

No. 668,341.

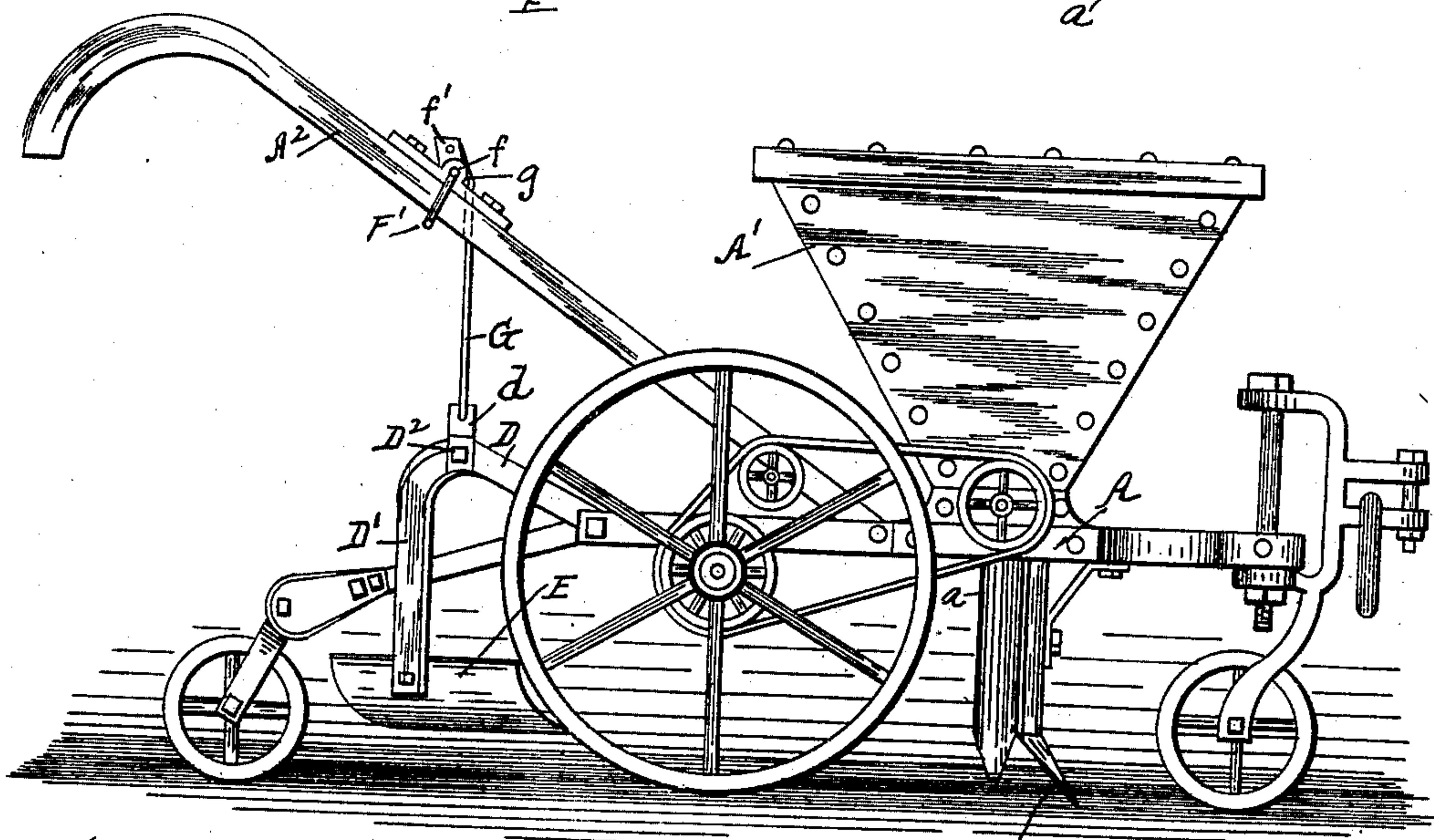
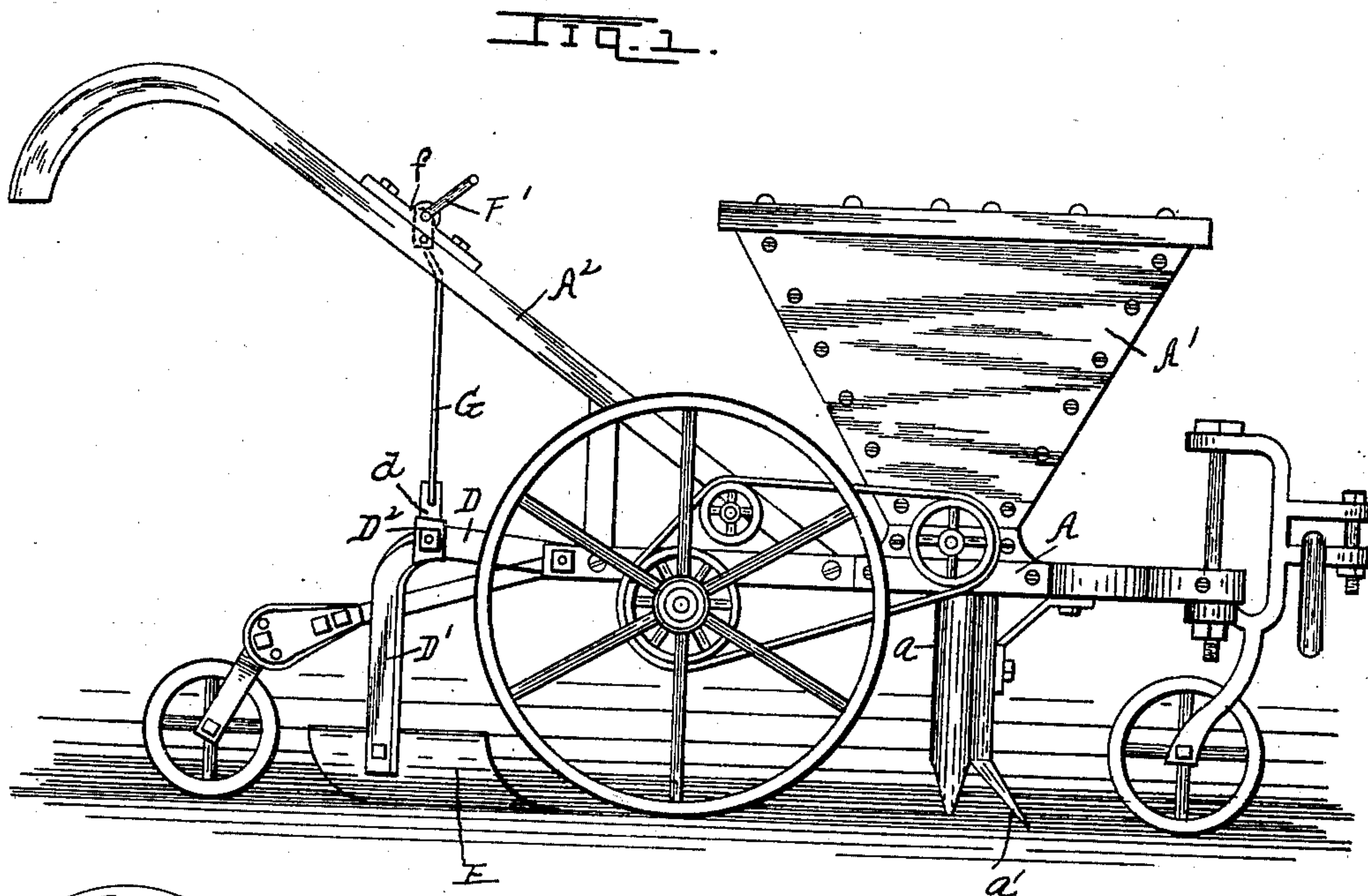
H. REITZ.
COVERER.

Patented Feb. 19, 1901.

(No Model.)

(Application filed Oct. 4, 1900.)

2 Sheets—Sheet 1.



WITNESSES,
H. H. W. Grimmer
C. G. Bassler.

Fig. 2.

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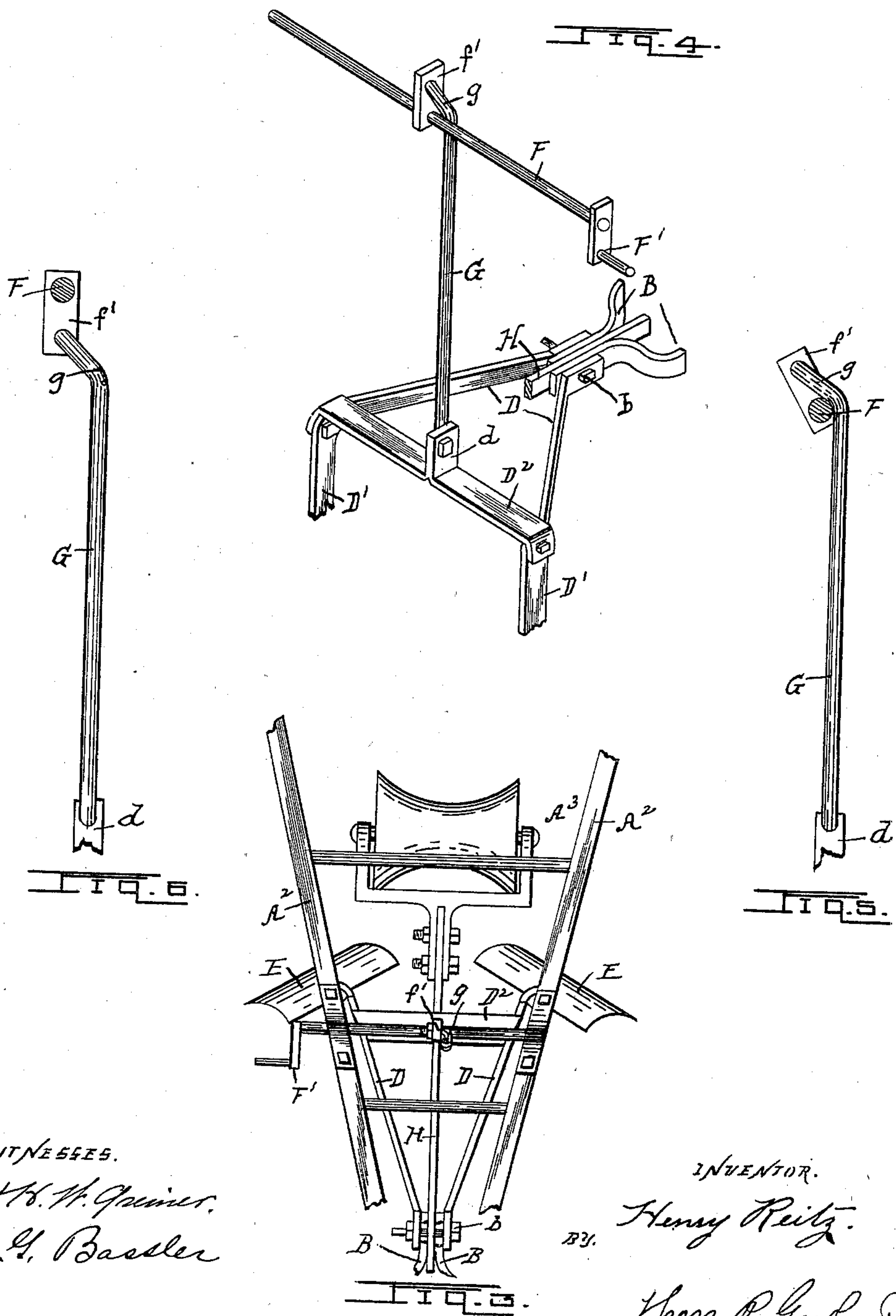
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UNITED STATES PATENT OFFICE.

HENRY REITZ, OF NEAR TERRE HILL, PENNSYLVANIA.

COVERER.

SPECIFICATION forming part of Letters Patent No. 668,341, dated February 19, 1901.

Application filed October 4, 1900. Serial No. 32,003. (No model.)

To all whom it may concern:

Be it known that I, HENRY REITZ, a citizen of the United States, residing near Terre Hill, in the county of Lancaster and State of Pennsylvania, have invented certain Improvements in Coverers, of which the following is a specification.

This invention relates to improvements in that class of devices designed for covering earth over the deposit from a drill, being intended more particularly for use with fertilizer-sowers; and the object of my improvement is to provide a simple and convenient device by which the operator can control the covering-shovels.

The invention consists in the construction and combination of the various parts, as hereinafter fully described and then pointed out in the claims.

In the accompanying drawings, which form a part of this specification, Figure 1 is a side elevation of a fertilizer-sower having a device embodying my invention attached thereto, the covering-shovels being shown in an operative position; and Fig. 2, a similar view, but showing the covering-shovels in an elevated position. Fig. 3 is a top plan view of so much of the fertilizer-sower as will show my invention; Fig. 4, a rear perspective view of my device for operating the covering-shovels; Fig. 5, a side view of the connecting-rod, showing the same in the position occupied thereby when the covering-shovels are raised from the ground; and Fig. 6, a similar view, but with the connecting-rod in the position occupied thereby when the covering-shovels are lowered.

Similar letters indicate like parts throughout the several views.

Referring to the details of the drawings, A indicates the side bars of a frame of a fertilizer-sower; A', the hopper; A², the handle-bars; A³, the rung connecting the handle-bars; α , the tube through which the fertilizing material is deposited in the furrow, and α' the share located in front of tube α .

B indicates inwardly-extending arms attached to the inner faces of side bars A and behind hopper A'. To the meeting ends of arms B are pivotally secured by a bolt b outwardly and backwardly flaring arms D, the outer ends D' whereof are curved downward

and carry on their lower extremities shovels E, adapted to cover with earth the fertilizer sown through planting-tube α . Where arms D curved downward, they are united by a cross-bar D², which has on its center an upright lip d .

F indicates a rock-shaft journaled in bearings f on handle-bars A², having on one end a crank F', and on the center of rock-shaft F is a short arm f' .

G indicates a connecting-rod or hanger having its lower end pivoted to lip d of cross-bar D². The upper end g of said connecting-rod curves backward and is pivotally secured in arm f' of rock-shaft F.

Covering-shovels E are raised and lowered through rock-shaft F and connecting-rod G, and the relation of the parts is such that when said shovels are in an elevated position arm f' of rock-shaft F is thrown back at such an angle that the connection between said arm and curved end g of connecting-rod G is behind the axis of rock-shaft F, whereby said shovels are automatically maintained in an elevated position. To lower covering-shovels E to an operating position, rock-shaft F is revolved in its bearings by means of crank F'. The shovels E are again raised by reversing the movement of crank F' and rock-shaft F. Said crank F' is within convenient reach of the operator who controls the movement of the fertilizer-sower. A roller is also connected with arms B through bolt b by a bar or tongue H, and this roller compacts the soil thrown up by the covering-shovels, as is usual.

I do not restrict myself to the details of the construction herein shown and described, as it is obvious that many alterations may be made therein without departing from the principle and scope of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a drill, of a shovel disposed behind the planting-tube, a rock-shaft located above the shovel, a hanger connected with the shovel, and a connection between the hanger and the rock-shaft and adapted to be thrown over the axis of said rock-shaft when the shovel is elevated, for the purpose specified.

2. The combination, in a drill, of a shovel

disposed behind the planting-tube, a rock-shaft located above the shovel, an arm on the rock-shaft, a rod connected through a pivot with the shovel, a curved upper end on the rod and adapted to take over the axis of the rock-shaft when the shovel is elevated, and a pivot connection between the curved upper end of said rod and the arm on the rock-shaft, for the purpose specified.

10 3. The combination, in a drill, of backwardly-flaring arms having a pivot connection between their front ends and the drill-frame, shovels on the free ends of the flaring arms and disposed in rear of the planting-

15 tube, a cross-bar uniting the flaring arms, a lip on the cross-bar, a rock-shaft above the

cross-bar, an arm on the rock-shaft, a rod having one end pivoted to the lip on the cross-bar, a curved upper end on the rod and adapted to take over the axis of the rock-shaft when the shovel is elevated, and a pivot connection between the curved upper end of said rod and the arm on the rock-shaft, substantially as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY REITZ.

Witnesses:

AUGUSTUS HOFFMAN,
JOHN C. MARTIN.