

railroad cars to prevent the entrance of dust, etc., by the action of the surrounding air on deflectors combined with the sides of the car substantially as specified, and operating on the principle set forth.

Coffin.—An Act for the Relief of the Heirs of Salmon D. Plisk, deceased. Approved Feb. 17, 1865. Patented Nov. 14, 1848. Reissued March 6, 1860:

First, Claims the manufacturing of coffins of cast or raised metal, when made substantially in the form and manner above described; that is to say, corresponding nearly with the human form, and making the coffin in two nearly equal parts or shells united by a flanch, substantially as set forth.

Second, The manufacture of coffins of raised or cast metal, in two shells each, formed with recesses of greater or less depth, which shall respectively constitute a portion of the receptacle of the corpse, thus approximating the coffin more nearly in shape to that of the human body than could otherwise be done.

Revolving Frame for Drying Fruit and other articles.—J. C. Dickey, Saratoga Springs, N. Y. Patented June 3, 1851:

I claim the center, E, with three or more arms to support a cord, netting or other cloth, for the purpose of exposing cloths, clothes, glue, fruits, seeds, etc., with facility to be dried; so constructed that the arms may be raised up and brought together, to expedite the collection of the articles dried, and so that it may be conveniently removed when not in use, substantially as described.



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Judge Mason was succeeded by that eminent patriot and statesman, Hon. Joseph Holt, whose administration of the Patent Office was so distinguished that, upon the death of Gov. Brown, he was appointed to the office of Postmaster-General of the United States. Soon after entering upon his new duties, in March, 1859, he addressed to us the following very gratifying letter.

Messrs. MUNN & Co.—It affords me much pleasure to bear testimony to the able and efficient manner in which you discharged your duties as Solicitors of Patents, while I had the honor of holding the office of Commissioner. Your business was very large, and you sustained (and I doubt not justly deserved) the reputation of energy, marked ability, and uncompromising fidelity in performing your professional engagements. Very respectfully, your obedient servant, J. HOLT.

Hon. Wm. D. Bishop, late Member of Congress from Connecticut, succeeded Mr. Holt as Commissioner of Patents. Upon resigning the office he wrote to us as follows:

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W. A. B., of Conn.—There is much difference of opinion in regard to the best kind of water wheel. In the cotton manufactories of New England undershot breast wheels were in almost universal use, but they are now being superseded to a great extent by turbines. All the best turbines you will find illustrated in the SCIENTIFIC AMERICAN.

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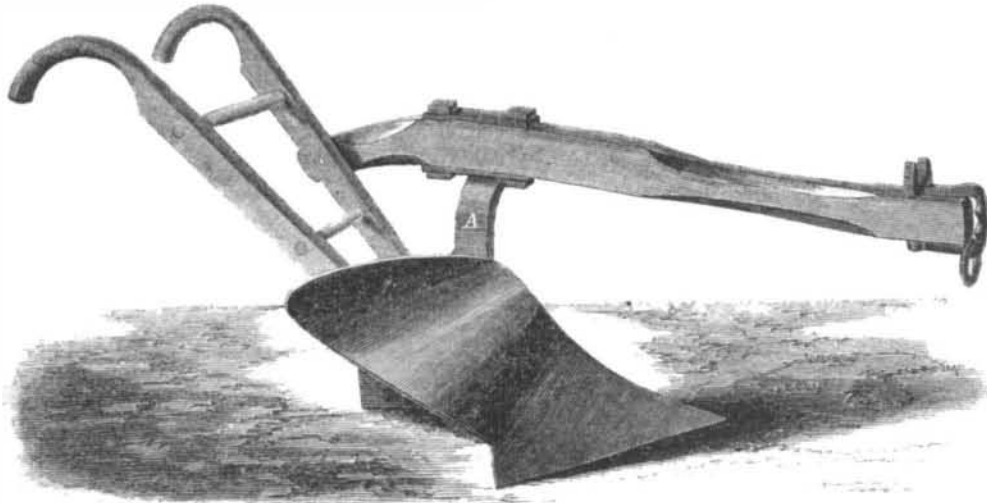
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Improved Plow.

The following description of the annexed illustration is furnished by the inventor:—

Time and experience have shown that, of all agricultural implements now in use, there is none of more vital importance to the farming community than a perfect plow; upon it, to a very great extent, depends the success of the farmer, and hence it has ever been his constant study to remedy its defects. Never has he been able to devise means by which the most serious objection to the ordinary plow—choking—could be obviated. This defect, however, is now completely overcome by the improvement herewith illustrated, and the farmer is enabled by this im-



PIERPONT'S PLOW.

provement to cultivate his worst land without suffering the annoyance heretofore met with. He is enabled to convert the straw stubble, etc., to his own advantage by turning it underneath the surface, where it decomposes and thus adds fertility to the soil.

The practical eye will at once discover in the design of the bent standard, A, the impossibility of choking from the accumulation of rubbish; as fast as it collects it is forced to pass to one or the other side of the plow, and eventually pass under the surface.

This is not the only advantage which this plow possesses. The ease with which the plowman can regulate the width and depth of his furrow is another very important item; this is done simply by the use of the "slot" in the lower end of the standard and the "plate" on the top.

This standard, combining as it does, all the good qualities of the ordinary plow, and being so perfectly adapted to the wants of farmers in every locality, is now offered to the public by State, county, township or shop rights—confident in the belief that ere long this improvement will supplant all others and be universally sought after by the enterprising farmer.

Patented through the Scientific American Patent Agency, Oct. 18, 1864. For further information inquire of Joshua Pierpont, La Harpe, Ill.

Improved Fountain Pen.

Vigor of style and felicity in expression are often



WELLER'S FOUNTAIN PEN.

the result of a smooth-running, easy-working pen. Many a sermon, begun in zeal and with a brain overflowing, has degenerated into "bald, disjointed chat," from the sputtering of a villainous pen or the glutinous consistency of the ink. So poems have shared a similar fate, and in dipping his pen into the inkstand the poetaster has put out his rushlight. The pitcher which goes often to the well is broken at last, and the pen which goes constantly to the inkstand gets its point snubbed off, its ribs crooked, and is

frequently ruined by a single dip. It is moreover annoying to be constantly interrupted in the current of thought by the necessity to replenish the pen with ink.

Copyists, and, in fact, all persons who have much writing to do, find fountain pens useful for supplying ink continually to the pen, it being only necessary to fill the fountain once in a certain time, and the ink then flows out mechanically.

The article here illustrated is claimed to be an improvement on this class of pens, it being in a measure self-cleaning—at least so far as relates to keeping the ink passage open; it is easily managed and regular in its action. The details are as follows:—

The holder, A, is hollow, and contains the ink, except at a certain portion near the end, which is devoted to the simple mechanism which governs the ink-flow. This mechanism is merely a rod with a spring, B, slipped over it. The rod connects to a needle inside the guard, C, between it and the pen, and communicates a sliding motion to the needle when the bar, D, is moved with the fingers resting on it. This rod also actuates a small valve in the end of the fountain, so that ink is admitted to the pen when the bar, D, is moved; the needle, by its thrusting motion prevents the gum, which is a component part of all inks, from clogging up the passage to the pen point. In this way the pen is kept constantly supplied with ink, and more or less may be let on by working the bar, D, as aforesaid.

This is a simple and compact arrangement for the purpose, and will doubtless become popular.

Patented Sept. 29, 1863, by Jos. Weller. For information as to rights to manufacture in the State of New York, address Brougham & McKee, 48 Fulton street, Brooklyn, N. Y.; for all other places address Jos. Weller, Washington C. H., Ohio.

Concrete Buildings.

A correspondent of the *Country Gentleman* says:—I find that cobblestone packed in lime mortar between boards laid on the wall raised as fast as it sets, makes a cheap and substantial building. It is rough coated on the outside, blocked off and colored in im-

itation of stone. No finish can excel this in beauty or durability. In the country such finish blends harmoniously with the landscape, is pleasing to the cultivated eye, and winning to the senses. I built an ash and smoke-house 8 feet square by 7 feet high, cemented at bottom, and beautifully finished, for \$12. It answers every purpose for such a building, I built a boiler and hog-house, 18 feet square by 12 feet high, well finished on outside, at an expense of \$50. I can keep corn in it clear of rats. I built a drying

house for a keg-manufacturing company, 18 by 22 feet, by 10 feet high, at a cost of \$100. It has sustained a great heat, enough to fire a wooden building, and answers every purpose. Apples could be dried in such a house to good profit. The stones were gathered from the adjacent grounds, and were of all sizes to fit in a 10 and 20-inch wall. Farm hands can work on such walls, having a master mason to direct the laborer. Where stone are plenty, buildings of this material can be reared for one-half the cost of wood. For dwelling houses strips of boards are laid up in the wall for lathing, to give an air chamber to avoid any dampness.

A ROAD lately found by some quarrymen at Hartlepool, Eng., and announced to be 6000 years old, is declared not a myth. The Rev. Robert Taylor, of St. Hilda's Parsonage, states that the toad is still alive, that it has no mouth, that it was found in the center of a block of magnesian limestone, 25 feet below the surface of the earth, and that it differs in many respects from all ordinary toads.

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