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RAIL-ROAD NEWS.

A Railroad to the Pacific.

We have heard nothing of Whitney's Railroad for some time, and while the utmost favor has been shown to other railroads in new States, by Congress, not a word has been said about the proposed great railroad to the Pacific. The railroad proposed by Benton, while he was Senator, is also lost sight of at present, but the time will certainly come when a railroad must, of necessity, be constructed for the purpose of uniting the Pacific with the interior of our country, and also with the Atlantic States. Our country is the Half-way-house between China and Europe, and when a railroad is constructed from the Atlantic to the Pacific, it will be the highway of nations to and from the East Indies, and China. It is also our opinion that Mexico will be absorbed by the United States before twenty years pass away, and then there will soon be a railroad built through the Isthmus of Tehuantepec, if it be not built before the act of absorption takes place. Before the discovery of gold in California, a gentleman who has resided in Mexico for twelve years, told us that it would be a good thing for Mexico if it were incorporated with the United States: he believed it would not be any benefit to our Republic, but an injury—that Mexico would be the gainer. The rapid growth of California has changed our view of this question; it would be better, both for Mexico and the United States, if they were united together; the union should, and we believe can, be brought about quietly by agreement.

Paving in Paris.

According to the report of the Administration of the Public Streets, the common method of street paving in Paris, by means of square blocks of stone, costs annually ten sous a square yard for expense of keeping it in repair. Macadamizage, on the contrary, costs eighty sous a square yard. The Macadamized streets in Paris are kept with a degree of care which would be out of the question in any other place. Men live upon them, and do not quit them five hours of the twenty-four. Besides being swept once a day, they are examined every morning, and any irregularities removed, and any concavities, ruts, or hollows, replenished from carts that are held continually in readiness. Notwithstanding the cost, the Rue de la Paix and the Place Vendome are to be immediately Macadamized. Numerous experiments have been tried with various mixtures of bitumen and finely-ground stone. Asphalt sidewalks are now in general use; but all attempts to render such a composition solid enough to resist the action of wheels and hoofs have entirely failed.

It is said that since the completion of the railroad through Northern Indiana, the wolves which came from the North, and were so savage on the flocks South, have not been seen South of the track. The supposition is that the wolves mistrust the road to be a trap, and they will not venture near its iron bars.

PATENT CAST-IRON CAISSONS.

Figure 1.

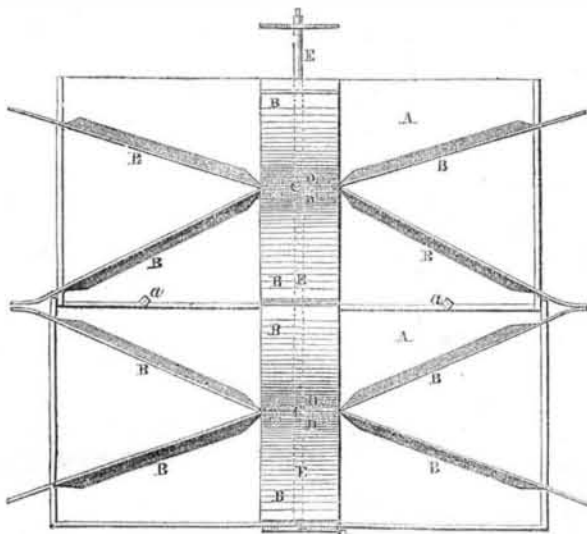
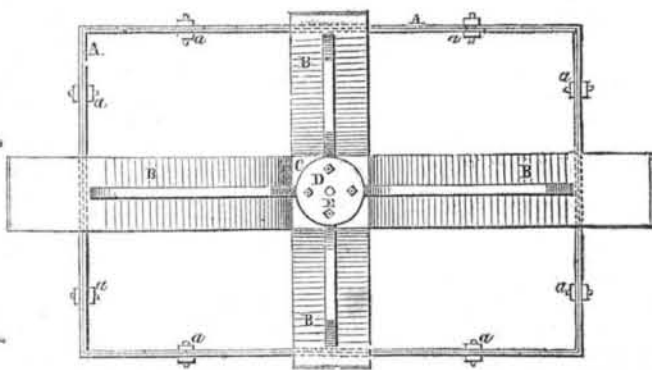


Figure 2.



This improvement is the invention of James P. Duffey, of the city of Philadelphia, and was patented on the 13th of last month (July, 1852). Figure 1 is a side elevation of two boxes, showing the braces and rods which connect the braces and boxes. Figure 2 is a plan view of the same. Similar letters on the two figures refer to like parts.

A A are two metallic boxes of rectangular form; each box has a series of braces, B; any number of them may be employed. C is a square plate at the centre where the braces meet. On these square plates, both on the upper and under sides, are flanches, D, which

have tie rods, E, screwed into the flanches, securing the plates, C, and supporting the braces, B. Each box, A, and its braces, are cast in one piece. The upper box in fig. 1, is somewhat smaller than the lower one, and fits a short distance within it. The screw bolts, a, pass through the sides of the two boxes and secure them together; any number of boxes may be secured together in this manner. By the above arrangement and construction of iron boxes or caissons, the pressure upon them is very equally distributed, and by them, a strong and durable breakwater, levee, or other like structure may be made. These boxes

are to be filled with masonry in cases where this is required, and the lower flanch, G, in fig. 1, will be imbedded in the earth. The outer ends of the braces may project a short distance beyond the sides of the boxes, and screw bolts will pass through them to secure the whole firmly together. The boxes may be cast of any size or form that the required structure is desired to be made, and they will be found to be very useful in constructing piers for harbors, in many places of our country.

More information may be obtained by letter addressed to the patentee at 91 South Eighth street, Philadelphia, Pa.

IMPROVED GRAIN CLEANER.

Figure 1.

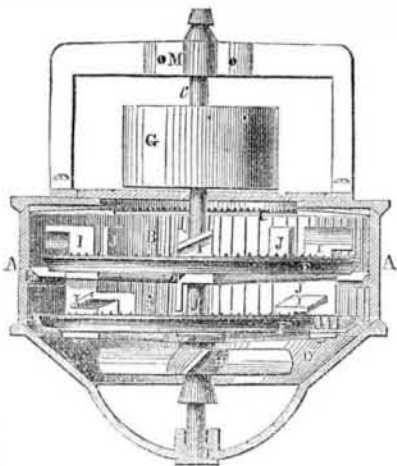
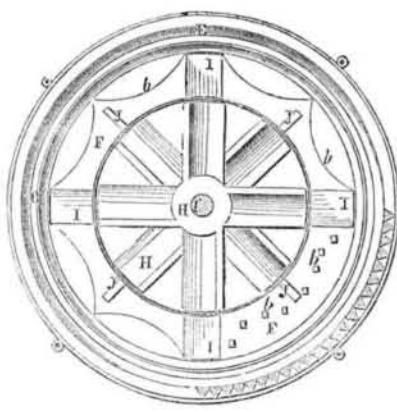


Figure 2.



The accompanying engravings are views of an improved machine for scouring grain and separating all impurities from it. The inventor is H. L. Fulton, of Chicago, Ill., who has taken measures to secure a patent for the same. Figure 1 is a vertical transverse section, and fig. 2, is a horizontal section looking downwards. The same letters of reference indicate like parts. A is a case formed of prismatic bars with small spaces between them, for the dust, &c., to pass through. B B show the prismatic form of these bars. C is a top plate, having its underside formed of prismatic bars. F F are dish or concavo-shaped plates, the one placed above the other, and secured on the shaft, c, by a collar. These dish-shaped plates are cast with projections, b b, on their surfaces, as seen in fig. 2, also with inclined fans, I I, and upright arms, J J; both plates are formed alike. There is a rim which stands up around on each plate, F, a short distance from where the shaft, c, passes through, thus leaving a space through the centre of the machine; this rim, upon each plate makes the grain pass over from the centre to the circum-

ference on the concave rough surfaces thus making it move over the greatest space. M is the top journal box of the shaft, and L is the lower one; D is the inclined passage for the grain to pass out below, after it has been operated upon, and is thoroughly cleaned. H is a spiral blower, which takes in a current of air, and drives all the light impurities, dust, &c., up and out through the spaces between the prismatic bars, B, which form the case, A. The grain is fed on to the top dish-shaped plate, F, by a hopper at the one side, on the top; the inclined beaters, I, receive and throw it up against the bottom of the serrated top plate, C, thus beating it, to break smut balls &c.; it is also acted upon by the projecting arms, J J, and teeth, b b, and scoured on its passage to the edge of the said dish-shaped plate. When it passes over the edge it is directed to the centre of the lower dish-shaped plate, F, by a concentrating inclined bevel ring, E, which is secured on the inside of the bars of the case. The action of the second concavo-plate, F, upon the grain, is like that of the upper plate, F, the centrifugal action of

the revolving plate, makes the grain pass from the centre to the circumference, rotating, and rubbing against the rough projecting surfaces, and it at last passes over perfectly cleaned, down the inclined outer passages, D, to the receptacle below. G is a pulley for driving the shaft, c, by a band from any prime mover, so as to give motion to the fan, H, and the dish-shaped plates, F F.

There are a number of good points about this machine; the case being formed of prismatic bars, allows of it being made light and strong, and at the same time the dust, &c., whenever it passes outside through the spaces between the bars, drops down at once, for there is a partial vacuum formed on the outside, by the entrance to the spaces being funnel-shaped both ways, which contracts the current, and then allows it to expand outside. The dish-shaped plates, F F, and their peculiar construction and action, are good and new features in this machine. It is simple, being all made of cast-iron, and it is not liable to break or wear out.

More information may be obtained by letter addressed to the inventor.

Poison Ivy.

Bro. Z. Breed, of Weare Centre, writes us that, from his own repeated trials, there is no remedy so sure and speedy for curing the poison of common ivy, as that rendered by simply chewing tender leaves of the plant itself. Many poisons that wound externally are quite innocuous when taken internally; and some have a counteracting influence. This is the case with ivy without doubt. Bro. Breed is a man whose word can be relied upon, and we recommend our friends, at this season when so many opportunities are offered, to give it a fair trial.—[New-England Farmer.

The challenge of the American shipbuilders has been published in the London papers; we do not believe it will be accepted. Will the English shipbuilders—the reputed rulers of the seas—acknowledge *beat* decently, or accept of it at once?