

choly characteristic of the present generation. We peruse newspapers, novels, gazettes, and magazines, with the greatest avidity, while we are repulsed by the very opening of a volume on such a subject as political economy, logic, or ecclesiastical history. And, while we can with assiduity for hours pore over the latest work of fiction of the most mediocre kind, we listen almost impatiently to the explanation of what is a promissory note, a bill of exchange, or a logical syllogism in an argument. When such erroneous and necessarily superficial knowledge becomes stereotyped, as it were, on our memory, we are incapable of imparting any valuable information to others; and our empirical formulas are received by those better informed with some amount of suspicion. Another distinguishing quality of the information of the present day is its want of discrimination and accuracy. We usually obtain information about things in such an unsatisfactory manner, accompanied by such inattention on our own part, that instead of well-digested and important truths we have merely vague and confused ideas, possessing, strictly speaking, no real value. And when we try to communicate our ideas to others we do so at the expense of truth itself and the risk of losing our character for intelligence.

THE GOOSE.

About a house the goose is a very well known fowl. Its eggs are very large, and are not often found for sale in the shops. Its food is grass or grain, and its drink water. The noise made by geese is called kackling, and their young are called goslings. They hatch their eggs four weeks, and then the young ones break the shells and come out, and are given a little warm milk for the first day until they are strong enough to eat fresh grass, the best food for them. The male of the goose is often cross to little boys and girls, and in spring will run at them, bite them, and flap them with his strong wings. There is no one who does not know this right well, and also knows his quills are made into pens. The wild geese are not so large as the tame ones, nor so good for food.

THE SUN.

The sun gives light and heat upon the earth, and gives warmth to all men, beasts, and plants. Every day he rises in one place—the east, and sets in the west. Plants would not grow if there was no sun; and we could not use them for food. We could not see how nice every thing in the world looks if there was not a sun. Some of the stars are as large as the sun, and many of them get their light from him. There are very, very many stars; more than we have seen or heard of; more than we could tell or count. Many of them cannot be seen at all with the eye, but need the help of a good glass. In spring when the sun begins to warm the earth, all plants send forth buds, which in time become branches, and even trees. When he has the ground well heated, plants put forth flowers of great beauty, and soon fruit comes on the trees. When he begins to take away his heat the fruit is ripe, and the apples have rosy cheeks, and soon the leaves begin to fall.

THE MOON.

Every one has seen the moon which shines at night when the sun has set and hid from view. Like our earth she is round as a ball, and like it too the moon flies round the sun; and I do not doubt but some boys and girls live, and move, and play, and jump there, with their bright faces in full glee. Black clouds hide the moon from our view, but when the vault of the sky is clear, she can be seen. It is said the moon acts on the tides in the deep sea, and causes them to be high or low, that is spring or neap tides. At times the moon is very small and looks like an arc or half bow; then she grows till quite round, when we call her full moon. When we do not see her for some days, though the sky be clear, she is called new moon; and in every four weeks and one day we have a new and full moon.

TOWN.

The town has many houses, all of which touch each other, and most of which are roofed with slates or thatched. It is mostly by trade the people live, and every one serves his neighbour. The baker gives food for money; the tailor makes clothes; the hatter sells hats and caps, and the grocer tea and sugar. The miller at his large mill, makes wheat into flour and ^{oats} into ^{meal}, from both of which nice cakes are baked in a pan or oven. The farrier puts shoes on horses, that they may walk with their soft hoofs on the hard stones, (with which the streets are paved), and carry heavy loads; and the pedlar trousers, smoking a black pipe and staring at those who pass. Alas! how he wastes his time, impairs his health, makes himself an easy prey to aches and pains, and, worse than all, falls into lazy, slothful habits, from which in a short time all his strength, all the advice of his neighbours, who may chance to advise him cannot cause him to escape. Poor fellow! what a country we should have if many people were as idle and lazy as he will become!

FOOD.

The food or victuals which we eat, like the clothes we wear, goes through many hands before it reaches us. More people live on rice than on any other substance; for all the Chinese, and many of the people of India eat rice only. The farmer in spring time scatters the seed upon the ground, which has been first dug or ploughed, and well stored with manures; then a heavy harrow is passed over the soil, and a man with a shovel makes furrows; the earth thrown up covers the seed. Some time after, any weeds that may have grown are plucked out by the root; and the plants, now in summer, look fine and green, and if too close together, some are pulled out to give plenty of room and fresh air to the others. Ere

harvest arrives, the ^{ears} have become quite full, and begin to ripen fast. The men with sickles cut down the grain, and bind it in sheaves. When quite dry, it is brought to the haggard, and then threshed with two jointed sticks called a flail, ^{mayal} or by means of a threshing-machine. Next it is sent to a mill dried in a kiln, and groun into meal or flour, from which bread is made. When the food is properly chewed; it passes into the stomach, where it is mixed with chyle, and is dissolved and digested. People must not eat much before going to bed; and, indeed, young people should eat often, but never much at a time.

THE PARROT.

The parrot is a native of tropical regions, being principally found in forests, its food consisting of fruits, seeds, leaves, and buds. We admire its beautiful plumage; but more particularly its remarkable powers of imitating the human speech. When domesticated it is capable of articulating not only single words but brief expressions or short sentences. They are very intelligent, and exhibit considerable restlessness, with a capricious irritable temper and fondness for petty tricks. The upper mandible of the bill exhibits considerable curvature, and is longer than the lower. The smaller species are called paroquets, of which immense flocks are seen in the cocoa-nut groves of Ceylon, this bird being particularly gregarious.

FORMER TIMES

In former times life and property were very insecure; robbers and banditti frequented the high ways, and often in the silence of the night mercilessly plundered unfortunate and unsuspecting travellers. Their audacious depredations frequently spread consternation through an entire country

brought to indigence comparatively affluent families, whose defenceless houses were rifled of all they possessed; and made a climax of their crimes by adding homicide and murder to burglary. Desperate individuals, whose depraved characters, were rendered equally ruthless and remorseless by lengthened impunity, lay in ambuscade in thickets for the purpose of entrapping travellers, who from necessity had to make perilous nocturnal journeys, and of despoiling them of all their valuables. But now all this is changed. The admirable system of police, combined with the firm and impartial administration of justice, has tended to increase the security of the subject, to spread a confidence in the law, to deter the evildoer from perpetrating deeds of violence, and to render the populace of the country free from solicitude and anxiety in their security from plunder and wrong.

THE BALLOON.

The cause of balloons rising into the higher regions of the atmosphere is precisely the same as that which causes a cork to rise to the surface of a water-but, viz.—The balloon or cork being lighter than the medium in which it is immersed. Recently balloons have attained an extraordinary interest, in consequence of their adoption as a means of conveying letters and despatches from the interior of Paris when surrounded by the immense German battalions, thereby rendering incalculable service to the besieged. The principle upon which they are constructed consists in filling them with hydrogen gas, (one of the lightest substances known) and admitting, gradually, atmospheric air when the aeronauts desire to descend. The seat of the aeronaut is called the car, and an umbrella-shaped construction, called a parachute, prevents the too precipitous descent of the aerial voyagers when it is no longer advisable to soar aloft. Coal gas is now used instead of hydrogen, and the covering of the balloon is of the most expensive silk, the whole being shaped like a pear.

SUCCESS IN LIFE.

Success in life usually turns upon three things; industry, energy, and enterprise. By industry is meant that unflagging devotion to useful labour which characterises some nations, in contradistinction to that half-drowsy, slothful, indolent habit of working so prevalent amongst less energetic races. The industrious carpenter having completed his daily toil often makes a few plain chairs or other common articles of furniture, which a member of his family bring to market such things being always saleable, and calculated to increase the week's wages materially. A meritorious hard-working apprentice will, eventually, become a master and employer of labour, not only enriching himself, but also tending to enrich the country he inhabits, by individually adding to its prosperity, and by becoming a conspicuous example to others of the result attainable by industry.

GAS.

Of all the inventions or more strictly speaking discoveries of modern chemical science, that of coal-gas or carburetted hydrogen is perhaps the most useful. We are now enabled to conduct the constituents of the most brilliant light through all our streets and houses with the greatest facility; and our midnight streets, once the dark haunts of public crime are now rendered plain as noonday to the eye of justice, personified in the eagle glances of our Metropolitan Police. The process by which gas is extracted from coal is one of considerable simplicity; and it may be taken as almost identical with the fundamental chemical operation of distillation. The variety of coal generally selected for use in the production of gas, is one which affords a more than usual per centage of carbon. The distillation of the coal is carried on in covered iron retorts which are subjected to a strong furnace heat, this

heat volatilising the gas-producing principles in the coal which accordingly pass off in the form of vapour. This vapour is now passed successively through cold iron pipes, and chambers filled with lime; the object of these operations being to condense and purify the vapour which at first holds in suspension many impurities. After undergoing these processes the vapour which is now entitled to the chemical cognomen of carburetted hydrogen gas, is stored in chambers rendered air-tight by means of water-fittings, from which reservoirs it is distributed through subterranean pipes to any desirable locality.

A PIECE OF SPONGE.

There is a regular Mediterranean fishing season; and when the rocks of Syria and the Grecian Isles are dredged, and the collected sponge dried, it is shipped off for the European markets. We know, principally by sight, two kinds of sponge—the fine, close, elastic, and the dark open, called “honeycomb.” The uninitiated think these are the produce of different countries; but the two qualities are found growing together, upon the same rock, and are dredged with the same net. The fishing lasts about four months, and is carried on in a rough, primitive fashion, but with tolerably satisfactory results. The thick, coarse, honeycomb sponge is far inferior commercially to its close-grained, firm brother, the Turkey sponge. For want of research, the supply of sponge is almost confined to the Mederranean and the West Indies. Florida and the neighbourhood of the Bahamas form the sponge hunter’s ground; and probably the turtle may make his resting-place amongst the jelly-like grove of the sponge. We get very little of the West Indian sponge; for it is principally disposed of in America, excepting such portions as are rough and inferior; and that is bought up by the Jewish merchants, who have the monopoly of this branch of commerce in England.

THE INVENTION OF TYPES.

The honour of the invention of movable types has been disputed by two cities, Haarlem and Mentz. The claims of Haarlem rest chiefly upon a statement of Hadrien Junius, who gave it upon the testimony of Cornelius, alleged to be a servant of Lawrence Coster, for whom the invention is claimed. The claims of Mentz, which appear to be more conclusive, are in favour of Peter Schæffer, the assistant and son-in-law of John Faust, better known as Dr. Faustus. The first edition of the “Speculum humanæ salvationis” was printed by Coster at Haarlem, about the year 1440, and is one of the earliest productions of the press of which the printer is known. The celebrated Bible, commonly known as the Mentz Bible, without date, is the first important specimen of printing with moveable metal types. This was executed by Gutenberg and Fust, or Faust, as it is sometimes spelt, between the years 1450 and 1455. The secret of the method then becoming known, presses were speedily established in all parts of Europe, so that before the year 1500 there were printing-offices in upwards of 220 different places in Austria, Bavaria, Bohemia, Calabria, the Cremonese, Denmark, England, Flanders, France, Franconia, Frioul, Geneva, Genoa, Germany, Holland, Hungary, Italy, Lombardy, Mecklenburg, Moravia, Naples, the Palatinate, Piedmont, Poland, Portugal, Rome, Sardinia, Upper and Lower Saxony, Sicily, Silesia, Spain, Suabia, Switzerland, Thessalonica Turkey, Tuscany, the Tyrol, Venice, Verona, Westphalia, Wurtemberg, &c.

This vast and rapid extension of the art, combined with the skill which the earlier printers displayed in it, seems to be totally incompatible with the date assigned to the invention, and it is more than probable, that the art having been long practised in private under continued attempts at secrecy, it at length broke into publicity after it had already attained a considerable degree of perfection.

ON THE PLEASURE OF ACQUIRING

KNOWLEDGE.

In every period of life, the acquisition of knowledge is one of the most pleasing employments of the human mind. But in youth, there are circumstances which make it productive of higher enjoyment. It is then that everything has the charm of novelty; that curiosity and fancy are awake; and that the heart swells with the anticipations of future eminence and utility. Even in those lower branches of instruction, which we call mere accomplishments, there is something always pleasing to the young in their acquisition. They seem to become every well-educated person; they adorn, if they do not dignify, humanity; and what is far more, while they give an elegant employment to the hours of leisure and relaxation, they afford a means of contributing to the purity and innocence of domestic life. But in the acquisition of knowledge of the higher kind,—in the hours when the young gradually begin the study of the laws of nature and of the faculties of the human mind, or of the magnificent revelations of the Gospel,—there is a pleasure of a sublimer nature. The cloud, which in their infant years seemed to cover nature from their view, begins gradually to resolve. The world, in which they are placed, opens with all its wonders upon their eye; their powers of attention and observation seem to expand with the scene before them; and, while they see, for the first time, the immensity of the universe of God, and mark the majestic simplicity of those laws by which its operations are conducted, they feel

as if they were awakened to a higher species of being, and admitted into nearer intercourse with the Author of Nature.

It is this period, accordingly, more than all others, that determines our hopes or fears of the future fate of the young. To feel no joy in such pursuits; to listen carelessly to the voice which brings such magnificent instruction; to see the veil raised which conceals the counsels of the Deity, and to show no emotion at the discovery,—are symptoms of a weak and torpid spirit,—of a mind unworthy of the advantages it possesses, and fitted only for the humility of sensual and ignoble pleasure. Of those, on the contrary, who distinguish themselves by the love of knowledge, who follow with ardor the career that is open to them, we are apt to form the most honorable presages. It is the character which is natural to youth, and which, therefore, promises well of their maturity. We foresee for them, at least, a life of pure and virtuous enjoyment, and we are willing to anticipate no common share of future usefulness and splendor.

In the second place, the pursuits of knowledge lead not only to happiness but to honor. "Length of days is in her right hand, and in her left are riches and honor." It is honorable to excel even in the most trifling species of knowledge, in those which can amuse only the passing hour. It is more honorable to excel in those different branches of science which are connected with the liberal professions of life, and which tend so much to the dignity and well-being of humanity.

It is the means of raising the most obscure to esteem and attention; it opens to the just ambition of youth some of the most distinguished and respected situations in society; and it places them there, with the consoling reflection, that it is to their own industry and labor, in the providence of God, that they are alone indebted for them. But, to excel in the higher attainments of knowledge, to be distinguished in those

greater pursuits which have commanded the attention and exhausted the abilities of the wise in every former age,— is, perhaps, of all the distinctions of human understanding, the most honorable and grateful.

When we look back upon the great men who have gone before us in every path of glory, we feel our eye turn from the career of war and ambition, and involuntarily rest upon those who have displayed the great truths of religion, who have investigated the laws of social welfare, or extended the sphere of human knowledge. These are honors, we feel, which have been gained without a crime, and which can be enjoyed without remorse. They are honors also which can never die,—which can shed lustre even upon the humblest head,—and to which the young of every succeeding age will look up, as their brightest incentives to the pursuit of virtuous fame.

El dia

no *Di' up*
SUMMER.

I THANK heaven every summer's day of my life that my lot was humbly cast within the hearing of romping brooks, and beneath the shadow of oaks. And from all the tramp and bustle of the world, into which fortune has led me in latter years of my life, I delight to steal away for days and for weeks together, and bathe my spirit in the freedom of the old woods, and to grow young again lying upon the brook-side, and counting the white clouds that sail along the sky, softly and tranquilly—even as holy memories go stealing over the vault of life.

Two days since I was sweltering in the heat of the city, jostled by the thousand eager workers, and panting under the shadow of the walls. But I have stolen away; and, for two hours of healthful regrowth into the darling past, I have

been lying, this blessed summer's morning, upon the grassy bank of a stream that babbled me to sleep in boyhood. Dear old stream unchanging, unfaltering,—with no harsher notes now than then,—never growing old, smiling in your silver rustle, and calming yourself in the broad, placid pools; I love you as I love a friend.

But now that the sun has grown scalding hot, and the waves of heat have come rocking under the shadow of the meadow oaks, I have sought shelter in a chamber of the old farm-house. The window-blinds are closed; but some of them are sadly shattered, and I have intertwined in them a few branches of the late blossoming white azalia, so that every puff of the summer air comes to me cooled with fragrance. A dimple or two of the sunlight still steals through my flowery screen, and dances, as the breeze moves the branches, upon the oaken floor of the farm-house.

Through one little gap, indeed, I can see the broad stretch of meadow, and the workmen in the field bending and swaying to their scythes. I can see, too, the glistening of the steel, as they wipe their blades; and can just catch, floating on the air, the measured, tinkling thwack of the rifle stroke.

Here and there a lark, scared from his feeding-place in the grass, soars up, bubbling forth his melody in globules of silvery sound, and settles upon some tall tree, and waves his wings, and sinks to the swaying twigs. I hear, too, quail piping from the meadow fence, and another trilling his answering whistle from the hills. Nearer by, a tyrant king-bird is poised on the topmost branch of a veteran pear-tree; and now and then dashes down; assassin-like, upon some home-bound, honey-laden bee, and then, with a smack of his bill, resumes his predatory watch.

As I sit thus, watching through the interstices of my leafy screen the various images of country life, I hear distant mutterings from beyond the hills.

The sun has thrown its shadow upon the pewter dial, two hours beyond the meridian line. Great cream-colored heads

of thunder-clouds are lifting above the sharp, clear line of the western horizon; the light breeze dies away, and the air becomes stifling, even under the shadow of my withered boughs in the chamber window. The whitecapped clouds roll up nearer and nearer to the sun, and the creamy masses below grow dark in their seams. The mutterings, that came faintly before, now spread into wide volumes of rolling sound, that echo again and again from the eastward heights.

I hear in the deep intervals the men shouting to their teams in the meadows; and great companies of startled swallows are dashing in all directions around the gray roofs of the barn.

The clouds have now well-nigh reached the sun, which seems to shine the fiercer for his coming eclipse. The whole west, as I look from the sources of the brook to its lazy drifts under the swamps that lie to the south, is hung with a curtain of darkness; and, like swift-working golden ropes that lift it towards the zenith, long chains of lightning flash through it, and the growling thunder seems like the rumble of the pulleys.

I thrust away my azalia boughs, and fling back the shattered blinds, as the sun and the clouds meet, and my room darkens with the coming shadows. For an instant the edges of the thick, creamy masses of cloud are gilded by the shrouded sun, and show gorgeous scallops of gold that toss upon the hem of the storm. But the blazonry fades as the clouds mount, and the brightening lines of the lightning dart up from the lower skirts, and heave the billowy masses into the middle heaven.

The workmen are urging their oxen fast across the meadow; and the loiterers come straggling after, with rakes upon their shoulders.

The air freshens, and blows now from the face of the coming clouds. I see the great elms in the plain, swaying their tops, even before the storm-breeze has reached me; and a bit of ripened grain, upon a swell of the meadow waves and tosses like a billowy sea.

Presently I hear the rush of the wind, and the cherry and pear trees rustle through all their leaves, and my paper is whisked away by the intruding blast.

There is a quiet of a moment, in which the wind, even, seems weary and faint; and nothing finds utterance save one hoarse tree-toad, doling out his lugubrious notes.

Now comes a blinding flash from the clouds; and a quick, sharp clang clatters through the heavens, and bellows loud and long among the hills. Then—like great grief spending its piteous agony in tears—come the big drops of rain, pattering on the lawn, and on the leaves, and most musically of all upon the roof above me; not now with the light fall of the spring shower, but with strong stepplings, like the first, proud tread of youth.