

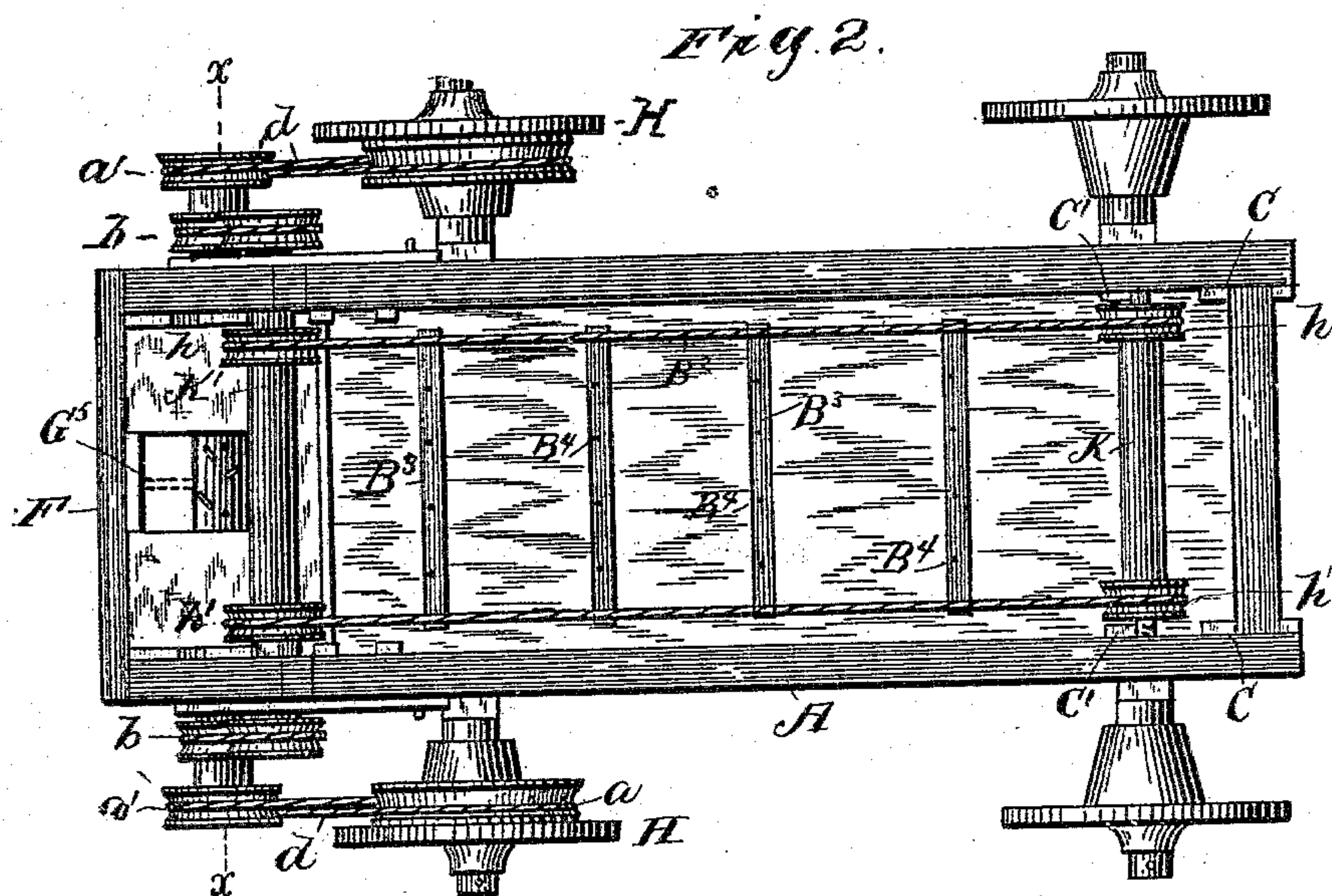
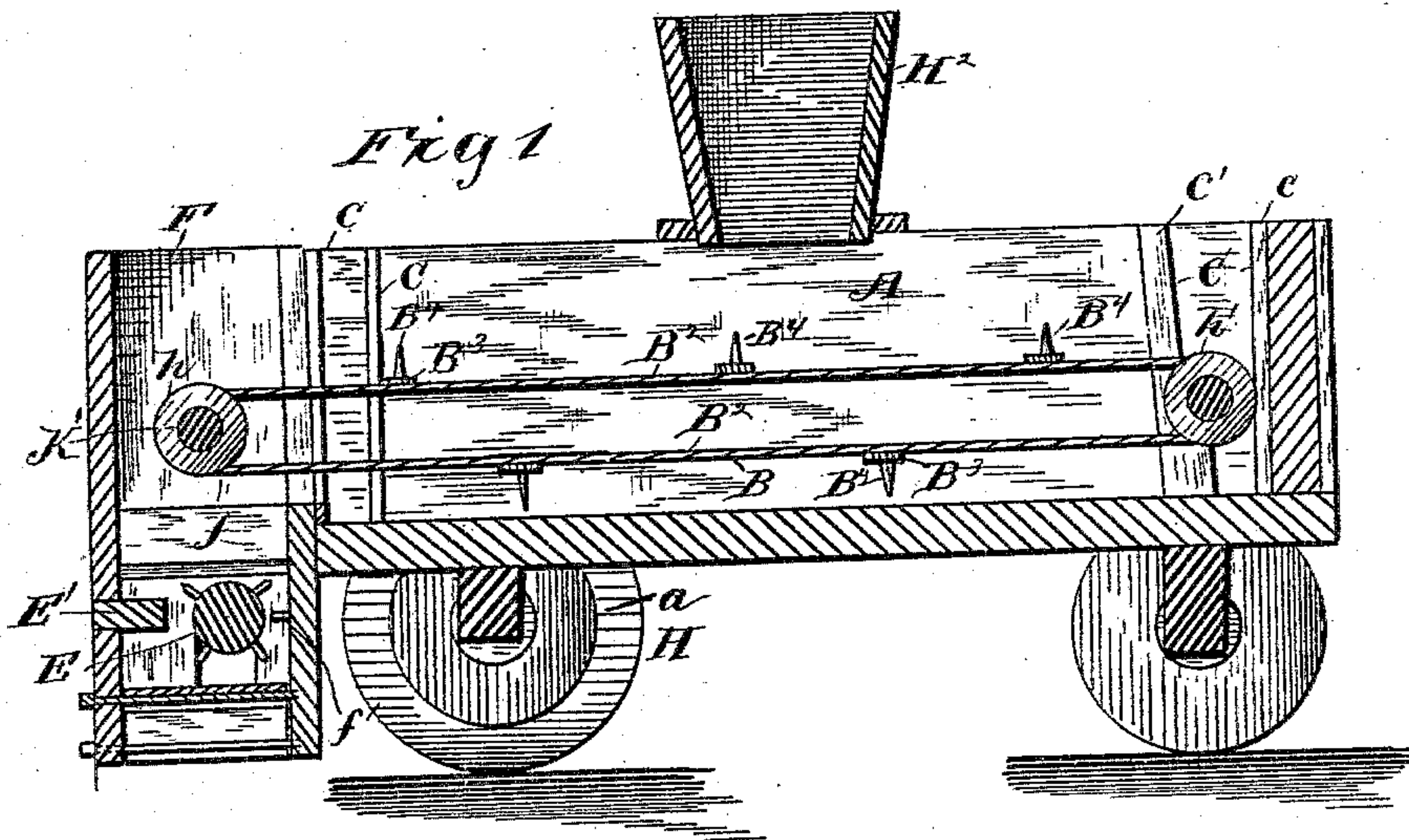
(No Model.)

2 Sheets—Sheet 1.

G. W. HARKEY.
FERTILIZING MACHINE.

No. 295,387

Patented Mar. 18, 1884.



WITNESSES
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Geo. H. Harvey

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2 Sheets—Sheet 2

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Fig 3.

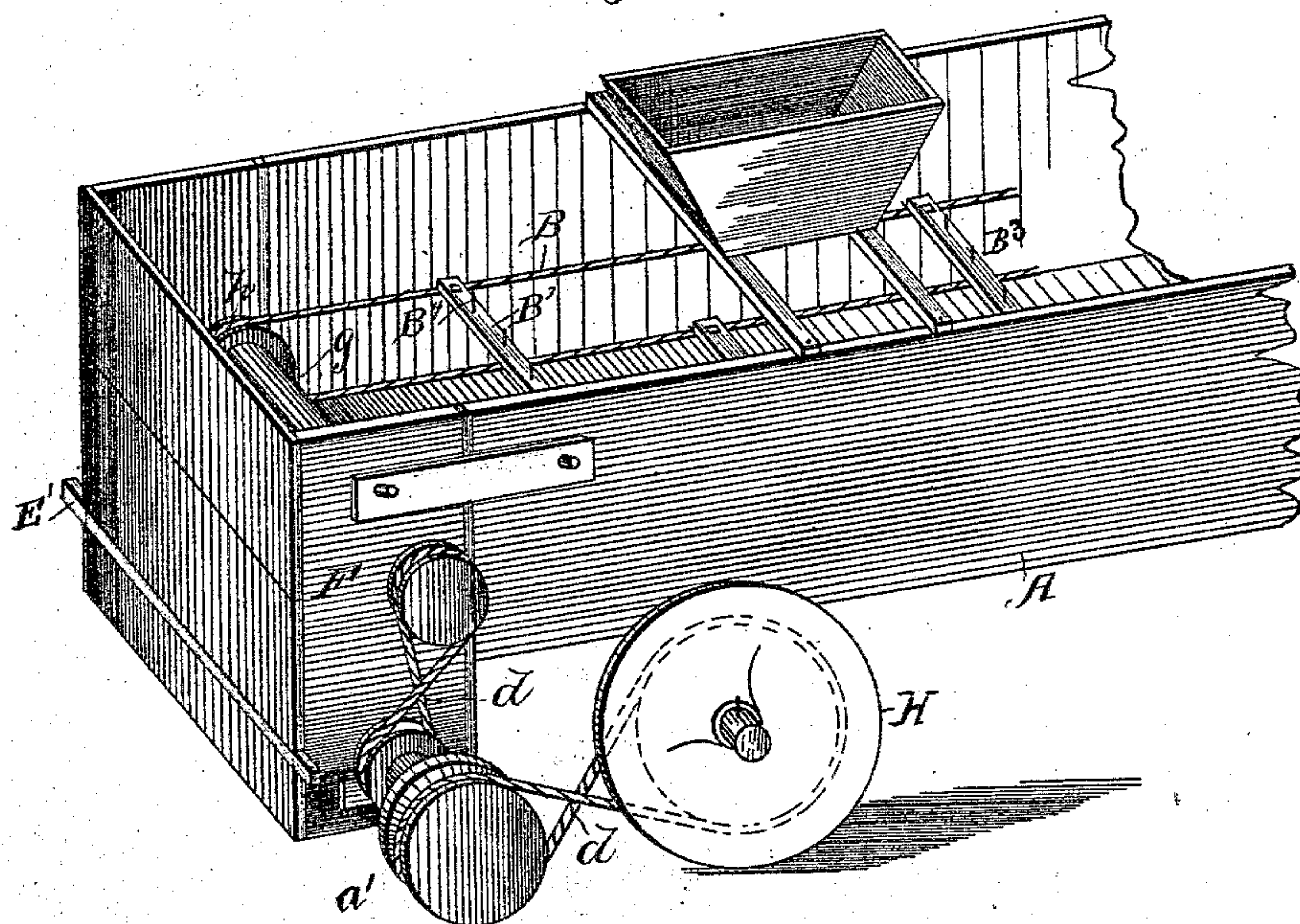
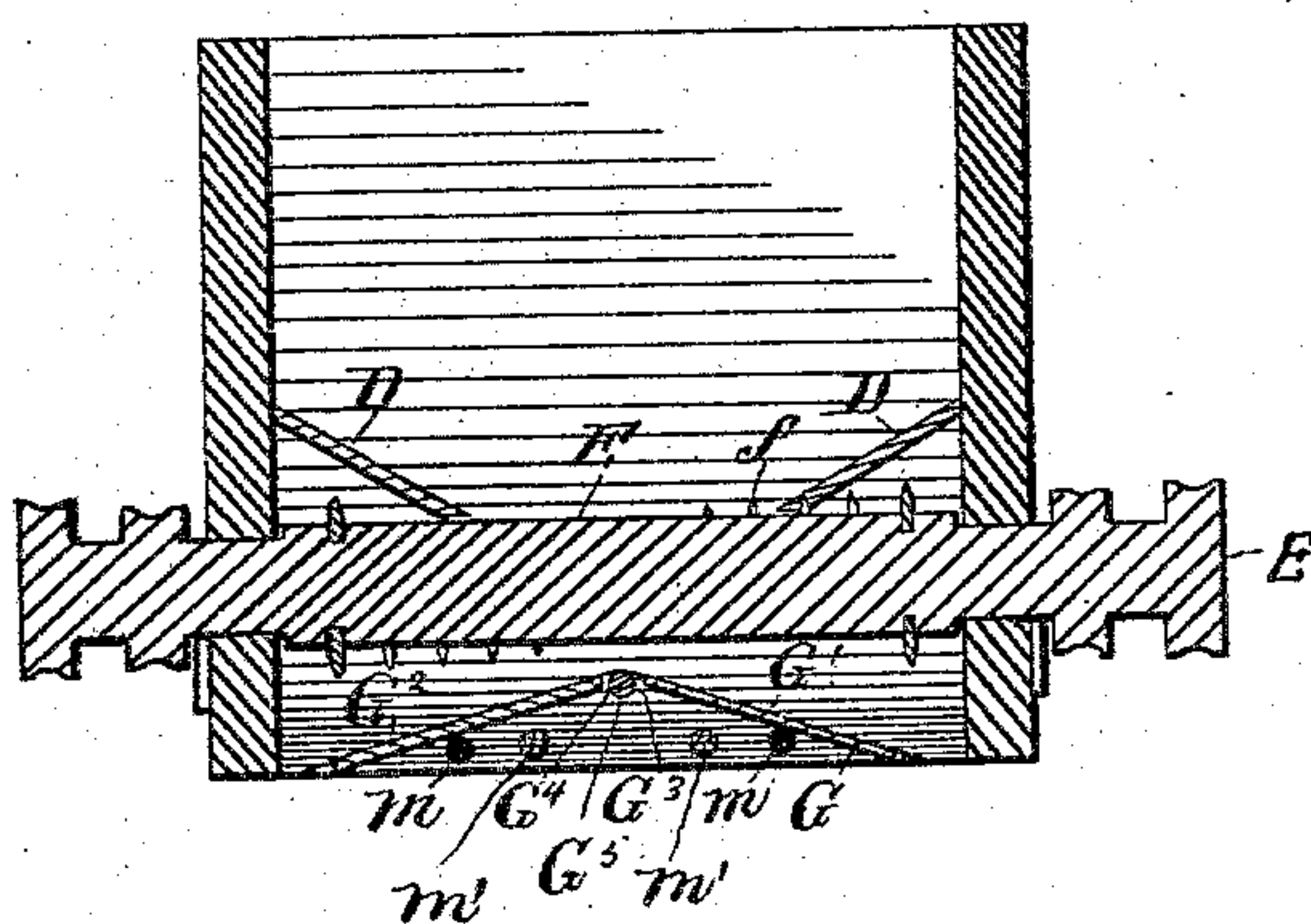


Fig 4.



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UNITED STATES PATENT OFFICE.

GEORGE W. HARKEY, OF MATTHEWS, NORTH CAROLINA.

FERTILIZING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 295,387, dated March 18, 1884.

Application filed November 20, 1883. (No model.)

To all whom it may concern:

Be it known that I, G. W. HARKEY, a citizen of the United States of America, residing at Matthews, in the county of Mecklenburg and State of North Carolina, have invented certain new and useful Improvements in Fertilizing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improvement in fertilizing-machines; and it consists in the wagon A, apron B, guides C, fenders D, pulverizing-shaft E, having pins f' , pulverizing-bar E' , annex-frame F, chute G, actuating-wheels H, in connection with pulleys a , a' , and b , belting or cord d , and in the combination and arrangement of the parts, substantially as hereinafter more fully shown and described.

In the drawings, Figure 1 is a sectional side elevation. Fig. 2 is a plan view. Fig. 3 is a perspective; and Fig. 4 is a section on the line $x x$, Fig. 2.

In the construction of my fertilizing-machine I attach to the rear end of a wagon-body an annex or frame, F, which serves in part as the bearings of the pulley-axle K' of apron B, having pulleys h and h' , and of the shaft E.

The apron-cloth, which is secured, as customary, on its frame, is omitted in the drawings, in order the more clearly to show bars B^3 and pins B, which are connected with the apron.

The pulley-axle K of apron B is secured in position by means of the guides C, the inner guide-bars, C' , thereof being inclined or curved to admit insertion of pulley-axle K after the other corresponding axle of the apron has been secured in the walls of the annex-frame F. Apron B has also the coincident pulley-axle K' , carrying the pulleys h and h' , the belting or bands B^2 , as usual, and also the transverse bars B^3 , secured thereto, which bars have the rake-pins B^4 to carry rearward to fenders D such fertilizer as may be spilled on the floor of the wagon; hence by action of the apron B the fertilizer is carried rearward in the wagon and precipitated upon the fenders D, and as the fenders are inclined from the sides of the annex downward toward the center of the pulverizing-shaft E, the fertilizer is thus directed, and is then pulverized between the pulverizing-shaft E, having the pins f , projecting from its periphery, and the pins f' , secured to

annex-frame F, and is also pulverized between the pulverizing-shaft E and the pulverizing-bar E' , which bar is fitted into an opening provided in the rear wall of the annex, as shown, and is sufficiently wide to project on the inside of the annex-wall and near to the ends of the pins f .

The chute G, which consists of the two pieces G^1 and G^2 , connected together by the strap G^3 , which pieces are beveled at G^4 where thus connected together, rests upon the central transverse annex-bar, G^5 , and the wing-pins m .

The operation is as follows: The hopper H^2 is located on the top of the wagon, as shown, and empties upon apron B, and the action of the hind vehicle-wheels carrying the actuating belt-pulleys a , connected by belting with the apron, causes the apron, in passing over its rollers, to carry the fertilizer rearward and to empty it upon the fenders D and upon the pulverizing-shaft E, from which it is in turn projected upon the chute G, and from thence it is directed to the right and left into the furrows or seed-beds, and thus two furrows or beds may be fertilized or manured simultaneously; and in case it is desired to distribute the fertilizer broadcast, the chute, which is removably secured in its position, is withdrawn from the annex-frame.

Having thus described my invention, I claim—

1. A fertilizing-machine consisting of wagon A, having hopper H^2 , annex-frame F, having pins f' , fenders D, shaft E, having pins f , pulverizing-bar E' , chute G, adjustable by pins m in orifices m' , apron B, pulverizing-bar E' , and the actuating mechanism, substantially as shown, and for the purpose described.

2. In a fertilizing-machine, the combination of the wagon A, having hopper H^2 , apron B, having pins B^4 , annex-frame F, having pins f' , fenders D, shaft E, having pins f , chute G, adjustable by pins m in orifices m' , pulverizing-bar E' , and the actuating mechanism, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE W. HARKEY.

Witnesses:

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C. N. G. BUTT.