

respects, and often ignorant, though boasting of its learning? How eagerly it would have seized this fact to prove a want of design in the creation, fatal to the claim set up for the infinite wisdom of the Builder. It is another instance illustrating that when God's wisdom or his truth seems to be endangered, they who reverence him may calmly wait, being assured that time will vindicate his character.

INTERESTING INCIDENT.—A colored man walked out in London, and observed a stone-cutter at work upon a block of granite which was to be placed in the walls of an elegant building near at hand. He spoke to the stone-cutter of another building more elegant and durable than the one which he was erecting. The stone-cutter asked where? The colored man replied in heaven. God had prepared mansions for those who love him, which far surpassed in elegance and beauty any ever erected by man. The stone-cutter asked him where he had learned these things? He replied in Western Africa, from a missionary sent out by the London Missionary Society, and that he had come to England to obtain an education, and return to preach the Gospel to his countrymen. The stone-cutter replied, I have been praying for the conversion of the heathen the last twenty years, and have contributed a penny a week for this object. I bless God that I am permitted to see and converse with a converted heathen. God has answered my prayers.

A SOLEMN THOUGHT.—It has been observed, with much significance, that every morning we enter upon a new day, carrying still an unknown future in its bosom. How pregnant and stirring the reflection. Thoughts may be born to-day, which may never die! Feelings may be awakened to-day, which may never be extinguished. Hope may be excited to-day, which may never expire. Acts may be performed to-day, the consequence of which may not be realized through eternity.

Scientific.

A Word about Air.

Few people would voluntarily drink dirty water, if they could get a clean article. Contrivances for filtering water and getting rid of its ordinary impurities, are in favour with most people, but how few give themselves any concern about the air they breathe. It is well established that a healthy man must have about a pint of air at a breath; that he breathes above a thousand times in an hour; and that, as a matter beyond dispute, he requires about fifty-seven hogsheds of air in twenty-four hours.

If it were water instead of air he was taking into his system, he would examine pretty narrowly the impurities it contained; but how does the ordinary man proceed in this case? Let us take the case of a person living in a room heated by a close stove. The chimney is stopped up to begin with. The room is shut up. The windows are made pretty tight to keep out the cold; and as there is very little air carried out of the room by the stove-pipe, (the stove is perhaps on the air-tight principle—that is, it requires the minimum amount of air,) there is little fresh air coming in through the crevices to supply any vacuum. Suppose the room holds 300 hogsheds of air. If a single person requires fifty-seven hogsheds of fresh air per day, it would last four persons but about twenty-four hours, and the stove would require half as much more. But, as a man renders noxious as much again air as he expires from his lungs, it actually happens that in four or five hours all the air in this room has been breathed over, that it is all thoroughly poisoned, and unfit for healthful respiration. And this is the air which four-fifths of our countrymen and countrywomen breathe in their homes,—not from necessity, but from choice!

Value of Old Rope.

Among the numerous worn out and often considered worthless materials, which the ingenuity of man has discovered means of re-manufacturing, and rendering of equal value with the original substance, are old tarred ropes, which have long been in use in coal pits. Our readers will be surprised when we inform them that out of the dirty and apparently unbleachable substance is produced a tissue paper of the most beautiful fabric, evenness of surface, and delicacy of colour, a ream of which, with wrappers and strings, weighs two and a half pounds. It is principally used

in the potteries for transferring the various patterns to the earthenware, and is found superior to any other substance yet known for that purpose. It is so tenacious that a sheet of it twisted by the hand in the form of a rope, will support upward of one cwt. Truly we live in an age of invention!

Curious Facts.

If the feathery gills of a small perch could be unfolded and spread out, they would nearly cover a square yard. This will not appear so extraordinary when it is recollected that the nerve in a dog's nose is spread in so thin a web, that it is computed to be equal to four square feet.

To Prevent Sneezing.

A correspondent of the London *Medical Gazette* states, that to close the nostril with the thumb and finger during expiration, leaving them free during inspiration, will relieve a fit of coughing in a short time. In addition to the above, we state from personal knowledge, that to press the finger on the upper lip just below the nose, will make the severest premonitory symptoms of a sneeze pass off harmless. We have found the remedy useful many a time in creeping on game in the woods.

Remedy for Sea-Sickness.

Dr. Edward Martin, a well-known physician of this city, has after many years of experiment, succeeded in discovering a remedy for that dreadful malady, sea-sickness. It is in the shape of a palatable draught, called by him the "Hygienic Elixir against Sea-Sickness." The doctor has successfully experimented with it at sea. He states that it checks the nausea at once, restores the stomach to a healthy state, awakens appetite, and calms the entire system. The elixir is equally effectual for all temperaments and constitutions, and is not decomposable by climate or age.

The Pig Used Up.

A travelling correspondent of Fraser's Magazine writes from Cincinnati, and thus describes the economy by which the hog is used up:

What Crocodiles were in Egypt, what cows are in Bengal, or storks in Holland, pigs are here, with this trifling difference—their sacredness of character lasts but as long as their mortal coil; and this abbreviated without ceremony, and from the most worldly motives. In life the pig is free—is humored; he ranges the streets; he reposes in thoroughfares; he walks between your horse's legs or your own; he is everywhere respected; but let the thread of his existence be severed, and, shade of Mahomet, what a change! They think in Cincinnati of nothing but making the most of him. How many of his kind perish annually to cement the vast prosperity of this city, cannot be told. About fifteen years ago, when it contained only one fifth of its existing population, a few bold speculators began the trade. Selecting the hams and the sides of the animal, they made pickled pork; of the rest they took small account: soon, however, the idea occurred to one more acute than his fellows, that the heads and the feet, nay even the spine and the vertebrae, might be turned to account. Trotters and cheeks had their partisans, and these parts looked up in the market. About this time the makers of sausages caught the inspiration; they found these luxuries saleable; and so many pigs were to be slaughtered that the butchers were willing to do it for nothing, that is to say, for the perquisite of the entrails and offal alone. The next step was due to the genius of France. A Frenchman established a brush manufactory, and created a market for the bristles; but his ingenuity was outdone by one of his countrymen, who soon after arrived. This man was determined, it seems, to share the spoil; and, thinking nothing else left, collected the fine hair or wool, washed, dried, and curled it, and stuffed mattresses with it; but he was mistaken in thinking nothing else left, as yet little was done with the lard; they invented machines and squeezed oil out of it—the refuse they threw away. Mistaken men again! this refuse was the substance of stearine candles, and made a fortune for the discoverer of the secret. Lastly came one who could press chemistry into the service of mammon: he saw the blood of countless swine flowing through the gutters of the city; it was all that was left of them; but it went to his heart to see it thrown away; he pondered long, and collecting the stream into reservoirs, made prussiate of potash from it by the ton. The pig was used up.

The Farm.

TWELFTH AGRICULTURAL MEETING,

AT THE BOSTON STATE HOUSE, APRIL 1, 1851.

Subject, "The Acquisition and Application of Fertilizing Matters to the Soil."

Hon. B. V. French, of Braintree, presided, and addressed the meeting.

In the first place, he thought it was of great importance to make compost manures. If the farmer has peat a meadow of the right kind, he knew of nothing better to convey to the barn-yard; and it was better to dig it and let it remain on the ground during the winter, in order to have it as dry as possible when placed in the yard. It is an excellent absorbent, but should be well mixed with the manure, or else a crop of sorrel will follow its use. A great deal depends on the judgment of the farmer, in determining whether the manufacture of compost is profitable to him. All the urine that passes from a barn every careful farmer will save and convey into beds of muck, sawdust, charcoal, or other absorbent.—Would recommend, to some extent, ground bone, in the proportion of thirty bushels to the acre. Guano also has produced excellent effects in some places, and he had used it with benefit in some cases. In these cases he had applied it to the growing crop in a warm, or what would be called a "muggy day." It is very desirable to have compost in a state of slight fermentation before it is applied, but care should be used not to allow the fermentation to go beyond a particular degree, or a great proportion of its virtues would be lost—he thought 75 per cent.

In regard to the application of plaster there is great difference of opinion, but Mr. French thought when cattle needed salting it was advantageous, but not otherwise. Lime he had tried to some extent, but thought it had rather injured his land; yet it might be applied under some circumstances with good effect. He was of opinion that every farmer loses \$10 every year on account of a want of knowledge in making and applying fertilizing manures. He estimated the loss to the farmers of the Commonwealth at \$300,000 every year, from the lack of this knowledge. The Commonwealth loses a great amount by the misapplication of lime, plaster, &c., as manure.

Mr. Sheldon, of Wilmington, followed, and referred to the subject before the last meeting, and the statement of Mr. Cook that for the last forty years farmers had made as much progress as any other profession, which statement did not seem to meet with general assent. He contended that it was substantially correct, and cited improvements in ploughing, haying, &c., in which the farmer had nearly doubled his efficiency within that time. He declared it impossible for the farmer to state the result of his improvements in dollars and cents, as the mechanic can do. The farmer cannot tell what he can make a pound of butter for. He may keep an account of what his labour, manure, &c., costs him, in the production of an article, but even then he could not say how much it cost him, for he cannot tell whether his land is in better or worse condition after the crop is taken from it, which is a very important consideration with him.

Mr. Sprague, of Duxbury, considered the compounding of manures one of the most important subjects which could engage the farmer's attention. He thought the judgment of the farmer was the best to guide him in this matter. He used all the sea manure he could get, and on low planting ground he ploughed it in, and on low grass land he spread it. For other lands he composted it.

Mr. Brooks, of Princeton, thought that farmers, in many instances, put too much manure upon their land; too great an amount of manure is as bad as too little. Compost he considered best on light sandy soils. Did not think it profitable to combine more absorbent with the manure than is necessary to absorb the juices. He believed that every farmer could make all the manure he needed by a judicious use of the substances connected with his farm.

Mr. Parker, of Sudbury, considered it wholly useless to plough green manure under grass, for the grass itself will heat fast enough if turned, and manure added was completely lost. It generated too much heat. He considered peat very valuable, and decomposed it better in beds than by carrying it to his yard. Another system he explained, was to place green manure and peat together in a vat, and pour hot ley of soda ash upon it. In a reservoir

holding about twenty cords, he turned two hundred gallons per week. The manure was fit to remove every ten days. In this way he made several hundred cords yearly. He considered green manure very bad for land.

Several other gentlemen took part in the discussion, and at a quarter to ten o'clock, the meeting adjourned.

Peat Manure.

May Peat Manure, carted from the swamp in the spring, be spread on land and ploughed in, for a crop the same season? My experience with peat as a manure has shown me, that it answers but a very poor return indeed, scarcely benefitting the crop at all, to apply it in its raw state. I have tried it on hoed crops, both on gravelly and sandy loams, and mowing, but have never derived an increase in the return of crops sufficient to half remunerate me for my labour. By exposing the peat to the action of frosts and the atmosphere, its natural acidity becomes corrected, and it may then be used by mixing with light soils to good advantage. I have had the best success in using peat as an absorbent, and by mixing it with stable manure, using two or three cords of the peat to one of manure in the compost-heap; being careful to fork the whole pile over when the temperature had arisen to the right point, otherwise the peat would sometimes bake into hard lumps. It makes the best material that a farm can afford, to absorb the liquid and gaseous elements of manure, by using it in as dry a state as possible, in the barn-yards, hog-pens, stables and privies.—Use it freely, covering the yard to the depth of 18 to 24 inches. By giving it such a berth for one year it comes out a valuable manure, each load being worth more for a crop than a dozen loads of the raw material.

Grafting in the Root.

The following is from the *Prairie Farmer* for April:—My intention in this communication is to give my mode of root grafting, as the season for that operation will soon be at hand. Now I have no doubt, that in the minds of many there is a great deal of mystery about this matter of grafting, as well as budding. In fact I have been called on to perform these operations by those that could just as well have done it themselves. There need be no mystery about it. Everybody that knows how to whittle can perform the operation of root grafting, provided he knows how to split a stick as well as to whittle one.

Having procured my roots and scions, I commence by cutting up the roots about three inches long, not being particular whether they are cut off square or otherwise; and as to the amount cut up at once it does not matter, so they are kept moist. Next I cut up a lot of the scions, allowing at least two buds to the graft. Being seated with both roots and scions within reach, and my big jack knife in hand, I sharpen a quantity of the scions in such manner that they will best fit the split which I make in the root. As I split the root I immediately insert a scion, then carefully lay it one side until I have grafted as many as I can conveniently carry. I then take them to my nursery, the ground being previously prepared for them, and set them out, as you would any thing else, only taking care that the ground is well pulverised, and drawn up around the graft sufficiently to keep it moist at the connection between the root and the scion. I use neither wax nor string, nor is any needed. Of course some care must be used as you insert the scion in the root, that the bark of the one shall cross that of the other at some point. Thus in one or two days any farmer can graft enough for a large orchard. And any one with a little care and attention can not only raise his own apple trees, but have them of the most approved kind, and by so doing will not only benefit himself, but be a blessing to the community around him, and to generations yet unborn.

Trenching Old Orchards.

If you have neglected old trees in your orchards, fork or trench up the earth all around their trunks, for a distance of four or five feet, and give to each tree at least a bushel of compost, made of equal parts of stable manure and leaf mould, or swamp muck. And at the top of this, spread half a peck to each tree of charcoal dust, wood ashes, and oyster shell lime. Pursue this course, and you will have no cause to complain that your trees bear only a few knotty, scrubby apples. Who will try it? Fruit raising ought to be, and could be, made a very profitable business.