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Veterinary.

Wash for Wounds on Cattle.—Dissolve one ounce of sulphate of zinc (white copperas) in a quart of soft water, and wash the wound with this, morning and evening. It is an excellent wash for common sores, but for virulent ulcers of long standing, the following is also an excellent and more powerful wash: Sulphate of zinc, one ounce; corrosive sublimate, one dram; and muriatic acid (spirit of salt), 4 drams,—all dissolved in a pint of soft water and bottled for use. Apply it with a sponge morning and evening.

Oil for Wounds.—Take one pint of neat's foot oil, and half an ounce of the oil of thyme; mix them together and add, by degrees, 6 drams of the oil of vitriol. These ingredients must be well stirred in a glass or stone-ware vessel until they are perfectly incorporated, then bottled up for use. This is an excellent oil for bruises in the feet of horses, and oxen.

Hoof Ointment.—Take one pound each of tar and tallow, and mix them with half a pound of common turpentine in a stone-ware dish. Stir them well until they are thoroughly incorporated together. This forms an excellent dressing for the sore hoofs of horses and oxen.

How to Plant Potatoes.

A pamphlet has been published in Scotland by a farmer named Craig, on the potato disease and its cure. By planting three different kinds of potatoes together last year, very favorable results were achieved. Two out of the three varieties planted had been on previous occasions affected by the disease, all were found to be perfectly healthy and sound when dug, and experience has shown that they kept well during the winter. He believes that the potato disease may be safely attributed to the violation of one of the laws of nature, and that the generation of the malady is occasioned by the plants being too closely bred, or, in other words, by "sub-breeding."

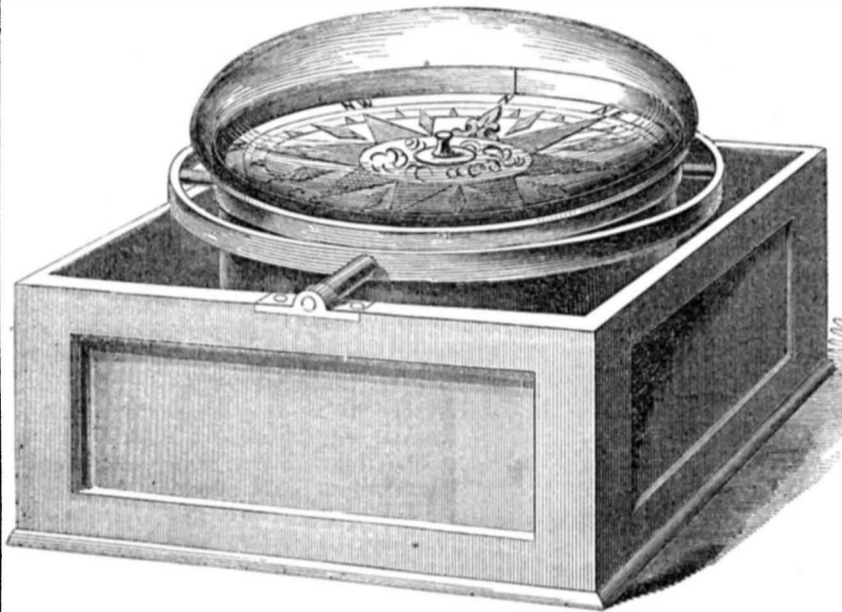
The lesson we derive from this is, that two or more varieties of seed potatoes should be planted in each hill.

Improvement in Mariner's Compasses.

Mr. John Prime, of Washington, N. C., has suggested and patented the method of covering the boxes of all kinds of compasses with a convex glass, so as to shed water, and thus exclude moisture. Our engraving exhibits the improvement. Simple as the invention may seem, it is, nevertheless, an important one. The common plan is to use a flat glass placed within the lips of the compass box; this forms a shallow cup, which catches water; the glass is somewhat smaller than the diameter of the box, so as to allow for contraction and expansion occasioned by differences of temperature.

The compass is an instrument that must be always in sight; consequently, on ship-board, or in surveying, it is more or less exposed to the weather. When water falls upon the flat glass it obscures the sight of the needle, and also penetrates through the cement into the box. Here it turns into vapor and lodges on the underside of the glass, again obstructing the vision; it also defaces the card,

IMPROVEMENT IN THE MARINER'S COMPASS.



rusts the needle, and endangers its proper operation. It is alleged that the electricity induced by the conversion of the water in the box into vapor, although quite trifling in amount, is sufficient, however, to affect the magnetic properties of delicate instruments like the compass. In stormy weather, when a correct compass is most needed on ship-board, it is, as at present constructed, most likely to become deranged.

All of the objections named are obviated by Mr. Prime's improvement. As shown in our engraving the glass is convex, and placed wholly outside of the compass box, forming a

complete cover. The space between the rim of the glass and the box is filled with an elastic material, which permits expansion, and always preserves a tight joint, so that water cannot beat in. Indeed, a compass thus fitted could be submerged without the least detriment. This invention is worthy the attention of all ship owners, instrument makers, and others. It is applicable to surveyor's compasses and all other kinds.

Address the inventor as above for further information. Patented in the U. S. Feb. 12, 1856. Also patented in England through the Scientific American Agency.

IMPROVED FOUNTAIN PEN.



New Fountain Pen.

In this improvement the pen handle is made hollow, and in its upper part there is a small india rubber bag, A, which contains the ink. A' is a cork which is removed when the ink bag is to be filled. The lower part of the bag terminates in a tube, B, down which the fluid flows and escapes at valve C, on to a bulb or ink collector, D, thence to the under side of the pen. Valve B is opened and closed by the finger, a lever, E, and spring being provided for that purpose; the finger button, F, of the outside of the pen, connects with the

valve lever, E; by pressing the button, the valve opens, and a supply of ink is thrown upon bulb D, and runs to the pen. When not wanted, the ink remains tightly enclosed, so that there can be no leakage. The end piece, G, encases and protects the pen point, so that the whole may be safely carried in the pocket. For traveling and other purposes, this contrivance is well adapted. Its construction is simple, economical for manufacture, &c. H. K. McClelland, M. D., Eldersville, Pa., is the inventor, of whom, and of G. W. Simons, maker, Ransted Place, 4th above Chestnut

street, Philadelphia, Pa., further information may be obtained. Patented April 17, 1855.

Many-Colored Bank Note Counterfeits.

The Boston Association to suppress counterfeiting, has issued a circular, in which it is stated that Mr. Serapyan's method, to prevent counterfeiting, is not safe in preventing impositions. The supposed security of this plan consisted in the printing the notes in several supposed permanent colors. It was found that some of the colors could be removed, and the denomination of the bills altered, in such a manner as to pass for genuine ones, even with pretty close scrutiny. The Association has passed a resolution condemnatory of notes so printed. This Association advertised through our columns for a method to prevent counterfeiting, but it has not met with the right invention yet.

The Shortest Passage across the Atlantic.

The new iron steamer *Persia* left this port on the 2nd of last month at 3 P. M., and arrived at Liverpool on the 12th, at 8h. 40m. A. M., making the actual run in 9 days, 12 hours, and 7 minutes—allowing for the difference of apparent time. She then discharged cargo loaded up and sailed from Liverpool for this port on the 19th, at 10h. 25m. A. M., and arrived at the Light Ship at 15 minutes past 9 P. M., on the 28th, and next morning came up to the dock in 1 hour 35 minutes, making the actual Western run in 9 days, 16 hours 58 minutes, adding the apparent time to the actual time of sailing. She has thus made the two voyages back and forth, right after one another in 19 days, 5 hours, 5 minutes. The fastest western passage heretofore made was by the *Baltic*, in July, 1854. The voyage from dock to dock was made in 9 days, 17 hours, and 15 minutes, which was, (if we take the time the *Persia* lay outside, into account,) the shortest western passage west yet made. The *Persia's* eastern voyage was the shortest ever made by five hours.

Copper Ore a Dangerous Cargo.

The ship *Georgia*, which recently arrived at Liverpool, Eng., from Savannah, brought some copper ore in cases, which proves to be an exceedingly dangerous cargo, for so great was the heat evolved during the passage, from the sulphur contained in the ore, that some of the cases were taken out of the ship completely charred, the lids being a mass of charcoal; while the cotton stowed immediately above them was partially burnt, and when landed from the ship, so hot as to make it painful for a man to thrust his hand into the bales. These ores should be first roasted to dispel the sulphur in them before they are shipped across the Atlantic.

A new Hot Air Locomotive.

We have seen the statement in some of our cotemporaries, that a hot air locomotive was very recently tried on some part of the New York and Erie Railroad, and proved a complete failure; also, that it is to be converted into a steam locomotive. Is there any truth in these statements? Will some one who knows give the public the facts of the case.

Another Steam Balloon.

A. M. Tippet, in Washington, D. C., is at work on a steam balloon, and it is stated in some of the papers, that an appropriation is about to be applied for in the Senate, to enable him to construct one to carry the mails to California.

The famous brazen column of Constantinople, described by Gibbon, has been discovered in that city. It consists of the bodies of three serpents, twisted into a column of brass—from the head of one of which Mahomet II. smote an under jaw with his battle-axe.

