(Model.)

# E. D. MEAD.

## GRAIN DRILL DISTRIBUTER.

No. 251,058. Patented Dec. 20, 1881.

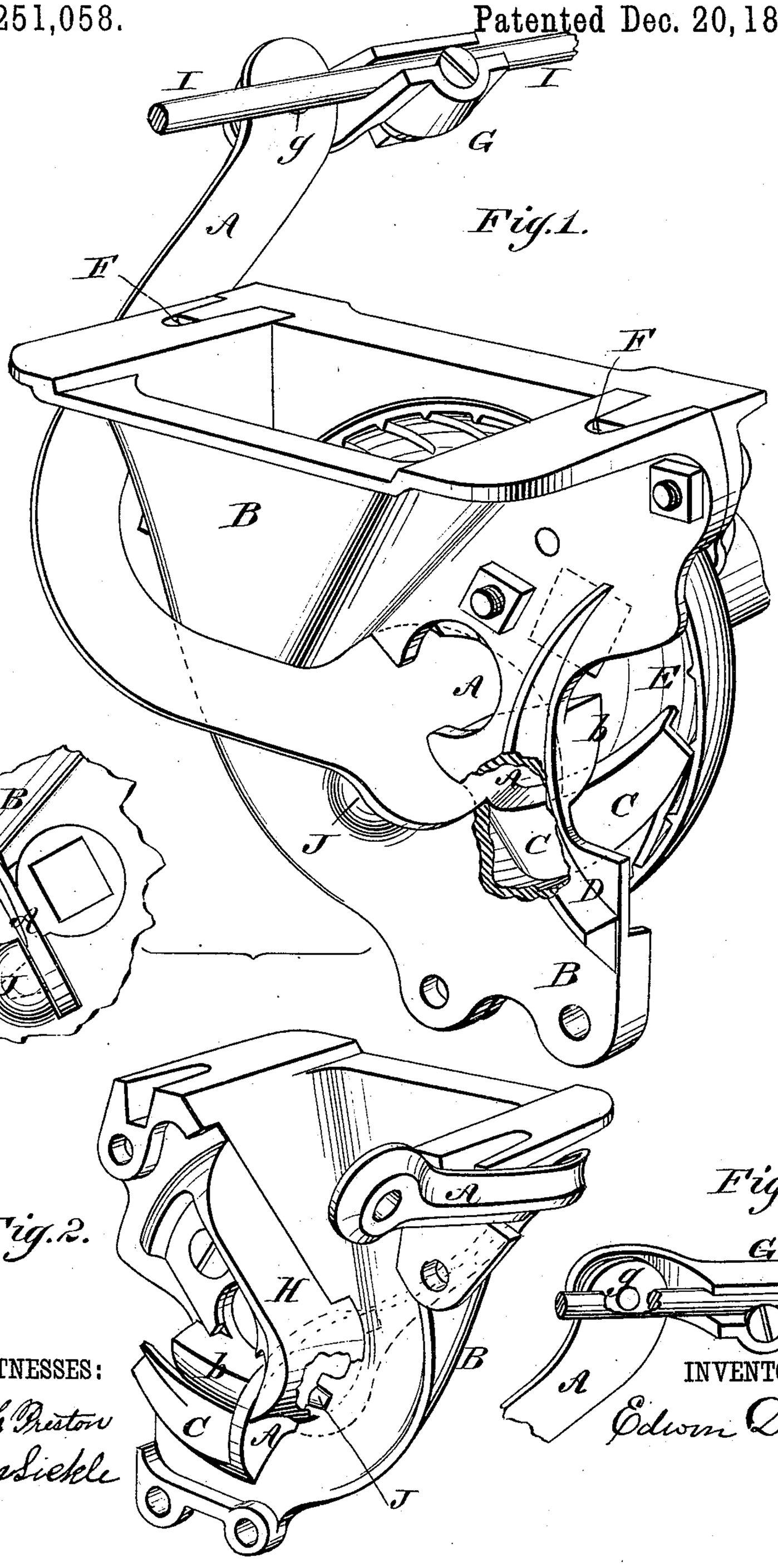
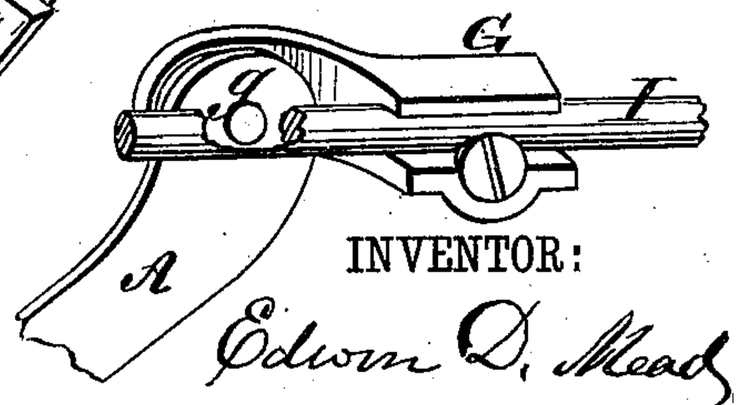



*Fig. 1.*




*Fig. 2.*

*Fig. 3.*




WITNESSES:

Geo. H. Preston

G. VanSickle

INVENTOR:

Edwin D. Mead

# UNITED STATES PATENT OFFICE.

EDWIN D. MEAD, OF SHORTSVILLE, NEW YORK.

## GRAIN-DRILL DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 251,058, dated December 20, 1881.

Application filed April 13, 1881. (Model.) Patented in Canada January 15, 1881.

*To all whom it may concern:*

Be it known that I, EDWIN D. MEAD, of Shortsville, in the county of Ontario, State of New York, have invented certain new and useful Improvements in Grain-Drill Distributers; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to certain improvements in that class of grain-drill distributers provided with a pivoted gate set to move at right angles, or nearly so, to the pivot or axle of the feed-wheel, or crosswise the discharge-cavity of the distributer, and has for its object, first, to carry the grain in a confined channel, after it passes the cut-off point of the gate or regulator, until it reaches the discharge-orifice, in order that it shall not roll back and pass off in bunches; second, to provide an improved device for hanging the gate or regulator in order that its action may be more perfect; third, to provide a pivot or socket-clamp for the purpose of connecting the end of the gate-levers in a series on a drill, which move parallel, or nearly so, with the sides of the hopper or grain-box to a rod moving endwise, to avoid drilling holes in the rod for a pivot, and also that it may be more accurately adjusted in setting up a machine.

Figure 1 is a perspective view of the distributer, with a portion of the case broken away to show the gate A in the interior, with my improvement C, and it also shows the point J at which the gate is pivoted. Fig. 2 is a detail, showing the partition H and its manner of inclosing the gate. Fig. 3 shows the end of lever A, the pivot-clamp G, and how it is fastened to the connecting-rod I.

In that class of grain-drill distributers to which I have added my improvement the grain sometimes gathers in the feed-wheel E after it passes the regulator or cut-off A, which grain, when so collected, is jolted out of the feed-wheel in bunches when the machine passes over rough ground, thereby making an irregular feed. To overcome this fault I cast or otherwise form upon the gate A a projecting arm or lip, C, which constitutes an adjustable side of a grain-channel leading from the gate A to the discharge-orifice, which channel, by conducting the grain to the point of discharge, prevents it from accumulating in the feed-wheel. The pivot of the gate A, which is shown at the point J, rests in a half-socket in the case B and a half-socket in the partition H. This partition is bolted or otherwise fastened to the case B, as shown. Besides forming the bearing for the pivot of the gate A, this partition may form or not, as desired, one side of the grain-channel leading to the gate A. I do not wish to confine myself to a socket in the case and partition and a pivot on the gate; but it may be vice versa.

The case B is provided with a rounded projection, *b*, shaped to correspond with the circle described by the lip C when the gate is moved. This also forms one side of the discharge-cavity.

By pivoting the gate A on the case B and holding it in position by the partition H, as described, I not only secure advantages which facilitate the manufacture of the distributer, but pivot the gate in such a manner that the channels are alike in a series and their motion is made uniform, avoiding all possibility of its getting out of place.

The pivot-clamp G is constructed with a pivot at one end to pass through a hole, *g*, in the lever A, (or there may be a hole in the clamp and a pivot on the lever,) and at the other end is a groove on a line with the pivot, of the size of the connecting-rod I. On the side of the groove, and opening into it, is a tapering hole, the large end the size of a bolt-head. The pivot-clamp is put on the rod, and a bolt with a tapering head is put into the hole from the side of the rod, and a nut put on the opposite side and screwed down tight, wedging the rod firmly in the groove, securing the advantage of not drilling any holes in the rod for a pivot, and also securing a pivot which can be nicely adjusted and still hold the lever firmly to the rod and give it a free movement.

In Fig. 1 it will be observed at points F F, where the back of the distributer, with its projections, enters a corresponding cavity in the case B, are holes left to fasten the distributer to the hopper or grain-box. By this I not only secure the back firmly in one position when bolted, but always make the holes in the same place, so that the boring can be done by pattern in the hopper; and it also lessens the cost of manufacturing by saving the drilling.

What I claim as my invention is—

1. In that class of grain-drill distributers

provided with a gate pivoted at right angles, or nearly so, to the pivot or axle of the feed-wheel and moving crosswise of the feed-channel, a projecting arm or lip, C, forming a part of the gate A, substantially as and for the purpose specified.

2. In that class of grain-drill distributers provided with a gate pivoted at right angles, or nearly so, to the pivot or axle of the feed-wheel, in combination with the projecting arm or lip C, a rounded projection, *b*, cast or otherwise fastened on the case B, substantially as and for the purpose specified.

3. In a grain-drill distributer, a detachable partition, H, in combination with the case B, forming a pivot for the gate A, substantially as and for the purpose specified.

4. In a grain-drill having a series of distributers with pivoted gates, these gates having levers pivoted to a connecting-rod, said rod moving endwise alongside of the hopper, a pivot-clamp to make the pivoted connections between the rod and the levers, substantially as and for the purpose specified.

5. In a grain-drill distributer, the combination of the case B, having prolonged cavities, and the back portion, having corresponding projections, or vice versa, whereby screw-holes F are formed to fasten the distributer to the hopper, substantially as and for the purpose specified.

EDWIN D. MEAD.

Witnesses:
ABIAL ALLEN,
N. K. COLE.