

prayer." "Have you prayed, then?" quickly inquired the younger sister. "Certainly, Helen; for every morning before I went out to collect I begged of God to direct my steps where to go, that I might get something for the heathen. There was only one morning when unhappily I did not pray; but on that day I collected nothing."

Natural History.

Charming, or Insect Mesmerism.

Although the cockroaches abounded inconveniently at the Mauritius, it was not without pity that I saw them consigned, as they frequently were, to a living grave by a wicked looking insect much resembling the Spanish fly. It was impossible to witness his proceedings, combined with his glittering blue and green dress, without imagining the elfish demon of a pantomime leaving an innocent victim to perpetual entombment in some haunted cavern. Let the cockroach be moving ever so briskly across the wall, he has no sooner caught sight of the fatal insect—not a quarter of his size—than all energy leaves him, and he stands stupidly resigned. The fly then walks up to him, looks him hard in the face, and presently putting forth some apparatus which stands him in place of a finger and thumb, gently takes the cockroach by the nose leading him along for a foot or two. Leaving him there, he commences a thorough examination of the neighborhood, beating the ground up and down like a well trained setter, and, not finding what he wants, returns to the cockroach and leads him on a little further, when the same process is gone through, sometimes for hours, till the whole wall has been examined. Chinks there are plenty, but they do not suit him; he has taken the measure of his victim's bulk, and means to lodge him commodiously. Presently a suitable hole is found, and the fly, moving backward gently pulls the cockroach after him into his last home. What horrors are perpetrated in this dark recess cannot be more than surmised. The object undoubtedly is to engage him as a wet nurse. No doubt the cockroach is bored in some part not vital, and eggs laid in him; a purpose, indeed, for which his succulent motherly frame seemed peculiarly adapted.

And not improbable, during this vicarious incubation, he is supplied with food, until the young, of whom he is pregnant, being hatched, commence, in return for his services, to "gnaw his bowels, their repast." It is in vain that during the scene above described, you urge the cockroach to seek safety in flight. The poke of a stick is disregarded; he seems deaf to all hints; nay, move him to another part of the wall, he waits there with the same stolid indifference the return of his tormentor. Probably a sly thrust is given him in the first meeting of noses, or some "leprous distilment" dropped in his ear; for he has entirely the air of being hounded.—*Voyage to the Mauritius.*

Bee-Hunting in Australia.

Honey is a grateful article of food with the natives, and their modes of finding it are very curious. The bee is very like the common house fly, but a good deal smaller; and it has no sting, for I have frequently had numbers of them in my mouth mixed up with the honey I was eating. As the bees fly along laden with the spoils of flowers, they frequently lose a small drop of their treasure, which if it falls upon a stone, or any substance on which it can be seen, will very likely attract the eye of the savage, who is always on the look-out for traces of food. The direction in which the sharpest end of the honey-drop lies, will point the way the bee has taken, and this will often suffice to lead them back to the hive. There is another mode, however, of hunting for sugar-bags, which is more amusing and interesting than this. Having seen a bee alight on any twig or leaf, the black takes a little bit of the finest down of a feather, and rolling it up between his fingers at one end, cautiously steals upon the bee, and dexterously places the down upon his back, to which the honey makes it adhere. Away soars the bee at once, high in the air, and away soars the savage's eye after it, his head being thrown back, and his whole gaze concentrated upon that one speck in the sky. As the bee advances, the black, keeping as nearly under him as possible, careering along at full speed, stumbling over boughs and bushes, leaping over logs and holes, and heedless of scratches and bruises, and every thing else, but the speck of white

down which is guiding him to the lofty gum tree, in the topmost boughs of which lies his dinner for that day. Having traced the bee to his retreat, he procures a quantity of string-bark, which he tears up into a mass, resembling dried moss, or more nearly still the fibres of the cocoa-nut husk, when torn and teased. This is to place the honey upon. He then, with his tomahawk, cuts his way up the tree, cuts into the hollow branch where the hive is, feasts on it himself, and takes the remainder down in the string-bark, which, if much adheres to it, he afterwards sucks, so that nothing may be lost.—*Henderson.*

The Spider's Thread.

The net of the Garden Spider consists of two kinds of thread. The threads forming the concentric circles are composed of a silk much more elastic than that of the rays, and are covered with minute globules of viscid gum, sufficiently adhesive to retain any fly coming in contact with it. A net of average dimensions is estimated to contain 87,000 of these globules, and a large net of fourteen or sixteen inches in diameter, 120,000; and yet such a net will be completed by one species of the garden spider in about forty minutes, on an average, if no interruption occurs.

Scientific.

Poisonous Effects of New Earthenware.

A somewhat singular though not unaccountable occurrence took place in the family of a gentleman in one of our neighboring towns, a short time since.

It appears there was a large number of the gentleman's family and connections to partake of a Thanksgiving dinner, numbering in all 23 persons.

The usual variety served on such occasions covered the banquet board, and the party partook of it with the proper relish. Twenty of this party remained over night, and took breakfast with their host the next morning. A large chicken pie which had not been touched the day before, was served out to them at this time. In a few hours after, seventeen of them were violently attacked with severe griping pains in the bowels, accompanied with profuse diarrhoea. It appeared, from investigation, that only those who ate of the pie were the ones who suffered. The lady of the house having made it herself, and partaken freely of it, suffering alike the rest, of course removed all suspicion of intentional poisoning. The query now is, what was there in this pie; or about it, that should produce these effects? The pie was baked in a yellow earthen dish, that never had been used before; and the conclusion necessarily is that its contents became impregnated with portions of the enamel with which it was lined, and hence the consequences. Now the enamel used by potters varies in composition, according to the purposes for which the ware is intended. They all, we believe, contain more or less lead, cobalt, &c. Often the biscuit, as it is called, is made of clay which contains poisonous matter in various proportions, and if after the baking the vessels are imperfectly glazed or protected, bad consequences may arise from using them. All such ware, to be used in cooking when new, should be first proved, and this is best done by having it greased over with lard or tallow, and then subjected to the heat of an oven. This will generally be found a sure protection. This one instance should serve as a warning to families, and is not without interest to the physician.—Had the occurrence taken place during the prevalence of cholera, the sickness might have been taken for it, and with very good reasons, its symptoms and character simulating that disease. We are pleased to state that the parties entirely recovered, the majority of them only suffering five or six hours.—*Boston Medical and Surgical Journal.*

A CURE FOR POISON.—If a person should be stung by a bee or other insect, rub some spirits of turpentine on the place, and the pain will cease in a minute. It is said that pain arising from the bite of a copperheaded snake may be arrested in a few minutes, by the continued application of this article; and from my own knowledge of the effects, in other cases, I have not the least doubt of it. The effect of poison to contract the blood vessels, and prevent a free circulation; the natural consequence is pain and inflammation immediately. Spirits of turpentine, by their penetrating and expanding qualities, soon overcome the difficulties.—*Far. Cabinet.*

AN INTERESTING EXPERIMENT.—Take a cylindrical glass, say six or eight inches deep, and three or four inches in diameter. Pour in about two inches of water, as clean as can be obtained. Fix a small stick within the mouth of the glass, and suspend, by a cotton thread, one or two acorns of the common oak, so that they may be an inch above the surface of the water. Now cover the glass as tightly as possible, in the way usually done by confectioners. Keep the whole near the light during the day, and, in a week or two, you will see the acorns push out shoots, and ultimately assume the form of a little tree growing in the close, moist atmosphere of the glass, with beautiful fresh green leaves.

FLEXIBLE IVORY.—M. Charriere, a manufacturer of surgical instruments in Paris, has for some time been in the habit of rendering flexible the ivory which he uses in making tubes and other instruments. After giving the ivory the desired form and polish, he steepes it in hydro-chloric acid diluted with water, when it becomes flexible, elastic, and of a slight yellow color. In the course of drying, the ivory becomes hard and inflexible, but its flexibility can at once be restored by wetting it with a wet sponge; some pieces of ivory have been kept in a flexible state, in the acidulated water, for a week without being either too much softened or injured in the texture.—*Scientific American.*

The Farm.

HINTS ON THE CULTURE OF WINTER WHEAT.

(From the Maine Farmer.)

DR. HOLMES:—From what I have seen and heard from different parts of our State, the present growth of winter wheat promises a fine crop; and with a strong hope and belief that much more may be profitably sown the present year, I wish to call the attention of farmers to the preparation of land, manure, &c., for this crop: not that I can offer anything new, but simply wishing to encourage every one to try the experiment, if it is to sow but one peck.

Five years ago, my first bushel was sown, which produced about twenty; and I think we have not had a less crop since. Last year we had 33 bushels from one; and some of the present growth stands five and two thirds feet high. But to the subject of soil, preparation, &c.

I find that any dry soil with sufficient slope of surface to drain off the surplus water from melting snows and heavy rains will produce good wheat with suitable cultivation. The last and present month is the proper time to plough in grass, and even if it be tough, bound out sward, when well turned, rolled and harrowed to prevent the grass springing up in the interstices between the furrows, it may be made to bear good winter wheat, with the addition of a light top dressing of decomposed barn-yard or stable manure, or compost. Clover turned under, or if the grass must be saved for winter fodder, plough in the stubble immediately after the hay is taken off, and if the land is in condition to produce two or more tons of hay per acre, it will bear good wheat without manure. A small quantity of plaster will improve it.

The stubble of spring grain ploughed in with the application of a suitable top-dressing, or without the top-dressing if the land is sufficiently rich answers very well. Corn may be removed from the field in season to plough and sow to good advantage, and land which produces fifty bushels of corn to the acre will be in strength to bear large wheat without additional manure. White blue-nose or other early varieties of potatoes may be harvested in season for w/e it.

Swamp muck or sods and earth taken in making ditches in low land, and leached ashes or lime, composted, make excellent top-dressing. Add one or two loads of animal manure to every ten of the compost, and let it lie a few weeks before it is used. Shovelling it over once or twice improves it. It makes a very rich compost.

If muck cannot be had, take the deposits from water-courses or by the roadsides, or from pastures or wood-lands, and mix all that may be found under the horse stable, cattle stall, sheep sheds, henery, privy, &c., with these materials, (taking care to make a new deposit of fresh earth or muck under said stalls for next year's use.) Add lime, ashes or plaster, and by twice shovelling over the heap, it will be in fine order for use another season. Nothing is here offered but what I have tried successfully and it is with the hope that these desultory remarks may induce some persons that have experimented further than I have to

give the results of their labors: as I believe we all, of every profession and vocation, agree that it is of vital importance to the State that we raise our own bread.

Clean seed is desirable, if we would have a clean crop. I regret to see so much rye, chess, &c., as in some fields the rye seems to predominate. The first I sowed was seed imported from Poland. Among this were a little rye, chess, and a climbing plant which I called *tares*, that run over the tallest wheat, enclosing quite a handful in its embrace, and decorated with beautiful clusters of pink blossoms—a ready sign for its own destruction soon followed. We have got pretty nearly rid of the rye, by pulling it up, as it heads higher—and some days before the wheat. Not so with the chess; it is lower than the wheat, with an oat-shaped head, and it is difficult to separate it. We spent much time, the first and second years on the chess, and could not get rid of it. After trying wind and water, and sifting in a powerful New York mill, which would nearly cleanse it, but not quite, it occurred to me to try the experiment of strong salt brine. This was effectual, as the brine would rise all the light grain, such as oats, chess, witch-grass seed, &c. to the surface, where it may be easily skimmed off.

We have growing both the standard varieties of winter wheat that are most in favor in this State, viz: the Poland, and Kloss Blue Stem, *alias* Banner wheat. They grow side by side, (a dead furrow only intervening, to keep them from mixing.) Both look well, and I cannot even risk a guess as to which will turn out best at harvest.

I have sown no other than the Poland, until last year, supposing that it would be hardy from the fact of its being imported from a latitude north of us; and I find that it stands the winter, on dry ground, as well as English grass.

Good wheat may be grown, I have no doubt on pasture land, without manure, especially if it is ploughed early in summer. Ashes or plaster would unquestionably improve the growth.

My object is, if possible, to draw the attention of farmers to the subject of raising winter wheat, and thereby save a few of the tens of thousands that is annually sent out of this State for flour.

M. TABOR.

Vassalboro', 7th mo., 10th, 1851.

SMALL FARMS.

There are thousands of small farms in the New England States varying in size from twenty-five to one hundred acres, upon which thousands of families not only live but are well to do in the world, and have reared large families in comfort and prosperity. It is true, the children, for want of room to work, have to go to contriving, and it is this necessity that has filled the whole country with Yankee contrivances of all kinds, from a basswood pumpkin seed to a steam engine.

One of the greatest crops of the diminutive farms, is, that inventive genius which characterises the whole nation. No Yankee clock ever run with more regularity than the whole of the operations connected with some of the small farms. Look at their cattle, horses, hogs, sheep, geese, ducks, and chickens. There is an appearance of unmistakable thrift about everything animate and inanimate upon some of these places. It is true, many of the occupants work with the same old fashioned tools their fathers did, and follow all the same time-honored practices, but the next generation will be more alive to the spirit of improvement.—*Am. Agriculturist.*

OXEN VS. HORSES.—It is an old maxim that oxen are better than horses for farm work—that they are kept cheaper and are not liable to so many diseases as the horse—that oxen are more patient and can live better on grass and the natural produce of the farm, and that with good usage they are continually growing more valuable till they are fit to be turned off for meat. On rough and rocky lands they are much the best team for ploughing, and the gearing or harness is more simple and less costly. A wooden yoke and a single chain serving for two oxen, while a pair of horses must have four chains for draft, and leather collars and straps in abundance to keep the chains in place. Is the substitution of horses on the farm any great improvement after all.—*Mass. Ploughman.*

Three thousand persons, who paid five shillings each, visited the Exhibition of the Agricultural Society, in the Home-Park, Windsor, on the 16th ult.