

wrong in this matter they yield to the temptation, so that the only safe rule is to keep all fruit out of their way. By adopting this rule, they will be able to get none except what their parents know to be good. Servants frequently destroy, unwittingly, the lives of children entrusted to their care, by buying for them green fruit when better cannot be had, in order to keep them quiet. Our parting advice is, not to be afraid of ripe fruit, either for yourself or family. But then, you must be sure that the fruit is ripe; not overripe, much the less green.—*Phil. Ledger.*

WALKING-STICKS.—Walking-sticks were first introduced into fashion by the effeminate Henry II of France, but did not become a requisite appendage to the gentlemen of fashion in England till the year 1655, at which time they were formed with an indented head, in order to afford a more easy pressure of the hand which they supported. Ingenuity, which, in matters of fashion, is forever on the alert, now crowned it with the addition of the round and hollow top, which sometimes contained nutmeg or ginger, to warm the stomach of the valetudinarian, and sometimes sugar-candy for the asthmatic; but snuff soon after coming into universal use among the *bon ton* of society, the cavity was exclusively appropriated to its reception, and the meeting of two friends was invariably marked, after the first salutation, by the unscrewing of the tops of their walking-sticks.

Science.

Historical Survey of the Industrial Sciences.

(Concluded.)

MANUFACTURES.

Raw materials are of little use in themselves. Food is to be prepared; clothing is to be made. The ore is to be roasted, smelted, and pass through various processes before the useful metal can take the form of a machine, or the precious, the shape of currency. Flax has to be rotted, bleached, dried, beetled, scutched, heckled, spun and woven; before it is fit for a garment. But these and all such works belong to manufactures.

Manufacture is the application of knowledge and skill in changing existing materials into desirable forms and fabrics, to meet the wants and pleasures of man.

It is a vast branch of enterprise. If we except agriculture, hunting, fishing and mining, it embraces all other departments of industrial science.

Manufacture stretches back into a distant past. Records of its doings have survived the flood. The wheel, and loom, and needle were engaged in producing beautiful fabrics as far back as 2000 years before Christ.—Travelling merchants crossed Asia with precious wares. Babylon, and Persia, and Tyre, and Egypt had their purple, and scarlet, and fine linen. Works of cunning workmen adorned their palaces.

The progress of this branch of industry has been magnificent. It has kept pace with the increase of intelligence and the multiplication of inventions. The useful and tasteful now meet in the same work, and beauty adorns the tools of the machinist. Stores are palaces. Merchants are princes.

The knowledge of the industrial sciences must be diffused abroad in society, till every man feels the importance of these departments of enterprise, and is ready to protect and honor all who are engaged in them. The people must become conversant with agriculture, hunting and fishing, mining, manufactures, and highways by land and sea. These are the industrial sciences, the strength and glory of the nation.

THE FINE ARTS.

This department includes Painting, Sculpture, Architecture, Poetry, Music, Rhetoric, and Needle-work. The Fine Arts have been well defined to be—the offspring of Genius, their model Nature, and their master Taste. The great object of the Fine Arts is to impart pleasure, the object of the Useful Arts being that of utility.

The study of the Fine Arts introduces us to a new universe. The sculptor, painter, and poet are creators. The sculptor takes a rock out of the quarry, and makes it the embodiment of his own thoughts. He covers it with thought, and throws around it a fascination, from which no spectator can deliver himself. It is so with the Painter. I have stood for hours transfixed, gazing on a single picture. The Poet has powers of a similar kind. He creates worlds, and carries the reader through them, filling him with joy, or grief, or amazement at every step. He who is ignorant of the Fine Arts has never dreamed of the mystery and greatness of man's nature.

The study of them refines, elevates, and adds immensely to the enjoyment of man.

It is greatly to be regretted that the study of the Fine Arts has scarcely received any attention in our common and private schools. We hope the time is not far distant, when school-houses will be constructed with a view to the advancement of this branch of human knowledge. The school-houses should be built and lighted so as to afford positions on the walls, for copies of the best paintings, of ancient and modern times. There should be alcoves, too, filled with plaster copies of the finest pieces of sculpture. Why should not the various kinds of architecture be continually before the eyes of the pupil? Models might be placed in conspicuous parts of the building. When the study of the Fine Arts is elevated to its proper place in our system of education, our school-houses will become attractive temples of Art, and Education prove itself to be of Divine origin. The angel part of our nature, will have a mastery over the animal, which we have never yet seen.

No person can lay claim to an accomplished education, who is unacquainted with the immortal productions of the chisel and easel.—Every child should know enough about architecture, to be able to give reasons for preferring one building to another, and to select intelligently the best order for his own house. How many beautiful flower-gardens might be seen in our villages, to refine and give pleasure to our citizens; how many houses which now look like deserted walls, made pleasurable abodes, if the Fine Arts had not been entirely overlooked.

Things Wonderful and True.

With a very near approach to truth, the human family inhabiting the earth is estimated at 900,000,000, the annual loss by death 18,000,000. Now, the weight of animal matter of this immense body cast into the grave is no less than 634,000 tons, and by its decomposition produces 9,000,000,000,000 cubic feet of gaseous matter. The vegetable productions of the earth clear away from the atmosphere the gases thus generated, decomposing and assimilating them for their own increase. This cycle of change has been going on ever since man became an occupier of the earth. He feeds on the lower animals and the seeds of plants, which in due time become a part of himself. The lower animals feed upon the herbs and grasses, which in their turn, become the animal; then, by its death again passes into the atmosphere, and is ready once more to be assimilated by plants, the earth or bony substance alone remaining sufficiently deep in the soil to be out of the absorbent reach of the roots of plants and trees. It is not at all difficult to prove that all the elements of which the living bodies of the present generation are composed, have passed through millions of mutations, and formed part of all kinds of animals and vegetable bodies, and consequently it may be said that fractions of the elements of our ancestors form portions of ourselves.—*Working Man's Friend.*

Properties of Charcoal.

Among the many properties of charcoal may be mentioned its power of destroying smell, taste and color; and, as a proof of its possessing the first quality, if it be rubbed over putrid meat, the flavor will be destroyed. If a piece of charcoal be thrown into putrid water, the putrid taste or smell will be destroyed, and the water rendered completely fresh. Sailors are aware of this; for when water is bad at sea, they are in the habit of throwing pieces of burnt biscuits into it to purify it. Color is materially influenced by charcoal, and in numbers of instances in a very irregular way. If you take a dirty black syrup and filter it through burnt charcoal, the color will be removed. The charcoal of animal matter appears to be the best for this purpose. You may learn the influence of charcoal in destroying colors by filtering a bottle of port wine through it; in the filtration it will lose a great portion of its color and become tawny; repeat the process two or three times and you have destroyed it altogether.

Important Invention.

A new and very valuable process of Tanning has lately been discovered by Captain Thos. K. Schuyler, of Massachusetts, which bids fair, completely to revolutionize the Trade. By this new process, nothing of the nature of lime is used, neither acids or hot liquors; consequently the stock is not diminished in

weight, nor the fabric thereof injured, as it necessarily is, by the old "rotting process," and the leather when finished, is incomparably superior in every respect, and far stronger and finer. The greatest advantage however, of this discovery, lies in the rapidity of the process, and the consequent quick return secured to the manufacturer, by enabling him to get his goods into the market in one half the time hitherto required. M. A. S. Hayward, Agent for the British Provinces, now resident in Kingston, informs us that the process is easily acquired; the working and the Tannage being the same as in the old method, that it can be introduced with facility, and a little expense into any ordinary tannery. It has already been adopted by all the principal manufacturers of the New England States, with the most signal success, and we understand that our enterprising fellow citizen, Wm. Ford, Jr., Esq., always amongst the first in progressive movements, has followed suit, and introduced it into his Tanneries in this neighborhood. We have seen some of the stock manufactured by this process, and it only requires to be handled, to convince even the most inexperienced judge of the article, of its great superiority over that manufactured by the old process. There can be no doubt that this valuable invention will soon be universally adopted, while those first in the field, will in the meantime, reap the reward of their enterprise.—*Canada, Kingston Com. Adv.*

The Farm.

THE OLD FARMER'S ELEGY.

BY J. D. CANNING.

On a green grassy knoll, by the banks of the brook,
That so long and so often has watered his flock,
The old farmer rests in his long and last sleep,
While the waters a low, lulling lullaby keep.

He has ploughed his last furrow, he has reaped
his last grain,

No morn shall awake him to labor again.

Yon tree that with fragrance is filling the air,
So rich with its blossoms, so thrifty and fair,
By his own hand was planted, and well did he say,
It would live when its planter had mouldered away.

He has ploughed his last furrow, &c.

There's the well that he dug, with its water so cold,

With its wet dripping bucket, so mossy and old,
No more from its depths by the patriarch drawn,
For the pitcher is broken,—the old man is gone.

He has ploughed his last furrow, &c.

'Twas a gloom-giving day when the old farmer died,

The stout-hearted mourned—th' affectionate cried;
And the prayers of the just for his rest did ascend,
For they all lost a brother, a man, and a friend.

He has ploughed his last furrow, &c.

For upright and honest the old farmer was,
His God he revered—he respected the laws;

Though fameless he lived, he has gone where his worth

Will outshine like pure gold all the stores of this earth.

He has ploughed his last furrow, he has reaped
his last grain,

No morn shall awake him to labor again.

Culture and value of the Parsnip.

As one who has lived twenty years upon a farm, searching all the while for reliable information, both from his own experience and from that of others, ought to be in possession of some "fixed facts" and settled opinions; and as duty, propriety, and fraternity require that we should allow others the opportunity of benefitting by our experience, I feel moved to give you a few items of information which I think very satisfactorily settled by evidence within my own observation.

Disliking long prefaces, and trusting that all your correspondents, will dispense with them, I commence the brief summary of my experience and observations of twenty years, by a statement in regard to the value of parsnips.

PARSNIPS FOR HOGS.—One of the things which I consider well settled, and a reliable and useful item of knowledge, is this: that parsnips, either raw or cooked, but preferably cooked, with the addition of apples, potatoes, &c., occasionally, were it only to prevent the appetite from being cloyed by "eternal same-

ness," constitute the best kind of food whereon to fatten a hog. They are also the best kind of roots for milch cows. Both hogs and cows eat them with avidity, and to the milk and butter they communicate a good, a delicious flavor. I have seen it stated some years ago, that beef made from parsnips brings the highest price in the London market. I think, though I may be deceived by imagination, that pork made from feed chiefly composed of parsnips, is sweeter than when made from anything else.

This is not the only recommendation which may be justly bestowed on the parsnip. Among the other good qualities is this—that it requires no care or housing in the fall, as all other roots do. In all the middle, northern and western states, potatoes, carrots, and turnips, must be harvested and housed, or buried; and even when all this is done, and with good care and judgment too, a portion will frequently be ruined and lost by frosting, over heating or decay from other causes. Perhaps, on the other hand requiring no care in the fall, as they may be left without injury in the ground all winter. They may also be planted early in the spring, the frost does not injure them, even at the earliest stage of their growth, so that this root-crop interferes the least of any with employments which crowd upon the farmer in the spring and fall. It continues to grow through the whole season, until the ground freezes in winter; it requires no expenditure to gather or store it; it may be taken up on several occasions during the winter, and the roots that stay in the ground all winter, are not injured, and probably improved, by the frost. Parsnips seem to be eaten with more relish than either turnips or potatoes, and yield in the raw state, a greater amount of nutriment.

Another advantage in cultivating parsnips is, that on a suitable soil—sand or loam, rich or well manured, and deep plowed—a large growth may be secured. At the rate of 1,200 bushels have been gathered from one acre of ground.

Parsnips may be planted either in spring, or in the latter part of summer, say in August or September. The ground should be well manured, mellow, and deeply plowed, and the seed sown in drills, so as to have plants to thin out, while preserving them at about eight inches apart. This will probably require at about the rate of two pounds seed to the acre. The drills should be two feet apart and the space between well cultivated and kept clear of weeds. If sown in spring, the earlier the better. A large growth may be secured, however, by sowing the seed in September. There will be some considerable growth before the ground freezes up, and the growth will commence again as soon as the frost leaves the ground in the spring, which will continue throughout the whole season, of about twelve months; whereas, when sown in the spring they can grow only eight or nine months.

All the advantages of this root crop have not yet been named. Among them are these—that they seem uninjured by either a wet or dry season, and that no insect nor bug attacks them at any stage of their growth.—*Working Farmer.*

Seeding Lands to Grass in August.

Those who were not able to lay down their land to grass in the spring, or who did not obtain what our farmers call a "good catch" of seed on those fields where they did sow grass seed in the spring, are reminded that it can be done successfully during this month.

We thin the Michigan plow will be found a useful implement for this purpose. Although it may probably require more team for ploughing than the common plow, there will be less harrowing required.

It has been found, by those who have been most conversant with sowing grass seed in this latitude during the month of August, that it is better to postpone sowing clover until spring, and then to sow it on some of the last snows that come. It is apt to be winter killed if sowed at this time, but herds grass and red top, and such fine grasses, do very well sowed at this time of year, and generally produce good crops the succeeding summer.

An increase of farm products lessens the market price, and the consumer is more benefited than the producer. Therefore the encouragement of agriculture is the interest of the whole people. It is the first duty of the government to encourage agricultural improvement.