are susceptible, that it is probable that no two individuals, of all the millions of the race of Adam, that have existed since the beginning of time, would be found to resemble each other. We know no two human beings presently existing, however similar to each other, but may be distinguished either by their stature, their forms, or the features of their faces; and on the ground of this dissimilarity, the various wheels of the machine of society move onward, without clashing or confusion. Had it been otherwise—had the faces of men, and their organs of speech, been cast exactly in the same mould, as would have been the case, had the world been framed according to the Epicurean system, by blind chance directing a concourse of atoms, it might have been as difficult to distinguish one human countenance from another, as to distinguish the eggs laid by the same hen, or the drops of water which trickle from the same orifice; and, consequently, society would have been thrown into a state of universal anarchy and confusion. Friends would not have been distinguished from enemies, villains from the good and honest, fathers from sons, the culprit from the innocent person, nor the branches of the same family from one another. And what a scene of perpetual confusion and disturbance would thus have been created! Frauds, thefts, robberies, murders, assassinations, forgeries, and injustice of all kinds, might have been daily committed without the least possibility of detection.—Nay, were even the *variety of tones* in the human voice, peculiar to each person, to cease, and the *hand-writing* of all men to become perfectly uniform, a multitude of distressing deceptions and perplexities would be produced in the domestic, civil, and commercial transactions of mankind. But the all-wise and beneficent Creator has prevented all such evils and inconveniencies, by the character of *variety* which he has impressed on the human species, and on all his works. By the peculiar features of his countenance, every man may be distinguished in the light; by the tones of his voice, he may be recognized in the dark, or when he is separated from his fellows by an

impenetrable partition; and his hand writing can attest his existence and individuality, when continents and oceans interpose between him and his relations, and be a witness of his sentiments and purposes to future generations.

THE ANCIENT AND MODERN HISTORY OF NATIONS.

THE GRECIAN STATES.

The genius of the Spartans was perfectly martial. Their extraordinary valour gained them a name among surrounding nations. They were distinguished from the other Greeks at the Olympic games. Neighbouring people applied for generals to this nursery of heroes. They held the balance between contending states, and were at the head of the Grecian affairs for five hundred years, and for a greater part of that time were deemed invincible. But notwithstanding the great valour of the Spartan state, it was formed rather for a defensive than an offensive war; and if they had adhered to the defensive system, their power would have been still of longer duration; but prosperity led them to attempt the reduction of all Greece, and to attack the king of Persia. Thus they armed all Greece against themselves, and being broken and dispirited by several defeats, and particularly in the battle of Leuctra, they were at last scarcely able to defend their own city.

Thus have we briefly sketched the rise, progress, and dissolution of Athens and Sparta, the two states that, in a great measure, engrossed all the power of Greece to themselves; and though several petty states still held their governments in independence, yet they owed their safety to the mutual jealousy of these powerful rivals, and always found shelter from the one against the oppressions of the other.

After these two commonwealths Thebes lifted up its head, principally renowned for the valour and prudence of Epaminondas, who, with the assistance of Pelopidas, humbled the pride, and reduced the consequence of Sparta, and took the lead in Greece. But

upon the death of Epaminondas, the Thebans, being without a rival, and elated with prosperity, gave themselves over to idleness and luxury: they slighted the virtue of their ancestors, and derided their frugality: the public revenues, which used to be employed to pay fleets and armies, were now expended upon games, shows, and frivolous amusements.

This degeneracy of disposition and manners in the Thebans and other Grecian states, afforded Philip, who had been educated under the discipline, and excited by the valour and wisdom of Epaminondas and Pelopidas, an opportunity of raising the Macedonians from obscurity to the empire of all Greece and Asia.

So small was the power of the Macedonians in the beginning of Philip's reign, that they were able with difficulty to bear up against any of the neighbouring nations. But this brave and prudent monarch subjugated, in a very short space of time, the barbarous surrounding states, by assisting the weak against the strong; and then, by the same arts, he commenced hostilities against Greece, till, worn out with mutual contentions, he subdued it entirely. Greece, therefore, conquered and at peace, Philip was declared general of the Grecian armies against the Persians; but while he was preparing for this expedition he was assassinated by his own subjects, leaving this business to his son Alexander.*

The fruits of this expedition perished with the conqueror, who dying in the thirty-second year of his age, and without heirs, the Macedonian chiefs entered into cruel wars with each other, during which those nations that were to the east of the Euphrates fell under the dominion of the Parthians.†

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* The reader is referred to page 127 of the present vol. of the Repository, for a brief account of the expedition undertaken against Persia by Alexander.

† The kingdom of Parthia, which was founded by Arbaces, about three hundred years before Christ, and which, after the death of Alexander, extended itself over Persia, was subdued by Trajan, and afterwards relinquished by Adrian, who, in the beginning of the second century, made the Euphrates the eastern boundary of the empire. The revolt of the Persians, and the subjection of the

As Alexander did not name his successor, there started up as many kings as there were commanders. At first they governed the provinces that were divided among them, under the title of viceroys; but when the family of Alexander was extinct, they took upon themselves the name of kings. Thus the whole empire of Alexander produced four distinct kingdoms, viz. (1.) the Macedonian, (2.) the Asiatic, (3.) the Syrian, and (4.) the Egyptian; which flourished under their own respective monarchs, till at last they were all compelled to receive the Roman yoke.

The principal persons who reigned at Macedonia, after the death of Alexander, were Antipater;—Philip, a brave man who long contested the Roman arms, but was at length subdued, and obliged to conclude an ignominious peace;—and Perseus, who renewing the war against the Romans, was overcome and taken by Æmilius, and carried in triumph to Rome, where he died in prison. Thus the Macedonian kingdom was reduced to a Roman province.

From the Asiatic kingdom, which comprehended Natolia and other regions beyond Mount Taurus, proceeded these three smaller kingdoms, 1. Pergamus the last king of which, Attalus, appointed the Roman people to be his heir. 2. Pontus, reduced by the Romans into the form of a province, after they had subdued Mithridates, the last king. 3. Armenia, of which Tigranes was the last monarch.

The most celebrated monarchs of the Syrian kingdom, were Antiochus the Great, who having conquered a considerable part of the east, made war upon the Romans, by whom he was defeated, and banished beyonnd Mount Taurus; Antiochus Epiphanes, a cruel enemy of the Jewish nation; and Tigranes, who governed at the same time Syria and Armenia and under whom they both became subject to the Roman power.

Parthians to their dominion by Artaserxes, formed the second Persian empire which continued from the year of Christ 226 to the year 652, when the whole country was overrun by the Arabs.

During this period the more celebrated sects of philosophers prevailed in Greece, such as the Academics, Peripatetics, Stoics, Epicuræans, Skeptics, and Cynics, of which the authors or founders were, Plato, Aristotle, Zeno, Epicurus, Pyrrho, and Antisthenes.

The celebrated Alexandrian library was founded by Ptolomy Philadelphus. When the city of Alexandria was building, the use of *papyrus* was discovered, a plant which grows on the banks of the river Nile, and being found fit for writing, it came into common use. Hence is the origin of the word *paper*. In process of time the Egyptian princes prohibited the exportation of the papyrus, when another substance was used in its stead, which was called *pergamena*, from *Pergamus*, the place where it was first used, whence we have the word parchment.

SKETCHES OF AMERICAN CHARACTER.

CHARLES CARROLL, OF CARROLLTON.

The last of the Signers—the sole survivor of that illustrious phalanx of free and fearless hearts! Who could contemplate without emotion, the venerable form of him whom the flood of death, which has swept away all his colleagues, from Hancock, whose signature stands the first, to Walton, whose name appears the last, on the famous scroll, has as yet spared to us! Well has it been said, "like the books of the Sybil, the living signers of the Declaration of Independence increased in value as they diminished in number." Carroll is alone. The last relic of a noble band. Full of years, he still lingers among us, a fine specimen of dignified old age. With what a halo does his loneliness surround him!—"The last of the signers!" He is the link which connects us with the past. When he departs, the Declaration of Independence will be a monument of the dead. Now it still tells of living virtue and patriotism, which yet burns in the aged, but warm, bold heart. Yes, let the orator and the poet unite in weaving the flowery wreath to the praise of the last of the signers. Long may it be ere that wreath is hung upon his urn. May we never forget the worth

of those who put their names to the noble declaration of a people's high resolve, nor what is due to those who fought, and bled, and risked their all to sustain it. It is good for us frequently to look back and ponder over the conduct, the deeds, the sufferings, of the fathers of our republic. They are deserving of all our consideration, and all our praise. The subject may be often repeated, but can never become trite. It will be of service to us, often to have before our minds the men of 1776. It may kindle an emulation of their firm virtue, their disinterested patriotism, their contempt of narrow selfishness. It will do much to establish in the mind a true standard of political virtue and official desert; to knit us together in brotherly regard, by contemplating the unanimity, the mutual zeal, the equal perseverance of our common benefactors; to inspire and to strengthen a just respect for our country, and a beneficial nationality.

Ably and truly did Charles Carroll express the spirit that pervaded the great body of the people, when he wrote to Mr. Graves, the brother of the admiral, and a member of parliament:—"If we are beaten on the plains we will retire to the mountains, and defy them. Our resources will increase with our difficulties. Necessity will force us to exertion; until, tired of combating in vain against a spirit which victory after victory cannot subdue, your armies will evacuate our soil, and your country retire, an immense loser, from the contest. No, sir, we have made up our minds to abide the issue of the approaching struggle, and though much blood may be spilt, we have no doubt of our ultimate success."

Carroll was born on the 20th of September, 1737, at Annapolis, in Maryland, He was educated in Europe. From the college of St. Omers, he went to that of Rheims, and from thence to the college of Louis le Grand. He studied the civil law in France, and the common law in England. In 1764, he returned home, with a mind expanded, and untainted by a foreign education.

In 1775, Mr. Carroll was chosen a member of the first committee of observation established in Annapo-

lis; and the same year elected a delegate to represent Anne Arundel county in the provincial convention. Here he opposed, but unsuccessfully, the instructions given to the representatives of Maryland in the general congress, "to disavow, in the most solemn manner, all design in the colonies of independence." He went to Canada, in February, 1776, as one of the three commissioners appointed to effect, if possible, a coalition between that country and our own. His associates were Dr. Franklin and Samuel Chase. Their ill success, and its causes are too well known to need repetition or detail. When Mr. Carroll returned, he took his seat in the convention, and strenuously urged the withdrawal of their former instructions, and the substitution of others, empowering the congressional delegates "to concur with the other united colonies, or a majority of them, in declaring the united colonies free and independent states." On the second of July, 1776, the instructions he desired were given. Mr. Carroll was appointed a delegate. His name appeared on the list on the fourth, and he took his seat on the eighteenth of July, 1776. The fact is now pretty generally known, that the copy of the Declaration of Independence, engrossed for signing, according to a resolution of the nineteenth of July, was not signed until the second of August, and then only by the members on that day present in congress, of whom Carroll was one. The others signed it at different intervals, as opportunity presented. A little incident has been mentioned. As Mr. Carroll returned from affixing his signature, some by-stander observed, "there go a few millions." Mr. Carroll was appointed a member of the Board of War, and exercised its duties during his continuance in Congress. He was still a member of the convention of Maryland, and was one of the committee appointed to draught the constitution of that state. He was chosen a senator of Maryland, and afterwards re-appointed a delegate to Congress, where he remained until the year 1778, when he resigned his seat, and gave his attention to the local concerns of his own state. In 1781, he was again sent to the Senate, and immediately after the adoption of the federal constitution, he represented here in the Senate of the United States. He left this sta-

tion in 1791, and the same year became a member of the Senate of Maryland.

Charles Carroll is now in his ninety-fourth year. The hand of time, which has marked his brow and whitened his locks, has left something of the fire of the eye of his spirited manhood, and rests lightly on the expansive intellect and the benevolent heart. His faculties remained unimpaired. He is still liberal, still patriotic; his spirit still looks abroad for the prosperity of his country—that country he has essentially served. To her he devoted the ardour of his youth, the vigour of his maturity, in the days of dark suspense and threatening evil. He continued firm when the lurid cloud hung over our land, and hope had well nigh fled. He gave to our councils the wisdom of his contemplative age. His wealth is very great. He has been blessed with this world's goods in abundance; and like a good steward, he has not abused his trust. He has been blessed in his family. The highest domestic felicity has been his. Smiling faces have surrounded his household hearth—faces, bright in the light of their joy; and if the grandeur of an aristocratic alliance can impart gratification, that gratification has been added; for his posterity rank among the *magnates* of Britain's proud nobility. And is there one who will not join in the aspiration: May his days extend to the utmost limit of man's allotted existence; and with no shade dimming the clear mirror of his virtues, and no misfortune ruffling his course to the realms of eternal rest, with feelings pure and spiritualized, with faith high and steadfast, looking with a fixed eye beyond the clouds of earth, with the pillow of his infirmities free from a single thorn, with a nation's benefactions upon his head, and the approving smile of his Maker in his soul—

* * * "May his evening sun go down,
Like the evening of the eastern clime, that never knows a frown."

Of all parts of wisdom, the practice is the best. Socrates was esteemed the wisest man of his time, because he turned his acquired knowledge into morality, and aimed at goodness more than greatness.

NATURAL HISTORY.

In front, in the centre, the Rhinoceros; to the right, the Hippopotamus & Orang Outang. Centre back ground, the Giraffe; to the left, Antelopes & Zebra.

GROUP OF AFRICAN ANIMALS.*

WHEREVER the observant traveller turns his steps, he finds in every country animals peculiar to itself; and many of these, occupying the most remote and insulated spots, are the most inadequately supplied with the means of locomotion. The mode of their original dis-

*For this interesting article touching the natural history of the Quadrupeds of Africa, we are indebted to No. XVI. of "*Harpers' Family Library,*" entitled "Discovery and Adventures in Africa from the earliest periods to the present time," embellished with several fine engravings and plans of the routes of the enterprizing travellers, Park, Denham, and Clapperton. It is a neat and handsomely printed volume of 360 12mo pages, and embraces whatever is striking in the adventures of travellers who have sought to explore Africa, from the earliest ages, and in various directions. Its aim is to give a general view of the physical and social condition of that sun-burnt continent at the present day—and in this the compilers have certainly succeeded. It is altogether such a work as we should

persion, whether from a single position, or from multiplied centres of creation, has therefore been a theme which has not unfrequently exercised the ingenuity of naturalists. The subject, however, seems to be one which scarcely falls within the scope of human intelligence; although a most ample source of interesting and legitimate speculation may be made to flow from an accurate and extended record of facts illustrative of their present distribution, the amount of genera and species, the relation which that amount bears to the animal productions of other countries, and similar numerical details.

Most nearly allied to the human race of all the species of the brute creation, the black or African orang-outang (*Simia troglodytes* of Linnæus) may be allowed to assume the foremost place in our enumeration. It is native to no other country than Africa, although we are as yet unacquainted with the extent of territory which it occupies in that continent. Angola, the banks of the river Congo, and all the districts which border the Gulf of Guinea, are the localities in which it has as yet most frequently occurred. Its history, like that of its Asiatic congener, the red orang-outang (*Simia satyrus*, Linn.), is still involved in considerable obscurity. Its habits, in the adult state, are extremely retired and wary; and the young alone have fallen into the hands of Europeans in modern times. Great exaggeration prevails in the narratives of all the earlier travellers regarding the sagacity of this singular animal. Its external figure and general conformation no doubt greatly resemble those of the human race, and hence its actions have to us much of the semblance of human wisdom. But a remarkable circumstance in the mental constitution of this tribe of animals disproves their fancied alliance to mankind,—the young are gentle, obedient, and extremely docile,—but as they increase in years their

be glad to find extensively circulated:—it contains much useful information written in an engaging manner, of that quarter of the globe, the greater part of which, down to a comparatively recent period, was the subject only of vague report and conjecture. In short it is no unworthy member of one of the best works in our country—*The Family Library*. From that part of the work which treats of the Natural History of the Quadrupeds of Africa, and which is illustrated by an engraving of a group of animals, at the head of the present article, we shall make farther extracts.

dispositions undergo a striking change, and their truly brutal nature is evinced by an unusual degree of untractable ferocity. In the wild state they are inferior both to the dog and the elephant in sagacity, although their analogous structure never fails to impress the beholder with a belief that they resemble man in mental character as well as in corporeal form. Two species of African orang-outang seem to have been described by the earlier writers. These were probably the young and old of the same species seen apart at different times, for later researches do not lead to the belief of there being more than one.

"The greatest of these two monsters," says Battell, "is called *pongo* in their language; and the less is called *engeco*. This pongo is exactly proportioned like a man; but he is more like a giant in stature; for he is very tall, and hath a man's face, hollow-eyed, with long hair upon his brows. His face and ears are without hair, and his hands also. His body is full of hair, but not very thick, and it is of a dunnish colour. He differeth not from a man but in his legs, for they have no calf. He goeth always upon his legs, and carrieth his hands clasped on the nape of his neck when he goeth upon the ground. They sleep in the trees, and build shelters from the rain. They feed upon fruit that they find in the woods, and upon nuts; for they eat no kind of flesh. They cannot speak, and appear to have no more understanding than a beast. The people of the country, when they travel in the woods, make fires where they sleep in the night; and in the morning, when they are gone, the pongos will come and sit about the fire till it goeth out; for they have no understanding to lay the wood together, or any means to light it. They go many together, and often kill the negroes that travel in the woods. Many times they fall upon the elephants which come to feed where they be, and so beat them with their clubbed fists, and with pieces of wood, that they will run roaring away from them. Those pongos are seldom or never taken alive, because they are so strong that ten men cannot hold one of them; but yet they take many of their young ones with poisoned arrows."

Purchas informs us, on the authority of a personal conversation with Battell, that a pongo on one occasion carried off a young negro, who lived for an entire season in the society of these animals; that, on his return, the negro stated they had never injured him, but, on the contrary, were greatly delighted with his company; and not only brought him abundance of nuts and wild fruits, but carefully and courageously defended him from the attacks of serpents and beasts of prey.

With the exception of such information as has been drawn from the observance of one or two young individuals sent alive to Europe, our knowledge of this species has not increased. We have become aware of the inaccuracy and exaggeration of previous statements, but have not ourselves succeeded in filling up the picture. It is indeed singular, that when the history of animals inhabiting New-Holland, or the most distant islands of the Indian Ocean, are annually receiving so much new and correct illustration, the most remarkable species of the brute creation, inhabiting a comparatively neighbouring country, should have remained for about 2000 years under the shade of an almost fabulous name, and that the "wild man of the woods" should express all we yet really know of the African orang-outang in the adult state.

Africa produces many other species of the monkey tribe. The promontory most familiar to the Mediterranean voyager, called Apes' Mountain, not far from the opposing point of Gibraltar, is so called from the occurrence of these animals; and the rock of the last-named fortress is itself the only strong-hold which they possess in Europe. They do not, however, occur in desert countries, commonly so called; that is, the open sandy plains of Africa are altogether unfitted for the dwellings of these pigmy people. Apes of all kinds are a sylvan race. Their structure being such as to render them unfit for the exercise of rapid movements, either on all fours or in an upright position, the inclined and densely intermingled branches of trees are their

favourite places of resort. Their feet in climbing being equally useful with their hands, great additional power and activity are thus derived. Among the shady and otherwise unpeopled arbours which skirt the banks of the yet mysterious rivers of Africa, they dwell in single pairs or in congregated troops, according to the instincts of each peculiar kind; and seated on the tops of ancient trees, or swinging from pendant boughs, they play their fantastic tricks, secure alike from the wily serpent during the day, and the panther which prowls by night.

YOUNG LADIES' GARLAND.

ON CULTIVATION OF TASTE.

A FEMALE of cultivated taste has an influence upon society wherever she moves. She carries with her that secret attractive charm which operates like magic upon the beholder, fixes the attention and softens the feelings of the heart like those benign influences over which we have no control. It is impossible to be long in her presence without feeling the superiority of that intellectual acquirement, which so dignifies her mind and person. Her words and actions are dictated by its power, and give ease and grace to her motions. The cultivation of a correct taste is so joined in affinity with the social affections, that it is almost impossible to improve the one, without affecting the other. For it is seldom that we see this resplendent qualification attached to minds under the influence of moral principles, neglectful of those social feelings which cement society together, and preserve it from jarring innovations. It is needful in every department of life; and more of our happiness is derived from this source, than we are often aware of.

Look at domestic scenes with a discerning eye, and see the movements of a woman of taste. If she is the head of a family, order appears to be the first law which governs and controls her actions.—All her affairs are planned with wisdom; confusion and discord never disturb her mind. Her house is the seat of social

happiness, where the stranger and friend can repose with delight; for neatness and order are the inmates of her habitation.

THE FEMALE HEART.

The female heart may be compared to a garden, which, when well cultivated, presents a continued succession of fruits and flowers, to regale the soul, and delight the eye; but when neglected, producing a crop of the most noxious weeds; large and flourishing, because their growth is in proportion to the warmth and richness of the soil from which they spring. Then let this ground be faithfully cultivated; let the mind of the young and lovely female be stored with useful knowledge, and the influence of women, though undiminished in power, will be like "the diamond of the desert," sparkling and pure, whether surrounded by the sands of desolation, forgotten and unknown, or pouring its refreshing streams through every avenue of the social and moral habit.

BOTANY.

The study of this beautiful science is particularly adapted to young females, to whom we would recommend it, as a lasting source of pleasure and amusement. It will be found much less difficult than may at first be apprehended, and the enjoyment experienced in its progress will be such, that difficulties, much greater than those which really present themselves, would be no barrier to the attainment of the science. The nomenclature, which appears at first view so repulsive, soon loses its terrors, and becomes familiar, and the pleasures which result from the application of principles, the exercise which the science requires, and the perpetual contemplation of the variegated and splendid colourings of nature, operate as a species of attraction so irresistible, that the student can neither resist nor control it. No object can be more delightful than to behold a lovely woman indulging a passion for that which is in itself so beautiful and innocent, or than to see her

"Looking through nature, up to nature's God."

What higher source of gratification can there be than to stroll amidst the groves, or wander over mountain heights, and enjoy the magnificent scenery of nature, and inhale the breeze teeming with fragrance and redolent with sweets, while you are in pursuit of a richer banquet, a more delightful spectacle, the fair and exquisite gifts of Flora—

"Each bounteous flower,
Iris all hues, Roses and Jassamine."—*Milton.*

YOUNG GENTLEMEN'S DEPARTMENT.

SUPERFICIAL READING.

The evils resulting from a habit of reading rapidly and without deep reflection, should deter every one from indulging that lively curiosity which is its grand cause. For it is an eagerness to reach the consummation that hastens the progress of most readers through a work's design, extracting as they say "the mere essence," and leaving the residue 'untasted, untouched.' Many plunge through volumes in a day, and to appearance emerge uninjured, yet I need not say that this practice soon occasions great confusion of ideas and eventually destroys the mind. Since to heap upon it, as it were, book upon book, battle upon battle, and victory or defeat, without giving the intellect time to grasp at each severally and fix them in her "keeping place," excludes thought from her true station and renders this store useless and burdensome. The conceptions become rayless and indistinct and language, the echo of the thoughts has all their dimness and obscurity. A habit is acquired of viewing subjects at a distance and with hasty and uncertain glances, than which there is nothing more prenicious to mental discipline, or subversive to intellectual greatness. It blunts all point, obscures every beauty and sacrifices genius to a worthless pleasure. The true value of all knowledge consists not so much in the superfices over which it extends as in the clear and distinct ideas we imbibe from the examination of various subjects; and it is the great object of education to acquire a habit of exercising clearness and truth.

This practice of extracing the "mere essence" from, naturally excites a disgust for works of real worth. The mind becomes accustomed to bestow but a passing glance, to skim along the surface and not drive for thoughts "fathom deep."—Naught therefore but frivolities are relished, and that which requires study and attention is pronounced dry and without interest; the historian and philospher are discarded from the thoughts to make place for pretty specimens of poetic inspiration, and science is left to grope its way from amid the beautiful passages of a favorite novelist.

Moreover, a habit of superficial reading greatly injures the memory. An insufficiency of time is necessarily allowed it to select its subjects and give them the stamp of thought's revision before they are imprinted on its tablets. Thus a mass of worthless matter is poured in upon it, till full and overflowing, when chaos assumes the sway and revels in its strength. It loses its former spring and vigor, and its tenacity becomes impaired from the mere barrenness of its resources. And if we examine the qualities that constitute an able reasoner we again find the effects of this habit to be detrimental and in no wise of advantage. For able reasoning requires a wide extent of useful knowledge to furnish the materials, and a habit of clear and patient thought in applying that knowledge, both of which qualifications are incompatible with the very name of a superficial reader.

With such views as these on a subject that deeply interests us all, I have endeavored to show the great injury necessarily sustained by those persons who are literally *swallowing* the trash of the day. The mind, the memory, and all of real worth in man, are to be thrown away for the foolish purpose of gratifying a momentary and worthless pleasure. In these remarks, however, I by no means object to the perusal of those works which recognize as their authors, any of those brightest stars that at times illumine the literary world, whose genius is studiously devoted to the promotion of virtuous knowledge. History, however, should unfold to our view the experience of past ages, by

which to guide our judgments, and the Philosophy of other times should render us its willing aid in examining the mysteries of nature.—We should avoid the light productions that are daily issuing from the press, whose fame is but to live and die; and die in the obscurity from whence they emanated. The pleasure of their perusal shuld yield to a thirst for refined and elevated knowledge, an acquisition that will deeply affect ourselves, and one that will sustain and even exalt the character of an American citizen. W.

INCREASE OF THE NUMBERS OF MANKIND.

On the supposition that the human race has a power to double its numbers 4 times in a century, or once in each succeeding period of 25 years, as some philosophers have computed, and that nothing prevented the exercise of this power of increase, the descendants of Noah and his family, would have now increased in the following number: 1, 496, 577, 676, 626, 844, 588, 240, 573, 268, 701, 473, 812, 127, 674, 924, 007, 424.

The surface of the earth contains, of square miles,...	296,643,355
Mercury, and all the other planets, contain about, ...	46 790.511,000
The sun contains	2,442,900,000,000
	2,489,887,174,555

Hence, upon the supposition of such a rate of increase of mankind, as has been assumed, the number of human beings now living would be equal at the following number for each square mile upon the surface of the earth, the sun and all the planets: 61,062,000,000,000 000,000,000,000,000,000,000,000; or to the following number for each square inch: 149,720,000,000,000, 000,000,000,000,000. This last number alone is infinite with relation to human conception. Merely to *count* it would require an incredible period. Supposing the whole inhabitants now upon the surface of the globe to be one thousand millions, which is believed somewhat to exceed the actual number; and supposing that this multitude, infants and adults, were to be employed in nothing else but counting; that each were to work 365 days in the year, and 10 hours in the day, and

to count 100 per minute, it would require, in order to count the number in question, 6,536,500 millions of years.

GOOD BOOKS.

A young man who has a fondness for books, or taste for the works of nature and art, is not only preparing to appear with honour and usefulness as a member of society, but is secured from a thousand temptations and evils to which he would otherwise be exposed. He knows what to do with his leisure time. It does not hang heavily on his hands. He has no inducement to resort to bad company, or the haunts of dissipation and vice; he has higher and nobler sources of enjoyment in himself. At pleasure he can call around him the best of company—the wisest and greatest men of every age and country—and feast his mind with the rich stores of knowledge which they spread before him. A lover of good books can never be in want of good society, nor in much danger of seeking enjoyment in the low pleasures of sensuality and vice.

MUSIC AS A BRANCH OF INSTRUCTION.

In the United States, singing is usually considered as an accomplishment which belongs to the luxuries of education. In Germany, it is deemed an essential part of common school instruction; as a means of cultivating one of the most important of our senses, of softening the character, and especially of preparing children to unite in the public worship of God. It is considered no more remarkable, and no more difficult, for children to read and write music, than language; and musical tones are made the means of associating valuable ideas with the common objects and phenomena of nature, and the ordinary events of life.

The following ordinance, extracted from the Prussian Official Gazette, (Amts Blatt,) Cologne, January 15th, 1828, will show the light in which this subject is viewed by that Government.

"Among the essential branches of education, which

ought to be found in all common schools, and to which every teacher who undertakes the management of such schools, is in duty bound to attend, is that of instruction in singing. Its principal object in these schools, is to cultivate feeling, and exert an influence in forming the habits, and strengthening the powers of the will, for which mere knowledge of itself is often altogether insufficient; hence it constitutes an essential part of *educating instruction*, and if constantly and correctly applied, renders the most unpolished nature capable of softer emotions, and subject to their influences. From its very nature, it accustoms pupils to conform to general rules, and to act in concert with others.

"Having recommended this important object of primary instruction, (the immediate connexion of which with religious instruction, no one can fail to perceive,) to the zealous exertions of the teachers, and the careful attention of the directors of schools, and, at the same time, having urged the study of the best writers upon the subject, which, so far as they relate to school instruction, ought to be found in the libraries of every district, we shall here bring forward some points, which demand a closer and more universal attention.

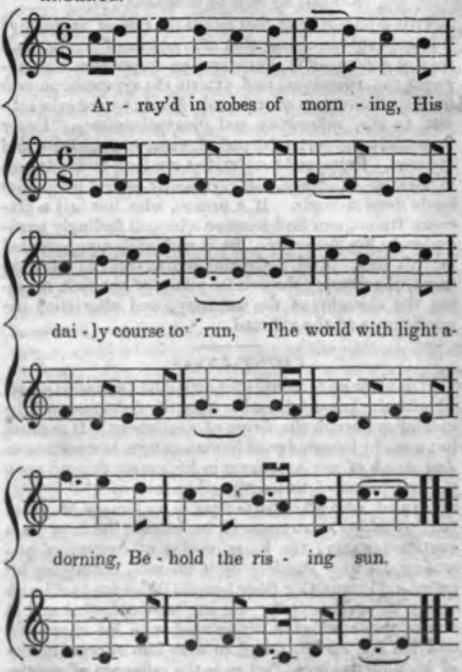
"If instruction in singing is to accomplish with certainty the objects proposed, it must be long continued without interruption, and, of course, it is indispensably necessary that a regular attendance be required during the continuance of the duties of the school, and enforced in the strongest manner.

"It is unnecessary to illustrate the contrast between the last remark and the usual desultory mode in which singing is taught."

In order to render a similar course of instruction practicable in this country, a gentleman in Boston has prepared, under the title of "The Juvenile Lyre," a set of tunes, adapted to the capacities of children, and calculated to associate the sensible with the moral and spiritual world, in their minds. Songs for children should have simplicity without frivolity, and an adaptation to the heart, which is not found in every day compositions. The American Annals of Education, speaks favorably of the system, and gives the following specimen:

THE RISING SUN.

ANDANTE.



2 With grateful hearts and voices.
We hail the kindly rays,
All nature now rejoices,
And sings thy Maker's praise.

3 O shed thy radience o'er us,
And cheer each youthful mind;
Like thee our Lord is glorious,
Like thee our God is kind.

to count 100 per minute, it would require, in order to count the number in question, 6,536,500 millions of years.

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INTERESTING AND INSTRUCTIVE EXTRACTS.

SYMPATHY.

"Come then with me thy sorrows join,
And ease my woes by telling thine."

It is a pure stream that swells the tide of sympathy; it is an excellent heart that interests itself in the feelings of others—it is a heaven-like disposition that engages the affections, and extorts the sympathetic tear for the misfortunes of a friend. Mankind are ever subject to ills, infirmities and disappointments. Every breast, at some particular period, experiences sorrow and distress. Pains and perplexities are long-lived plagues of human existence, but sympathy is the balm that heals these wounds. If a person, who has lost a precious friend, can find another who will feelingly participate in his misfortune, he is well nigh compensated for his loss. And delightful is the task, to a feeling mind, of softening the painful pillow of the sick, amusing the thoughts of the unhappy, and alleviating the misfortunes of the afflicted.

GENTLENESS.

Whoever understands his own interest, and is pleased with the beautiful, rather than the deformed, will be careful to cherish the virtue of gentleness. It requires but a slight knowledge of human nature, to convince us that much of our happiness in life, must depend upon the cultivation of this virtue. The man of wild, boisterous spirit, who gives loose reins to his temper, is, generally speaking, a stranger to happiness; he lives in a continual storm; the bitter waters of contention and strife are always swelling up in his soul, destroying his peace, and imparting their baneful influence to all with whom he is connected. He excites the disgust and ill will of those who are acquainted with his character, and but few can be found to wish him success in any of his undertakings. Not so is the influence of gentleness. This virtue will assist its possessor in all his lawful undertakings; it will often render him successful when nothing else could; it is exceedingly lovely and attractive in its appearance; it wins the hearts of all;

it is even stronger than argument, and will often prevail when *that* would be powerless and ineffectual; it shows that man can put a bridle upon his passions; that he is above the ignoble vulgar, whose characteristic it is to storm and rage like the troubled ocean, at every little adversity or disappointment which may cross their paths; it shows that he can soar away in the bright atmosphere of good feeling, and live in a continual sunshine, when all around him are enveloped in clouds and darkness, and driven about like maniacs, the sport of their own passions. The most favorable situations in life, the most lovely objects in nature, wealth and all that is calculated to increase the happiness of man, lose their charm upon a heart destitute of this virtue.

DEATH OF COLUMBUS.

With all the visions and fervor of his imagination, its fondest dreams fell short of the reality. He died in ignorance of the real grandeur of the discovery. Until his last breath he entertained the idea that he had merely opened a new way to the old resorts of opulent commerce, and had discovered some of the wild regions of the east. He supposed Hispaniola to be the ancient Ophir which had been visited by the ships of Solomon, and that Cuba and Terra Firma were but remote parts of Asia. What visions of glory would have broke upon his mind, could he have known that he had indeed discovered a new continent, equal to the whole of the old world, in magnitude, and separated by two vast oceans from all the earth hitherto known by civilized man? And how would his magnanimous spirit have been consoled, amidst the afflictions of age, and the cares of penury, the neglect of a fickle public, and the injustice of an ungrateful king, could he have anticipated the splendid empires which were to spread over the beautiful world he had discovered; and the nations and tongues and languages which were to fill its lands with his renown, and to revere and bless his name to the latest posterity.

True prudence is to see from the commencement of an affair what will be the end of it.

MEMORY OF THE PAST.

No day's remembrance shall the good regret,
Nor wish one bitter moment to forget;
They stretch the limits of this narrow span,
And, by enjoying, live past life again.

THERE is certainly no greater happiness than to be able to look back upon a life usefully and virtuously employed, to trace our own progress in existence, by such tokens as excite neither shame nor sorrow. Life, in which nothing has been done or suffered, to distinguish one day from another, is to him that has passed it, as if it had never been, except that he is conscious how ill he has husbanded the great deposit of his Creator. Life made memorable by crimes, and diversified through its several periods by wickedness, is, indeed, easily reviewed, but reviewed only with horror and remorse.

The great consideration which ought to influence us in the use of the present moment, is to arise from the effect, which, as well or ill applied, it must have upon the time to come—for though its actual existence be inconceivably short, yet its effects are unlimited—and there is not the smallest point of time but may extend its consequences either to our hurt or to our advantage, through all eternity, and give us reason to remember it for ever, with anguish or exultation.

The time of life in which memory seems particularly to claim predominance over the other faculties of the mind, is our declining age. It has been remarked by former writers, that old men are generally narrative, and fall easily into recitals of past transactions, and accounts of persons known to them in their youth. When we approach the verge of the grave it is more eminently true:

Life's span forbids thee to extend thy cares
And spread thy hopes beyond thy years.

We have no longer any possibility of great vicissitudes in our favor. The changes which are to happen in the world will come too late for our accommodation, and those who have no hope before them, and to whom their present state is painful and irksome, must of ne-

cessity turn their thoughts back to try what retrospect will afford. It ought, therefore, to be the care of those who wish to pass their last hours with comfort, to lay up such a treasure of pleasing ideas, as shall support the expenses of that time, which is to depend wholly upon the fund already acquired.

> Seek here, ye young, the anchor of your mind;
> Here, suffering age, a blest provision find.

In youth, however unhappy, we solace ourselves with the hope of better fortune, and however vicious, appease our consciences with intentions of repentance—but the time comes at last, in which happiness can be drawn only from recollection, and virtue will be all that we can recollect with pleasure.

> "An Idler is a watch that wants both hands;
> As useless when it goes, as when it stands."

POETRY.

Those persons who are familiar with foreign periodicals, may have noticed the effusions of a lady, by the name of *Mary Ann Browne*. She is the author of Mont Blanc, Ada, Repentance, and other poems. She is quite young, and is as fair as young. A vein of religious feeling pervades her compositions. We select as specimen the following lines, from a piece entitled

MOSS.

> How I love to look on the fresh green moss
> In the pleasant time of Spring,
> When the young, light leaves in the quick breeze toss,
> Like fairies on the wing.
> When it springeth up in woodland walks
> And a natural carpet weaves,
> To cover the mass of withered stalks,
> And autumn's fallen leaves.
>
> And I love, I love to see it much,
> When on the ruin gray,
> Which crumbles, to time's heavy touch
> It spreads its mantle gay,
> While the cold ivy only gives
> As it shivereth thoughts of fear,
> The closely clinging moss still lives,
> Like a friend, for ever near.

But oh, I love the bright moss most,
When I see it thickly spread
On the sculptur'd stone, that fain would boast,
Of the forgotten dead.
For I think if that lowly thing can efface
The fame that earth has given,
Who is there that would ever chase
Aught that is not of heaven.

THE SEASONS.—BY BISHOP HEBER.

When Spring unlocks the flowers, to paint the laughing soil;
When Summer's balmy showers refresh the mower's toil;
When winter binds in frosty chains the fallow and the flood,
In God the earth rejoiceth still, and owns its Maker good.

The birds that wake the morning, and those that love the shade,
The winds that sweep the mountain, or lull the drowsy glade;
The sun that from his amber bower rejoiceth in his way,
The moon and stars, their Master's name, in silent pomp display.

Shall man, the lord of nature, expectant of the sky,
Shall man, alone unthankful, his little praise deny?
No! let the year forsake his course, the Seasons cease to be,
Thee, Master, must we always love; and, Saviour, honor Thee:

The flowers of Spring may wither—the hope of Summer fade—
The Autumn droop in Winter—the birds forsake the shade—
The winds be lull'd—the sun and moon forget their old decree;
But we, in Nature's latest hour, O Lord! will cling to thee.

"SEARCH THE SCRIPTURES."

BY A YOUNG LADY OF S. C.

Yes, search them, for in them thou'lt surely find,
Knowledge, most precious, words of life and light;
Wisdom, surpassing all of human kind,
And virtue, yielding the most pure delight.

Faith that will stand thee in the hour of death;
Hope that will gild thy pathway to the tomb,
And charity, that to thy latest breath,
Will cheer thy heart—and all thy soul illume.

Pure precepts, bright examples, there thou'lt find,
Purest and brightest—for the Lord on high
To frail mortality was even joined,
To teach us how to live, and how to die.

Oh! may we prize such knowledge—may we live
To ponder o'er the precepts of our Lord,
And fix them in our hearts, and glory give
To Him who gave us His most precious word. M. M.

STANZAS.

Hast thou not marked, when Winter's reign to Spring begins to yield,
How dreary, and how comfortless the prospect round revealed?
The miry earth, the cloudy sky, the cold and driving rain,
Seem worse than Winter's sparkling frosts, or fleecy-mantled plain.

No sudden, instantaneous change brings Summer's perfect day,
But winds of March, and April showers, prepare the path of May;
And Summer's leafy months must pass, in due succession by,
Before the husbandman may hope the joy of harvest nigh.

Meek pilgrim to a better world! may not thine eye discern
Some truths of grace, in Nature's school, thine heart may wisely learn?
Is there no lesson taught to thee by seasons as they roll,
Which ought to animate the hopes of thy immortal soul?

If on thy dark and wintry heart a beam of light divine,
From the blest Sun of Righteousness, hath e'er been known to shine;
Oh! view it as the glorious dawn of that more cloudless light,
Which, watched and waited for, shall chase each lingering shade of night.

Be not dismayed by chilling blasts of self-reproof within,
Or tears at night and morning, wept for folly or for sin;
Rather lift up thy head in hope, and be His mercy blest,
Whose ray of light and love divine hath broke thy wintry rest.

In quiet hope, and patient faith, Spring's *needful* conflicts bear,
Then green shall be thy Summer leaf, in skies more bright & fair;
And fruitage of immortal worth in Autumn's later days,
Shall on thy bending boughs be hung, to speak thy Master's praise.

KINDRED SPIRITS.

BY MARY ANN BROWNE.

Drops from the ocean of eternity,
  Rays from the centre of unfailing light;
Things that the human eye can never see,
  Are spirits—yet they dwell near human sight;
But as the shattered magnet's fragments still,
  Though far apart, will to each other turn,
So, in the breast imprisoned, spirits will
  To meet their fellow spirits vainly burn;
And yet not vainly. If the drop shall pass
  Through streams of human sorrow, undefiled,
If the eternal ray that heavenly was,
  To no false earthly fire be reconciled;
The drop shall mingle with its native main,
The ray shall meet its kindred rays again!

OMNIPRESENCE OF GOD.

Above—below—where'er I gaze,
  Thy guiding finger, Lord I view,
Trac'd in the midnight planet's blaze,
  Or glistening in the morning dew;
Whate're is beautiful or fair,
Is but thine own reflection there.

I hear thee in the stormy wind:
  That turns the ocean wave to foam!
Not less thy wond'rous power I find,
  When summer airs around me roam;
The tempest and the calm declare
Thyself, for thou art every where.

I find thee in the noon of night,
  And read thy name in every star
That drinks its splendor from the light
  That flows from mercy's beaming car;
Thy footstool, Lord, each starry gem
Composes—not thy diadem.

And when the radiant orb of light
  Hath tipp'd the mountain tops with gold,
Smote with the blaze, my wearied sight
  Sinks from the wonders I behold;
That ray of glory, bright and fair,
Is but a living shadow there.

Thine is the silent noon of night,
  The twilight eve—the dewy morn—
Whate'er is beautiful and bright,
  Thine hands have fashioned to adorn;
Thy glory walks in every sphere,
And all things whisper "God is here!"

SPRING.

How beautiful is Spring, the maiden Spring!
  Whose hand all warm and bright draws forth the flowers—
Who dyes with rainbow tints the young bird's wing—
  Who fills with forest scents the April hours,—
How beautiful she is, the year's first child,
  (Its sweetest,) with her violet tresses crown'd;
Her gesture, like the antelope's, shy and wild;
  Her voice a song, her eyes in pleasure drown'd!
And yet her fairest treasure ne'er is shown
  In scents, rich blooms, bright skies, or running river
(For streams may fail, and fair buds die ere blown,)
  But that then Hope, whose eyes are like the morn,
  Sweet sister of the Spring, is newly born,
Who forward looks for age, and murmureth never.

FALLS OF THE PASSAIC RIVER.

MONTHLY REPOSITORY,

AND LIBRARY OF

Entertaining Knowledge.

VOL. I. MAY, 1831. No. 12.

PASSAIC FALLS, N. J.*

Few places of resort are possessed of so many delightful attractions as the romantic village of Paterson. The handiwork of nature has been exerted in her most picturesque models, and every variety of landscape is presented to the traveller. The falls of the Passaic river, though of no very great magnitude, are characterized by a wildness of scenery which imparts a more than ordinary interest to the view. The peculiar location of the stream, which springs down a perpendicular abyss, and is received into a natural basin below—the immense apertures in the basaltic columns which surround it, the serpentine mazes of the river above the fall, and the lake below covered with the angry foam, which sparkles with rainbow lustre as it falls—all conspire to lend an air of enchantment, which, at the same time, impresses the mind with wonder and with awe.

In the year 1827 a foot-bridge was thrown over the principal cataract, which, notwithstanding it detracts somewhat from the native simplicity of the spot, is not without its advantages.

The Passaic river, at Paterson, affords a water power which is second only to Niagara; and, of all the streams that have been diverted from their natural beds for manufacturing purposes, is decidedly the most powerful and valuable. The active hand of human ingenuity has seized upon the facilities which nature offered, and converted them to his own use.

* We have been disappointed in receiving from a correspondent a particular account of the Falls and the Village of Paterson, for the present number.—It will appear hereafter.

MUSIC AS A BRANCH OF COMMON EDUCATION.

In a former number of the Annals,* we stated that Vocal Music was deemed an essential branch of common school education in Germany and Switzerland, and enjoined as such by the governments of those countries; and gave a specimen of the music employed for this purpose.

The immediate object to be accomplished, is to perfect one of our senses, to exercise an important set of organs, and, in short, to cultivate one of those faculties which our Creator has seen fit to give us. To neglect it, is to imply that it was unnecessary; that it is useless. It is to treat a noble gift in a manner which involves ingratitude to the Giver.

In this case also, as in others, the invariable law of Providence is, that the employment of our faculties is important to their preservation and perfection. Singing is of no small value, as a mere physical exercise of the vocal organs, which invigorates the lungs, and thus promotes the health of the whole frame. Dr. Rush observes, that it is a means of protection from the pulmonary diseases so common in our climate; and adduces as a fact in confirmation of this opinion, that the Germans in the circle of his practice were seldom afflicted with consumption, and that he had never known but a single instance of spitting blood among them. He ascribes this to the strength which their lungs acquire, by exercising them in vocal music, which constitutes an essential branch of their education. He had even known singing employed with success as a means of arresting the progress of pulmonary complaints.

But *the ultimate objects* in cultivating vocal music are those for which it was obvious this gift was bestowed. The first and the highest is, to unite with our fellow men, in expressing our gratitude and love to our Heavenly Father. In doing this we rouse and excite our own devotional feelings, and stir up each other to new life in the worship of God. For these purposes, God himself commanded the use of music, in the Israelitish

* See Monthly Repository, &c. for April, page 363.

church. Indeed, he has written this law on the hearts of men. Scarcely a temple or a service has existed in the world, except among the Mahometans, in which music did not occupy an important place. In this view the subject is of great importance. The defects in our church music are felt as well as admitted by all; and no thorough change can take place, but in acting on the rising generation.

But it has other important uses, which are not so generally appreciated. There are periods of exhaustion, and there must be hours of relaxation and repose in the life of all, from the prince to the peasant, when we need some innocent amusement to employ and interest, without wearying, and to exclude improper occupations: and this necessity is greater in proportion as the intellect is less cultivated. There are moments of physical debility or moral discouragement, when the mind is almost incapable of operating upon itself. At such seasons, music is of great utility. It is, perhaps, the only employment which leaves the intellect wholly in repose, and on this account, is peculiarly important to literary men. In fact, it forms the relaxation of considerable numbers of those on the continent of Europe.*

The popular vocal music introduced of late years in Germany and Switzerland is peculiarly adapted to these objects. Without being trifling, it is cheering and animated. Without being directly religious, or even didactic, it presents ordinary subjects under an aspect fitted to excite the nobler feelings, to elevate the thoughts above the world, and kindle the feelings of devotion. It comprises songs on the various objects and phenomena of nature—the rising sun—the rolling thunder—the still evening—the rich harvest—and presents something applicable to every circumstance of

* A distinguished professor of the island of Sicily, on hearing the sad tale of the influence of study on our literary men, inquired what were their amusements. I was c y able to answer—None. He expressed his astonishment, and added, "No wonder they die of study." He informed me that he spent a given portion of the day in practising instrumental and vocal music; and thought he could not live without the relief which they afforded his mind.

life. It thus associates common occurrences and objects with the most elevated feelings, and every view of nature calls forth the notes of pleasure, and the song of praise to its Author. Such exercises are undoubtedly often mechanical at first, but their repetition cultivates the feelings they describe. It leaves an impress of softness, and produces a tendency upwards, which are useful to all, and it is of peculiar importance to those for whom it is generally deemed superfluous,—I mean, whose minds are chiefly occupied with providing for the immediate necessities of life, and who are conversant with its ruder elements.

A passage of Vehrli's journal of his school at Hofwyl, presents a very interesting example of the influence of this species of music. "The last autumn I was walking with my children by moonlight—'How beautiful the moon rises, and shines red over the lake,' said one of them. Another instantly began singing the hymn—

"In still and cheerful glory
She raises mild before us."

and all joined in chorus. The last summer, at the approach of a storm, they often sung the hymn beginning—

"God thunders, but I nothing fear."

They selected, as appropriate to the marked divisions of time, the hymn which begins—

"The days that Heaven allows us here,
How swiftly do they fly;"

and sung it frequently at the close of the week;"

The visitor at Hofwyl may often hear them sing, in going or returning from their labours, especially at the unseasonable hours sometimes necessary for securing the harvest in this variable climate; and thus cheering their toils, and elevating their thoughts and feelings above the little inconveniencies and hardships they endured. A number of commissioners who visited the establishment, observe that they, like most other strangers, could not hear the music of these pupils without the deepest emotion. The greater part of them know by heart a hundred religious and popular hymns. Vehrli

himself, observes, that he has uniformly found, that in proportion as vocal music was improved, a kind and devotional spirit was promoted among his pupils.

In furnishing an amusement of this kind, we shall divert from others of a doubtful or injurious character. In giving young men such a means of innocent excitement, by music appropriate to their age and feelings, we diminish the temptation of resorting to stimulating liquors, and other questionable modes of producing cheerfulness. The editor has known and visited a village in Switzerland, where a set of drunken, disorderly young men were led, by the cultivation of vocal music among them, to an entire exterior reformation, which was regarded with as much surprise as the change in regard to temperance in our own country. He has seen them, when they met at a public house, resort to this method of raising their spirits, instead of drinking, and amuse themselves with singing songs and hymns adapted to improve the mind and elevate the heart, instead of the profane or indecent conversation or noisy clamour which is generally heard on such occasions.

But, aside from this benefit, music, of itself, has an effect which cannot be doubted, in softening and elevating the character. It diminishes the strength of the passions by keeping them, for a time at least, in a state of inaction. It counteracts them, by producing the opposite and softer feelings.

In addition to this, the study of music, from its very nature, cultivates the habits of order, and obedience, and union. All must follow a precise rule; all must act together, and in obedience to a leader; and the habit acquired in one part of our pursuits necessarily affects others.

On all these accounts, vocal music has no small influence on school discipline. We were struck with the superior order and kindly aspect of the German schools in comparison with our own, and ascribed it not a little to the cultivation of music in them. Those who unite in singing with their fellows and their master, will be more disposed to be kind to the one and obedient to the other.

SKETCH OF MILTON.

Milton stood apart from all earthly things. He may be likened to that interpreter of the mysterious things of Providence, who sits in the bright circle of the sun; while Shakspeare resembles rather the spirit created by his own matchless imagination, which wanders over earth and sea, with power to subdue all minds and hearts by the influence of his magic spell. The poetry of Milton is accordingly solemn and dignified, as well becomes the moral sublimity of his character, and the sacredness of his awful theme. His mind appears to have been elevated by the glories revealed to his holy contemplation; and his inspiration is as much loftier than that of other poets, as his subject was superior to theirs. It is superfluous to say, that his moral influence is always pure; for how could it be otherwise with such a mind, always conversant with divine things, and filled with the sublimest thoughts? Yet it has been sometimes said, that the qualities with which he has endued that most wonderful of all poetical creations, the leader of the fallen angels, are too fearfully sublime to be regarded with the horror and aversion, which they ought naturally to inspire. He is indeed invested with many sublime attributes;—the fierce energy, unbroken by despair—the unconquerable will, which not even the thunders of the Almighty can bend;—but these qualities, though they may fill us with wonder and awe, are not attractive. His tenderness is only the bitterness of remorse, without end and hopeless; his self-devotion is only the result of wild ambition; and a dreadful retribution at length falls upon him, 'according to his doom.' In this exhibition of character, there is undoubtedly vast intellectual power, but there is nothing redeeming, nothing which can win the soul to love. We dread the effect of those delineations in which crime, from which nature recoils, is allied to qualities, with which we involuntarily sympathise; such portraits are of evil tendency, because though unnatural, they are still attractive; but great crime frequently supposes the existence of imposing traits of character, which may excite admiration, with-

out engaging sympathy. We are interested in Conrad, because his fierce and gloomy spirit is mastered by the passion which masters all;—because in him it is deep and overwhelming, yet refined and pure—like the token, which restored the repenting Peri to Eden—the redeeming and expiatory virtue, which shows that the light of the soul, however darkened, is not extinguished altogether—and we do not ask, how purity and love can find their refuge in a pirate's bosom—we do not remember, that they could as hardly dwell there as Abdiel among the rebel host. Not so the ruined Archangel. In him all may be grand and imposing, but all is dark, stern and relentless. If there be aught to admire, there is at least nothing to imitate. Through all the writings of Milton, there reign a loftiness and grandeur which seem to raise the soul to the standard of his own elevation. The finest minds have resorted to them for the rich treasures of eloquence and wisdom; and they might also find in them the more enduring treasures of piety and virtue.

THOMSON AND COWPER.

There are few who do not love to contemplate the two great masters of descriptive English poetry, Thomson and Cowper; with whom we seem to converse with the intimacy of familiar friends, and almost to forget our veneration for the poets, in our love and admiration of the virtues of the men. Both had minds and hearts which were touched with the feelings of the beauty, and fitted to enjoy the influences of nature; and the poetry of both was elevated, if not inspired, by religious veneration of the great Author of the grand and beautiful. The view of Thomson was bold and wide; it comprehended the whole landscape; he delighted to wander by the mountain torrent, and in the winter's storm; and it seemed as if the volume of nature was open and present before him. It is not so with Cowper. His lowly spirit did not disdain the humblest thing that bore the impress of his Maker's hands; he looked with as keen an eye of curiosity and

admiration upon the meanest flower of the valley as upon the wide expanse, glittering in the pure brilliancy of winter's evening, or bright with the dazzling glory of the summer noon. He made the voice of instruction issue from the most familiar things, and invested them with beauty, hourly seen, but never felt before: and he painted them all with the pure and delightful colouring of simplicity and truth.

CIRCLE OF THE SCIENCES WITH SUITABLE REFLECTIONS.

ASTRONOMICAL SKETCHES.—NO. XI.—THE MOON.

The Moon has an apparent daily motion from east to west, like all the other heavenly bodies; (this apparent motion is caused by the rotation of the earth from west to east) a progressive motion from west to east, advancing through the twelve signs of the zodiac in about 29 days, 12 hours; and a rotation upon her axis, which is completed in the same time as her revolution round the Earth.

The motion of the Moon in her orbit is very unequal. Sometimes she moves faster than the Earth, at other times slower. In some parts of her orbit she is behind the Earth, at other times she is before the earth; but at the conjunction and opposition she is in the same part of the heavens as seen from the Sun.

The Moon's absolute motion from her change to the first quarter is so much slower than the Earth's, that she falls 24,000 miles behind the Earth at her first quarter. From her first quarter to her opposition, her motion is gradually increased, having regained what she lost in her first quarter. From her opposition to the beginning of her last quarter, her motion continues accelerated, so that she is advanced as far before the Earth, as she was behind it at her first quarter, namely, 24,000 miles, which is equal to the semi-diameter of her orbit. But from the beginning of her last quarter to her conjunction with the Sun, her motion is so retarded, that she loses as much with respect to the Earth, as is equal to her distance from it. From these remarks it appears

that the absolute motion of the Moon is slower than the motion of the Earth, from the beginning of her last quarter to the end of her first, and swifter than the Earth's, from the beginning of her second quarter to the end of the third, her path being less curved than the Earth's in the former case, and more in the latter. The curve, in both cases, is always bent, or concave, toward the Sun.

Although the Moon moves round the Earth upwards of twelve times in one year, and round the Sun in the same time, yet her real path in the heavens differs very little from the path of the Earth. Both paths, indeed, are so very similar in their curve towards the Sun, that the difference in their form, to an eye which could view both orbits, could not be noticed. The distance of the Earth from the Sun is 95,000,000 miles, and of the Moon from the Earth 24,000, which is only in the proportion of one mile to 3,900, or one inch to 110 yards: a difference too minute to be perceived.

The Moon is invisible at her conjunction with the Sun, having her whole enlightened disk turned from the Earth. A few days after her conjunction, she is seen in the west in the form of a beautiful crescent. In this stage of her revolution, she appears the most beautiful object in the heavens when viewed through a telescope. During seven or eight days she increases in size, until she reaches her first quarter; and continuing still more to increase, she at length comes in opposition to the Sun; when, her whole illuminated hemisphere being turned towards the Earth, she is called the full Moon. From the full she gradually decreases, and daily rises later after sunset; and in the course of seven or eight days she finishes her third quarter, when she is seen with her convex side toward the east, and her dark limb towards the west; the line which separates between the bright and dark parts being without any curve. After this she continues to decrease in brightness until her conjunction with the Sun; when she is again invisible, having her whole illuminated disk again turned from the Earth.

Besides the apparent diurnal motion of the Moon

from east to west, she has an absolute motion from west to east, at the rate of thirteen degrees in twenty-four hours. If the moon is seen on any night in conjunction with any fixed star, she will appear the following night to have receded from that star thirteen degrees eastward, on the second night twenty-six degrees, and on the third night thirty-nine degrees; and at the end of twenty-seven days, seven hours, forty-three minutes, eleven seconds, she will have returned to the same point of the heavens, or will be in conjunction with the same star. Since the Moon, while she appears to move daily round the earth from east to west, advances in reality through thirteen degrees in her orbit, from west to east, the time of her rising, southing, and setting, must be later every rotation of the Earth upon its axis, or every day or night. This difference is nearly fifty minutes every day, at or near the equator. The greatest difference observed between the time of the rising and setting of the Moon at London, upon any two successive nights, amounts to one hour and seventeen minutes, which happens at the period of the vernal full Moon; and the least difference is seventeen minutes, which happens at the period of the autumnal full Moon.

PHILIP GARRETT.

REFLECTED HAPPINESS.

To a man who possesses a good heart there can be nothing more pleasing than the consciousness of giving pleasure to others. The luxury of doing good is a most exquisite as well as a most innocent luxury to him whose feelings and affections are such as make a man capable of enjoying as well as bestowing happiness.

FEMALE MODESTY.

MODESTY, in a young female is the flower of a tender shrub, which is the promise of excellent fruits. To destroy it, is to destroy the germ of a thousand virtues, to destroy the hope of society, to commit an outrage against nature. The air of the world is a burning breath that every day blasts this precious flower.

CARAVAN IN THE DESERT.

CARAVAN or KARAVAN—A Persian word used to denote large companies which travel together in the Levant and in Africa, for the sake of security from robbers having in view principally, trade or pilgrimages. Such a company often has more than a thousand camels to carry their baggage and their goods. These walk in single file, so that the line is often a mile long. On account of the excessive heat, they travel, mostly, in the morning. As every Mahomedan is *obliged* to visit the tomb of Mahommed, once at least, during his life, caravans of pilgrims go to Mecca, every year from various places of meeting. The leader of such a caravan to Mecca, who carries with him some cannon, for protection, is called *Emir Adge*. Trading caravans choose

one of their own number for a leader, whom they call *Caravan-Baschi.* Much information on the subject of caravans, is to be found in the travels of Niebuhr, who made many journeys with them, and describes them, as well known, minutely and faithfully.

A more particular account will be given of the caravans of the east, when we come to treat on the natural history of the camel.

NATURAL HISTORY.

GROUP OF AFRICAN ANIMALS.*

(*Continued from page 358.*)

We now arrive at the pachydermatous, or thick skinned animals, corresponding to the order Belluæ of Linnæus. In this division are included the elephant, the tapir, the rhinoceros, the hyrax, or Cape marmot, the pecaris, the babyroussa, the wild boar, the African boar, the hippopotamus, and the horse.

The most gigantic of all living terrestial animals, the elephant, combines superhuman strength with almost human wisdom, in a manner otherwise unequalled among the brute creation. Many instances are on record of its retentive memory, its grateful and affectionate disposition, and its general intelligence as a discriminating, if not reflecting creature. From the earliest ages its stupendous size and unexampled sagacity have formed a theme of wonder and admiration to mankind. Elephants in the wild state are gregarious and herbivorous. They are naturally averse to the extremes of heat and cold; and, although inhabitants of some of the most sultry regions of the earth, they shelter themselves from the overpowering heat of the mid-day sun in the comparative coolness of those umbrageous forests which, both in Africa and Asia, are their chosen places of abode.

Second in size, though widely distant in sense, is the rhinoceros, an animal of a sour and stubborn disposition, and in every way less trustworthy than the elephant. Of this genus there are several species, two of which (if *R. Burchellii* is entitled to specific distinction)

* For Engraving see Repository, vol. 1 page 355.

inhabit Africa. The others are native to India, and the great islands of Java and Sumatra. The African species *(R. Africanus)* is armed with a couple of horns; its coat is not distinguished by voluminous folds, and it wants the incisive teeth. The sense of sight is said to be rather defective in the rhinoceros: those of smell and hearing are acute.

Another animal, characteristic of, though not entirely peculiar to Africa, is the hyrax or Cape marmot. This species is supposed by some biblical annotators to be the *cony* of the Scriptures. It inhabits the rocky territories of many parts of Africa, and occurs, with little variation in its external aspect, in Syria. With the exception of the horns, it bears a strong resemblance to a rhinoceros in miniature.

The Ethiopian hog *(Phascochœrus Africanus)* is a fierce and savage animal, allied to the wild boar in its habits, but distinguished by a pair of large lobes or wattles placed beneath the eyes. The tusks of the upper jaw bend upwards in a semicircular manner towards the forehead. When attacked, it is apt to become furious, and, rushing on its adversary with great force and swiftness, inflicts the most desperate, and sometimes fatal wounds. It inhabits a wide extent of country along the western side of Africa, from Senegal to the Cape; and it also occurs specifically the same in Ethiopia. A new species of this genus has been recently discovered in the north of Africa, by M. Ruppell. It is named *Phascochœrus barbatus.* The ascertainment of the latter animal is a proof, among many others which might be adduced, of the impropriety of denominating a species from the continent which it inhabits. Few species are so isolated in the animal kingdom as to exist alone over a great tract of country, without claiming kindred with any other; and we may fairly infer, *à priori*, that when one of a genus is discovered, a second or a third will ere long make its appearance. When this happens such specific names as *Africanus, Americanus, &c.* cease to be of a discriminating or exclusive nature, and consequently lose their value,

Next to the elephant and rhinoceros, perhaps the

most bulky land animal with which naturalists are acquainted, is the hippopotamus or river horse. It is peculiar to Africa, and inhabits the fresh waters of that continent. It formerly existed in Lower Egypt, but has long since disappeared from that district. Mr. Bruce makes mention of hippopotami as existing in the lake Tzana, exceeding twenty feet in length. It would be hard to limit the growth of this naturally gigantic species; but the largest ever killed by Colonel Gordon, an experienced hippopotamist, did not exceed eleven feet eight inches. M. Desmoulins regards the species of Senegal as differing from those of the more southern parts of Africa. These animals are chiefly valuable on account of their ivory tusks, which, being harder than those of the elephants, and not so subject to turn yellow, are much esteemed by dentists. Their hides are formed into bucklers by several of the African tribes.

The aspect of the zebra is too familiarly known to require description. It is one of the most fancifully adorned of all known quadrupeds; but the beauty of its external appearance is its chief merit, as its disposition is wayward and capricious in the extreme. With the exception of one or two instances, in which persevering individuals have succeeded in subduing the stubbornness of its nature, it has not been rendered subservient to the purposes of the human race. It is a mountain-animal, called *dauw* by the Hottentots, and is scarcely ever seen on the plains.

The zebra of the plains, although only recently characterized as a distinct kind, is in fact a better known and more abundant species than the other. It is chiefly distinguished by the want of rings upon the legs. "I stopped," says Mr. Burchell, "to examine these zebras with my pocket telescope: they were the most beautifully marked animals I had ever seen; their clean sleek limbs glittered in the sun, and the brightness and regularity of their striped coat presented a picture of extraordinary beauty, in which probably they are not surpassed by any quadruped with which we are at present acquainted. It is indeed equalled in this particular by the dauw, whose

stripes are more defined and regular, but which do not offer to the eye so lively a colouring."

The quagga is more nearly allied to the zebra of the plains than to that of the mountains. It lives in troops in the neighbourhood of the Cape, and, in common with the zebra, is frequently found in company with ostriches. The wary disposition of these birds, and their great quickness of sight, are supposed to be serviceable to the congregated group in warning them of the approach of their enemies.

Very few animals of the deer kind, properly so called, are found in Africa. The red deer, however (*Cervus elaphrus*,) one of the noblest of the tribe, and the most stately of all the wild animals still indigenous to Britain, occurs in some of its northern quarters. But to these it was not improbably imported, at some unknown period, from Europe.

Before proceeding to the more abundant family of the antelopes, of which Africa is the great emporium, we shall mention, as a species entirely peculiar to this continent, the giraffe or camelopard, the tallest and, in every other respect, one of the most singular of quadrupeds. Its appearance is too familiar to our readers to require description. We shall merely state that it is a timid and gentle animal, feeding principally on the leaves of trees (especially those of the genus *Mimosa*,) and inhabiting the plains of Central and Southern Africa. Its gait, or mode of progression, is described as extraordinary by Mr. Lichtenstein. "We had scarcely travelled an hour when the Hottentots called our attention to some object on a hill not far off on the left hand, which seemed to move. The head of something appeared almost immediately after, feeding on the other side of the hill, and it was concluded that it must be that of a very large animal. This was confirmed, when after going scarcely a hundred steps farther, two tall, swan-necked giraffes stood almost directly before us. Our transports were indescribable, particularly as the creatures themselves did not perceive us, and therefore gave us full time to examine them, and to prepare for an earnest and serious chase. The one was smaller

and of a paler colour than the other, which Vischer immediately pronounced to be a colt, the child of the larger. Our horses were saddled, and our guns loaded in an instant, when the chace commenced. Since all the wild animals of Africa run against the wind, so that we were pretty well assured which way the course of these objects of our ardent wishes would be directed, Vischer, as the most experienced hunter, separated himself from us, and by a circuit took the animals in front, that he might stop their way, while I was to attack them in the rear. I had almost got within shot of them when they perceived me, and began to fly in the direction we expected. But their flight was so beyond all idea extraordinary, that, between laughter, astonishment, and delight, I almost forgot my designs upon the harmless creature's lives. From the extravagant disproportion between the height of the fore to that of the hinder parts, and of the height to the length of the animal, great obstacles are presented to its moving with any degree of swiftness."

Camelopards were known to the Romans, and were exhibited in the Circæan Games by Cæsar the dictator. The emperor Gordian afterwards exhibited ten at a single show; and tolerably accurate figures of this animal, both in a browsing and grazing attitude, have been handed down by the Prænestine pavement.

(*To be continued.*)

EXAMPLES FROM HISTORY.

ANGER.

Make no friendship with an angry man; and with a furious man thou shalt not go; lest thou learn his ways, and get a snare to thy soul.

Passion is a fever of the mind, which ever leaves us weaker than it found us. It is the threshold of madness and insanity; indeed, they are so much alike, that they sometimes cannot be distinguished; and their effects are often equally fatal. The first step to moderation is to perceive that we are falling into a passion. It is much easier wholly to prevent ourselves from falling into a passion, than to keep it within just bounds; that

which few can moderate, almost any body can prevent. Envy and wrath shorten life; and anxiety bringeth age before its time. We ought to distrust our passions, even when they appear the most reasonable. Who overcomes his passion, overcomes his strongest enemy. If we do not subdue our anger, it will subdue us. A passionate temper renders a man unfit for advice, deprives him of his reason, robs him of all that is great or noble in his nature, destroys friendship, changes justice into cruelty, and turns all order into confusion.

EXAMPLES.

Augustus, who was prone to anger, received the following lesson from Athenodorus the philosopher:—that so soon as he should feel the first emotions towards anger he should repeat deliberately all the letters of the alphabet; for that anger was easily prevented, but not so easily subdued. To repress anger, it is a good method to turn the injury into a jest. Socrates having received a blow on the head, observed, that it would be well if people knew when it were necessary to put on a helmet. Being kicked by a boisterous fellow, and his friends wondering at his patience, "What," said he, "if an ass should kick me, must I call him before a judge?" Being attacked with opprobrious language, he calmly observed, that the man was not yet taught to speak respectfully.

Cæsar having found a collection of letters written by his enemies to Pompey, burnt them without reading: "For," said he, "though I am upon my guard against anger, yet it is safer to remove its cause."

Antigonus, King of Syria, hearing two of his soldiers reviling him behind his tent, "Gentlemen," said he, opening the curtain, "remove to a greater distance, for your king hears you."

A farmer, who had stepped into his field to mend a gap in a fence, found at his return the cradle, where he had left his only child asleep, turned upside down, the clothes all bloody, and his dog lying in the same place, besmeared also with blood. Convinced by the sight that the creature had destroyed the child, he dashed out

its brains with the hatchet in his hand; then turning up the cradle, he found the child unhurt, and an enormous serpent lying dead upon the floor, killed by that faithful dog which he had put to death in blind passion.

Field Marshal Turenne, being in great want of provisions, quartered his army by force in the town of St. Michael. Complaints were carried to the Marshal de la Ferte, under whose government that town was; who being highly disobliged by what was done to his town without his authority, insisted to have the troops instantly dislodged. Some time thereafter, La Ferte, seeing a soldier of Turenne's guards out of his place, beat him severely. The soldier, all bloody, complaining to his general, was instantly sent back to La Ferte with the following compliment: "That Turenne was much concerned to find his soldier had failed in his respect to him, and begged the soldier might be punished as he thought proper." The whole army was astonished; and La Ferte himself, being surprised, cried out, "What! is this man to be always wise, and I always a fool?"

Clytus was a person whom Alexander held very dear, as being the son of his nurse, and one who had been educated together with himself. He had saved the life of Alexander at the battle near the river Granicus, and was by him made the Prefect of a province; but he could not flatter; and detesting the effeminacy of the Persians, at a feast with the king he spake with the liberty of a Macedonian. Alexander transported with anger slew him with his own hands; though when his heat was over, he was with difficulty restrained from killing himself for that fault which his sudden fury had excited him to commit.

Herod, the Tetrarch of Judea, had so little command over his passion, that upon every slight occasion his anger would transport him into absolute madness. In such a desperate fit he killed Josippus. Sometimes he would be sorry, and repent of the folly and injuries he had done when anger had clouded his understanding, and soon after commit the same outrages, so that none about him were sure of their lives a moment.

L'Alviano, General of the Venetian armies, was taken prisoner by the troops of Louis XII. and brought before him. The king treated him with his usual humanity and politeness, to which the indignant captive did not make the proper return, but behaved with great insolence. Louis contented himself with sending him to the quarters where the prisoners were kept, saying to his attendants, "I have done right to send Alviano away. I might have put myself in a passion with him, for which I should have been very sorry. I have conquered him, I should learn to conquer myself."

When Catharine de Medicis one day overheard some of the soldiers abusing her extremely, the Cardinal of Lorraine said he would order them immediately to be hung. "By no means," exclaimed the princess, "I wish posterity to know, that a woman, a queen, and an Italian, has once in her life got the better of her anger."

The Duke of Marlborough possessed great command of temper, and never permitted it to be ruffled by little things, in which even the greatest men have been occasionally found unguarded.—As he was one day riding with Commissary Marriot, it began to rain, and he called to his servant for his cloak. The servant not bringing it immediately, he called for it again. The servant being embarrassed with the straps and buckles, did not come up to him. At last, it raining very hard, the Duke called to him again, and asked him what he was about that he did not bring his cloak. "You must stay, Sir," grumbles the fellow, "if it rains cats and dogs, until I can get at it." The Duke turned round to Marriot, and said, very coolly, "Now I would not be of that fellow's temper for the whole world."

Two gentlemen were riding together, one of whom, who was very choleric, happened to be mounted on a high mettled horse. The horse grew a little troublesome, at which the rider became very angry, and whipped and spurred him with great fury. The horse, almost as wrong-headed as his master, returned his treatment by kicking and plunging. The companion concerned for the danger, and ashamed of the folly of his friend, said to him coolly, "Be quiet, be quiet, and show yourself the wiser creature of the two."

THE SOLDIER AND HIS BIBLE.

In the January number of the Wesleyan Methodist Magazine, for the present year, we find the following interesting article, by Rev. William Ash of Whitby.

Samuel Proctor is a useful class-leader, in Gainsborough circuit. His father was a member of society; the son was trained up in the use of religious ordinances, and in early life became a subject of divine influence. He afterwards enlisted as a soldier, in the first regiment of foot guards, and was made a grenadier.—Notwithstanding this, the impressions made upon his mind continued; and the fear of the Lord, as a guardian angel, attended him through the changing scenes of life. There were a few persons in the regiment who met for pious and devotional exercises; he cast in his lot among them, and met in the classes, one of which was under the direction of Sergeant Wood. He took part in the struggle on the plains of Waterloo, in the year 1815, and always carried a small bible in one pocket, and his hymn book in the other. On the evening of June 16th, in the tremendous conflict just mentioned, his regiment was ordered to dislodge the French from a wood, of which they had taken possession, and from which they annoyed the Allied army. While thus engaged, he was thrown a distance of four or five yards by a force on his hip, for which he could not account at the time; but when he came to examine his bible, he saw, with overwhelming gratitude to the Preserver of his life, what it was that had driven him. A musket-ball had struck his hip where the bible rested in his pocket, and penetrated nearly half through that sacred book. All who saw the ball said it would undoubtedly have killed him, had it not been for the bible, which served as a shield. The bible is kept as a sacred deposit, and is laid up in his house, like the sword of Goliah in the tabernacle. I examined it with peculiar interest, and while I held it in my hand, "That Bible," said he, "has twice saved me instrumentally: from darkness and condemnation; and from the shot of the French at the battle of Waterloo. It was the first bible I had of my own, and I shall keep it as long as I live."

A FUTURE STATE.

Revelation declares that we are to live hereafter in a state differing considerably from that in which we live here. Now the constitution of nature in a manner says so too. For do we not see birds let loose from the prison of the shell and launched into a new and noble state of existence? insects extricated at length from their cumbrous and unsightly tenement, and then permitted to unfold their beauties to the sun? seeds rotting in the earth, with death, and clothed with luxuriant apparel? Is not our own solid flesh perpetually thawing and restoring itself, so that the numerical particles of which it once consisted have by degrees dropped away, leaving, meanwhile, the faculties of the soul unimpaired, and its consciousness uninterrupted for a moment? Is not the eye a telescope, and the hand a vice, and the arm a lever, and the wrist a hinge, and the leg a crutch, and the stomach a laboratory, and the whole frame but a case of beautiful instruments, which may accordingly be destroyed without the destruction of the agent that wields them? Nay, cannot that agent, when once master of its craft, work without the tools, and are not its perceptions in a *dream* as vivid as when every organ of sense is actively employed in ministering to its wants? What though the silver chord be loosed, and the golden bowl broken, and the pitcher broken at the well, and the wheel broken at the cistern; still may not the immortal artist itself have quitted the ruptured machinery, and retired to the country from which it came? What though the approach of death seem, by degrees, to enfeeble, at last to suspend the powers of the mind, will not the constitution of nature bid us to be of good cheer, seeing that the approach of *sleep* does the same? Of sleep, which, instead of paralyzing the functions of the man, is actually their

——— 'second course,
Chief nourisher in life's feast.'

And if, in some instances, death does lie heavy on the trembling spirit, in how many others does it seem

to be only cutting the chords that bound it to earth, exonerating it of a weight that sunk it—so that agreeably to a notion too universal to be altogether groundless, at the eve of its departure it should appear,

——— 'to attain
To something of prophetic strain?'

Here, then, the constitution of nature and the voice of revelation conspire to teach the same great truth, 'non *omnis* moriar.'

INSPIRATION OF ASTRONOMY.

There are several recorded instances of the powerful effect which the study of astronomy has produced upon the human mind. Dr. Rittenhouse, of Pennsylvania, after he had calculated the transit of Venus, which was to happen June 3d, 1769, was appointed, at Philadelphia, with others, to repair to the township of Norriston, and there to observe this planet until its passage over the sun's disc should verify the correctness of his calculations. This occurrence had never been witnessed but twice before by any inhabitant of our earth, and was never to be again seen by any person then living. A phenomenon so rare, and so important in its bearings upon astronomical science, was, indeed, well calculated to agitate the soul of one so alive as he was to the great truths of nature. The day arrived, and there was no cloud on the horizon. The observers, in silence and trembling anxiety, waited for the predicted moment of observation. It came—and in the instant of contact, an emotion of joy so powerful was excited in the bosom of Mr. Rittenhouse, that he fainted. Sir Isaac Newton, after he had advanced so far in his mathematical proof of one of his great astronomical doctrines, as to see that the result was to be triumphant, was so affected in view of the momentous truth, which he was about to demonstrate, that he was unable to proceed, and begged one of his companions in study, to relieve him, and carry out the calculation. The instructions, which the heavens give, are not confined to scholars; but they are

imparted to the peasant and to the sava
shepherd often feels a sudden expansio
attempting to form an idea of that po
out and adorned the heavens with
light.

DEAR

To enter the wor
without an adieu—
municate your
monument ami
understand n
carry wi

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g in a close room for hours, comes down
with his senses benumbed from the ef-
bers, and partakes of his repast more
e than in obedience to the demands
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iser on the contrary, so
ich the body requires
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asts