

—The *American Artizan* says:—"We have received from the publishers, Miller, Wood & co., 15 Laight street, New York, a pamphlet, being the subject of two lectures delivered in the New York University, on the causes, mode of communication, and means of preventing cholera. A few extracts from it will do no harm, and may do some good. The author believes 'germs of cholera to be in the discharges from infected persons; and to be taken up by the air, and carried to some miles distance at least. Persons of good health are able to resist the influences of germs; but those whose digestive organs are impaired by the use of improper food, stimulants, and irregular habits, are very liable to be affected if they inhale air that is tainted by contact with cholera patients. Air from putrid matters is a predisposing cause of cholera; hence he advises the removal of all matters that can putrefy, before they putrefy. Fire is a safe means of preventing putrescence; and should be used when not inconvenient. Lime is slow, but permanent in its effects; charcoal absorbs but not destroys atmospheric poisons, and is not so safe; chloride of lime is quick, and may be best for general use. Strong fumigations are worse than useless, as they merely render the senses unconscious of the presence of foulness in air without destroying its poison. The best plan is to heat rooms up to 220°, which is sufficient to destroy any species of animal or vegetable poison.

The food should be plain and nutritious, and taken at regular hours, and in moderation. All indigestible and badly-cooked food should be avoided. Healthy beef and mutton, good bread, and fresh ripe fruits are recommended; but unripe and stale fruits are deemed dangerous. Watery vegetables, such as turnips, cabbages, cucumbers, and pickles of all kinds, and onions, lettuce, horseradish, and seasoning sauces are tabooed. Pickle and smoked pork, fish, and sausages, lard, rancid butter, old cheese, gravy, pastry, sweetmeats, and candies are also condemned. Alcoholic drinks are to be avoided. Wine to be used very sparingly, by those who are constrained by habit to use it: so with tea and coffee. The general reason for these cautions is that the digestive powers should be kept in their highest efficiency, so that the system may be able to resist the effects of the poison in the air. Moderate exercise, regular sleep, personal cleanliness, and avoidance of dejection and mental excitement, are to complete the guards against cholera.

Now if these preventives were observed by all, cholera would disappear from the earth; but until there is an approximation to this state of defence, we must expect occasional visits of the scourge.

—Mr. Lynn, of the Greenwich Observatory, noticing, in *Astr. Nachr.*, a letter from Herr Schmidt, of the Athens Observatory, stating that between half-past eight and half-past nine, Athens time, on the 12th May, he was surveying the heavens near Corona, and must have seen the so-called "new star," if it had been as large as 5 mag., applied, through Mr. Huggins, to Mr. Birmingham, of Tuam, to know at what hour on the same night he saw this remarkable variable as of the 2nd mag. The reply was, not later than 11 45 p.m. local time, whence Mr. Lynn draws the important conclusion, that at 8 p.m., Greenwich time, the star must have been less, and may have been much less, than five mag. and that it increased to the 2nd mag. in four hours, either suddenly or with great rapidity. This star was noticed, on the 4th May, by Mr. Barker, of London, Canada West, as brighter than Corona. He thinks he saw it one or two years ago.—*Intellectual Observer*.

—The inertia of the projectile causes a certain time to elapse before it is set in motion. A certain amount, therefore, of the force of the gunpowder is wasted, and the more rapid the explosion the greater the loss, from this cause. M. Galant, of Liege, has invented a breech-loader which meets this difficulty. The force of the charge is first communicated to an elastic body which is easily set in motion, and the force which in ordinary cases is wasted, but in this is stored up, is gradually communicated to the ball, after it has begun to move. The charge is ignited by a needle, the explosion commencing at the end next the ball, but between the latter and the powder, are placed five pads of felt, those next the ball having been, for the sake of lubrication, moistened with a fatty matter. This arrangement altogether changes the nature of the explosion. A white smoke escapes from the muzzle, instead of flame, and the penetrative effect is so great that with a charge consisting of 6.5 grammes of powder and a cylindrical-spherical steel ball weighing fifteen grammes, a plate of steel twenty-nine millimetres thick was perforated at the distance of one hundred metres. Omitting any of the pads causes a proportionate increase in the recoil.—*Ibid.*

—Dr. Davy, finding that a statement made by him many years ago, to the effect that a leech might be frozen without loss of life, was contradicted by more recent experiments of M. Puget, has repeated his investigations on leeches, frogs, etc., and he arrives at the conclusion that "the thorough congelation of an animal is incompatible with life." It is still, however, not certain to what extent congelation may be carried without death necessarily ensuing. What, for example, are we to make of the story of the frozen carp told by Sir J. Franklin, and cited by Mr. Couch? The amount of freezing in these cases may have been nearly complete. Dr. Davy's paper is in *Proceedings of the Royal Society*, 86.—*Ibid.*

—*Proceedings of the Royal Society*, 86, contains a paper by Lieut.-General Sabine, F.R.S., on the lunar diurnal variation of the magnetic declina-

tion, and of the horizontal vertical components of the magnetic force, derived from seven years Kew observations, and from comparison with observations in other parts of the world. The paper states that "a magnetic variation shown to be thus obviously dependent upon the moon's position relatively to the terrestrial meridian, and agreeing in its principal features in such various localities, is urged by the author as being ascribable, with great probability, to the direct magnetic action of the moon."—*Ibid.*

#### MISCELLANEOUS INTELLIGENCE.

—Philosophers tell us that the winds gain velocity by unobstructed travel: and the fact is verified by the dreadful hurricane on the ocean, the raging tempest on lake and sea, the awful simoon on the African desert, and the furious tornado on the American prairies—all which strew their paths with desolation, because there are no trees to check the violence of the winds. Even our sudden gusts in summer, when the air becomes too much rarified by heat, are often destructive to life and building.

All these besoms of destruction would be greatly modified could trees be planted in their paths. The trees getting the first strokes, and being flexible, would bend before the blast, breaking its force and making it pass, harmlessly over buildings or other stationary objects. The electric fluid so destructive of life and property, also is attracted by trees, and conducted into the ground; and, in fact trees are the best protectors against all the natural destructive agencies with which man has to contend.

Another consideration as to the value of growing trees is the fact that a park of any size is warmer when belted and grouped with trees, in winter, and cooler in summer, which has been demonstrated by practical experience for centuries. Many fruiting and ornamental plants flourish when so protected, that would not live if exposed to bleak winds. Domestic animals, too, grow faster, thrive better, and give better returns if sheltered and protected by trees. Much better it is also to rest under their broad branches on a hot summer's day or to be enlivened by their cheering green when all else is dull and cheerless.

A feeling of admiration and awe comes over me when I think of the wonderful wisdom shown in the forms or natures of trees to suit our various wants. If we plant trees with naked stems and branchy heads to shut out unsightly views, the work is only half done, as we can see through and under the branches; but when we plant evergreens, whose largest branches are near the ground, they fill up the gap and the work is complete. With fruit trees the same beneficence is manifest. We have to climb up trees to pick the large fruits, which when green are unfit for eating: while it would be tedious to pick the thorny gooseberry and blackberry, did they grow upon trees.

We say therefore, plant trees for shelter and shade, for embellishments to your grounds and adornment to the landscape: they are grand and ennobling to look upon, and their fruits and timber in a few years growth will be as valuable as gold.—*Gardener's Monthly*.

—Mr. Pollard states that in his drinking days he was the companion of a man in Arundel county, Maryland, who had a monkey that he had valued at a thousand dollars.

We always took him out on chesnut parties, and when he could not shake them off, he would go to the very end of the limbs and knock them off with his fist. One day we stopped at a tavern and drank freely. About half a glass was left, and Jacko drank it up. Soon he was merry, hopped and danced, and set us in a roar of laughter. Jacko was drunk. We all agreed, six of us, that we would come to the tavern next day, and get Jacko drunk again, and have sport all day. I called at my friend's house next morning, and we went out for Jack. Instead of being, as usual, on the box, he was not to be seen. We looked inside, and there he was, crouched up in a heap.

"Come out here!" said his master.

Jack came out on three legs; his fore-paw was on his head. Jack had the headache. I knew what was the matter with him; he felt just as I did many a morning. Jack was sick and couldn't go. So we waited three days. We then went, and while drinking, a glass was provided for Jack. But where was he? Skulking behind the chairs.

"Come here Jack, and drink," said his master, holding out the glass to him.

Jack retreated, and as the door was opened, slipped out, and in a moment was at the top of the house. His master went out to call him down, but he would not come. He got a large whip and shook it at him. Jack sat on the ride-pole and refused to obey. His master got a gun and pointed it at him. A monkey is much afraid of a gun. Jack slipped over the back side of the house when he saw his predicament, at once whipped upon the chimney, and got down in one of the flues, holding on by his fore-paws. The master was beaten. The man kept the monkey twelve years, but could never persuade him to touch another drop of liquor. The beast had more sense than the man who has an immortal soul, and thinks himself the first and best of God's creatures on earth.—*Exchange*.