

H. RODES.
Plaster Sower.

No. 81,410.

Patented Aug. 25, 1868.

Fig. 1.

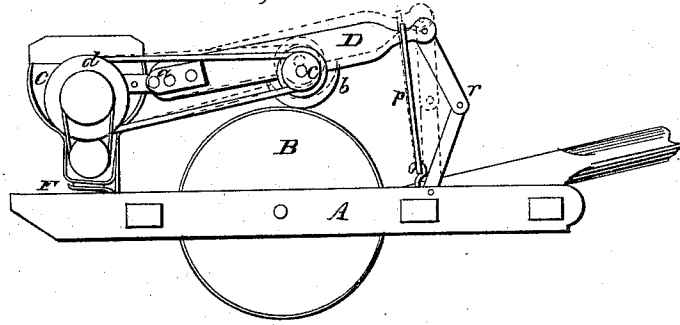


Fig. 3.

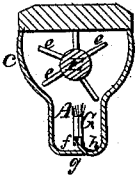
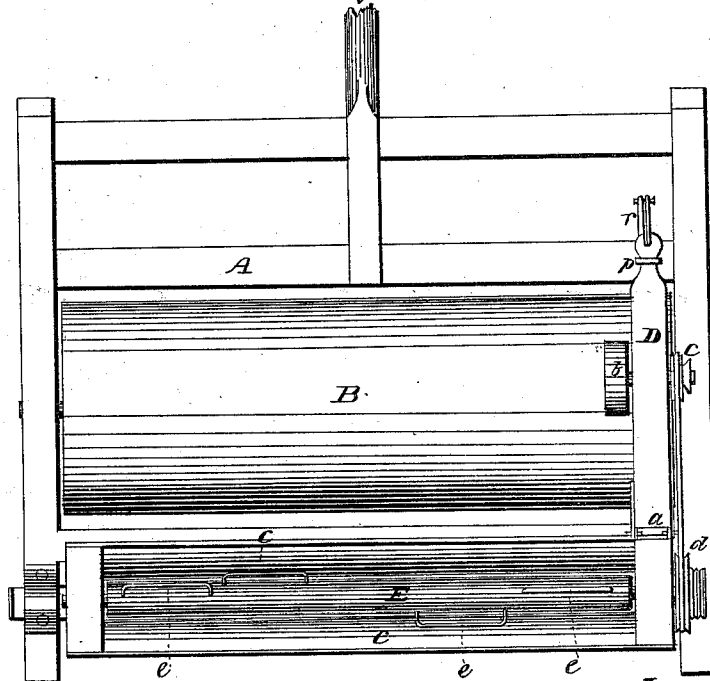


Fig. 2.



Witnesses:

J. R. Drake

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Inventor:

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United States Patent Office.

HENRY RODES, OF CLARENCE CENTRE, NEW YORK.

Letters Patent No. 81,410, dated August 25, 1868.

IMPROVEMENT IN PLASTER-SOWER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, HENRY RODES, of Clarence Centre, in the county of Erie, and State of New York, have invented certain new and useful Improvements in Plaster-Sowers; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is an end elevation.

Figure 2 is a plan.

Figure 3 is a transverse vertical section of the hopper and its adjuncts.

Like letters of reference indicate corresponding parts in all the figures.

My invention relates to the hopper, having a lifter or stirrer provided with wire loops extending spirally around the shaft, and having also the edges of the discharge-holes in the bottom turned up opposite the motion of the sweeping-brush, which is situated intermediate with the lifter and holes. It further consists in the arrangement of parts for imparting motion to the lifter and brush, as hereinafter set forth.

In the drawings, A indicates the main frame, B a field-roller running therein, and C the hopper.

Attached to one end of the hopper is a bar or arm, D, hinged at *a*, which projects over the roller.

A friction-roller, *b*, is attached to the inside of this arm, and, running on large roller B, gives motion to a pulley, *c*, on the outside of the arm, which is connected by a chain or band to a pulley, *d*, which revolves the shaft of the stirrer or lifter E inside the hopper.

This lifter is provided with a series of eyes or loops, *e e e*, of wire, arranged spirally around the shaft, as clearly shown.

The outer end of the arm D is held down by elastic band *p*. With it is also connected a toggle, *r*, which, by straightening, serves to raise the friction-gear from contact with the roller.

The bottom of the hopper is cut into narrow openings, *g g*, running crosswise of the hopper. The inner edge of each opening is turned up, presenting a raised flange, as shown at *h*, which comes in contact with the expelling-brushes, *f f*, of shaft G as the latter turns. These flanges are formed by simply bending up the edges of the holes.

F is the ordinary graduating slide at bottom of hopper.

The brush-shaft is operated by a pulley, *j*, outside the hopper, and revolved by a band or chain from pulley *d*.

The great advantage in the arrangement of the hopper, as above described, consists in the use of the lifter or stirrer E and the turned-up edges, *h h*, of the discharge-holes.

Plaster is of a very heavy and damp nature, and has a tendency to pack in the hopper, so as to impede the brush.

The loops *e e* cut into the body of the plaster and raise the mass up bodily from the brush, and, by their sifting action in passing around, always keep it light and in just such condition as to be acted on and expelled easily. The spiral arrangement of the loops around the shaft greatly assists in producing this result. Simple radial pins or arms would not accomplish this result, as they work only in a plane.

The turned-up edges, *h*, of the discharge-holes, by standing opposite the motion of the brush, catch the plaster as it is carried around and force it out beneath. Were it not for these, the plaster would be carried around in a solid mass, and be very imperfectly discharged.

The combined use of the loops *e* and raised edges *h*, in connection with the brush G, insures a very effective and equal spread of the plaster upon the ground.

The arrangement of the hinged arm D with band *p* and toggle *r* is of great value in practical operation, as it serves to engage and disengage the gearing in the simplest and most expeditious manner. The band holds the gear *b* firmly in contact with the roller, and to disengage it at once, it is only necessary to straighten the toggle, as shown in red lines.

What I claim as my invention, and desire to secure by Letters Patent, is—

The arrangement, in connection with the intermediate brush G, of the lifter E, provided with the spiral loops *e e*, situated above, and the raised edges *h h* of the discharge-openings situated below said brush, the whole operating in the manner and for the purpose specified.

I also claim the hinged arm D with holding-band *p* and elevating-toggle *r*, and serving, with gear *b*, to give motion to the parts in the hopper, as set forth.

In witness whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

HENRY RODES.

Witnesses:

J. R. DRAKE,
ALBERT HAIGHT.