

(No Model.)

C. A. T. DAY.
SAWDUST CARRIER.

No. 360,762.

Patented Apr. 5, 1887.

Fig. 1.

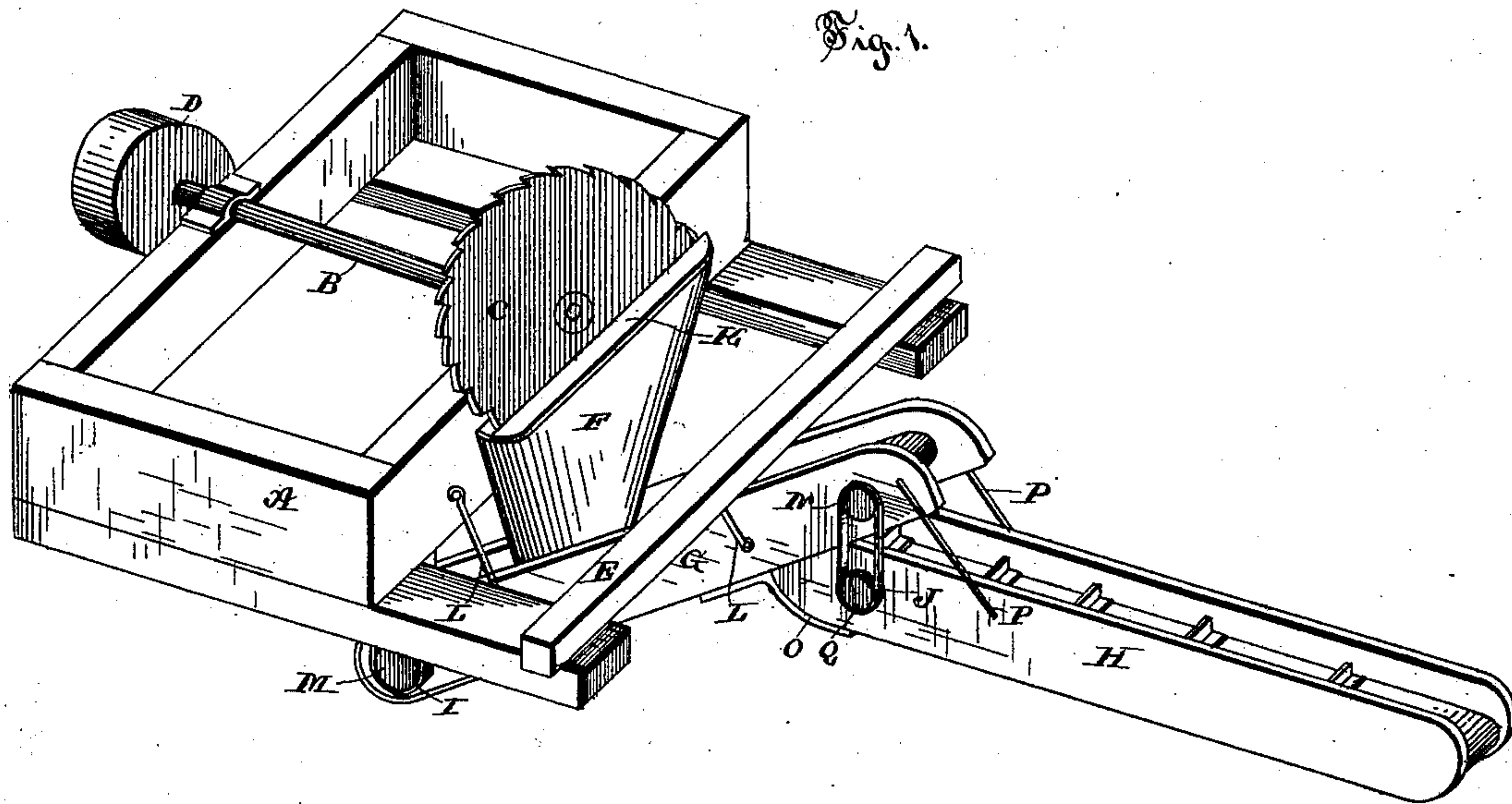


Fig. 2.

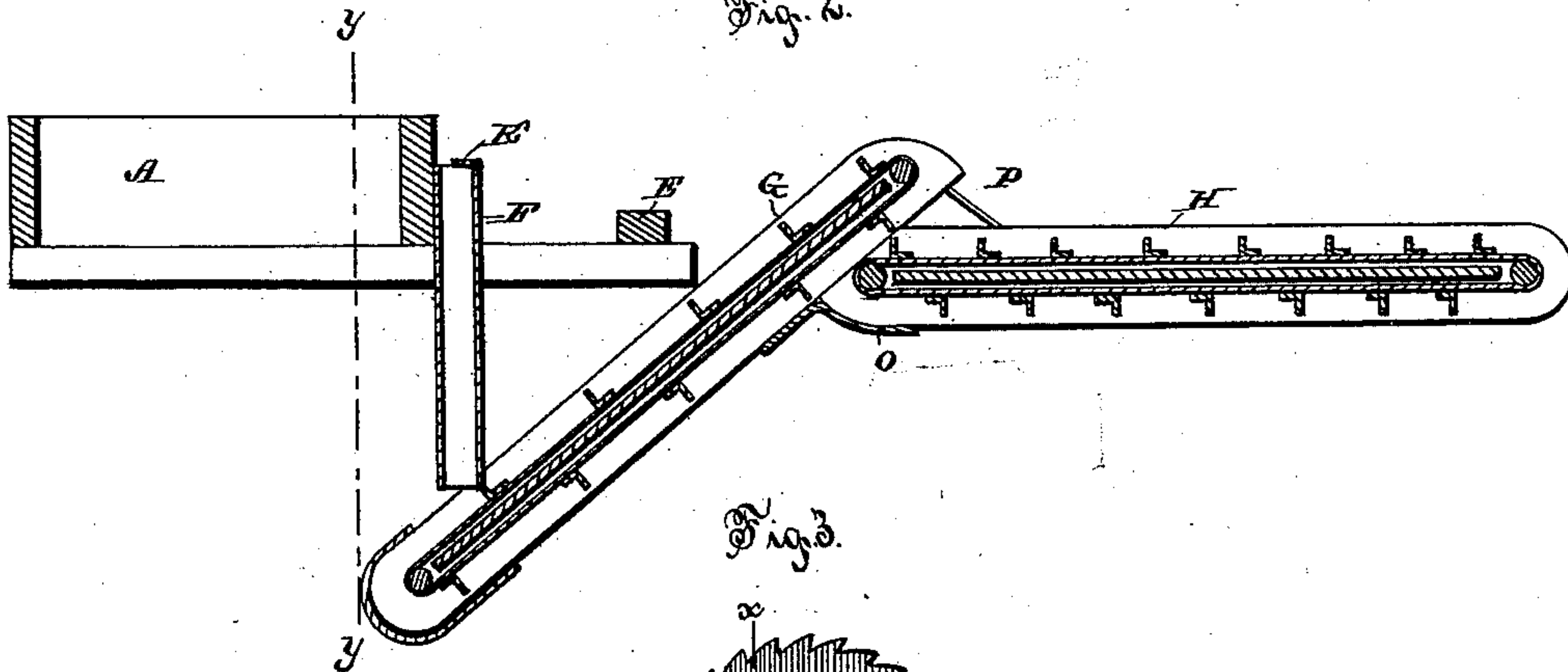
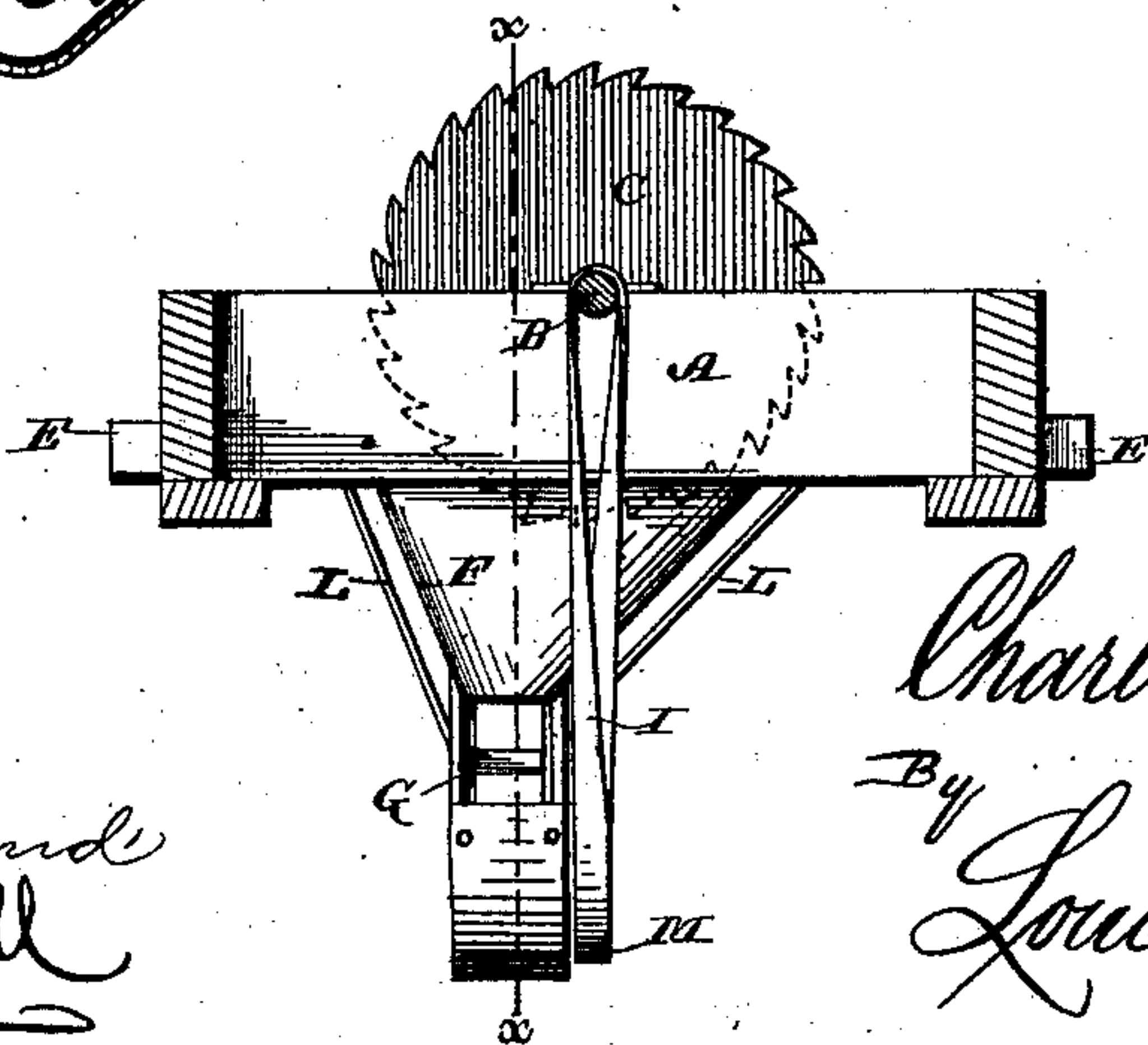


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

CHARLEY A. T. DAY, OF MORGANFIELD, KENTUCKY, ASSIGNOR OF ONE-HALF TO J. E. DANIELS, OF SAME PLACE.

SAWDUST-CARRIER.

SPECIFICATION forming part of Letters Patent No. 360,762, dated April 5, 1887.

Application filed July 24, 1886. Serial No. 208,950. (No model.)

To all whom it may concern:

Be it known that I, CHARLEY A. T. DAY, a citizen of the United States, and a resident of Morganfield, in the county of Union and State of Kentucky, have invented certain new and useful Improvements in Sawdust-Carriers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved sawdust-carrier as used in connection with a circular saw. Fig. 2 is a longitudinal vertical section taken on line *x x* of Fig. 3, and Fig. 3 is a vertical transverse section taken on line *y y* of Fig. 2.

Like letters of reference indicate like parts in the several figures.

My invention has relation to sawdust-carriers; and it consists in the improved construction and combination of parts, as will be hereinafter fully set forth.

The object of my invention is to provide simple, cheap, and efficient means for conveying the sawdust from circular and other power saws. This object I accomplish by means of an endless-apron elevator and a carrier, which receive their motion from the saw-shaft, and which receive the dust from the saw through a chute.

Referring to the accompanying drawings, A represents the saw-frame; B, the saw-shaft journaled upon said frame; C, the circular saw attached to one end of said shaft; D, the drive-pulley secured upon the other end thereof; E, a cross-piece secured at one end of said frame; F, the chute; G, the elevator; H, the carrier; I, the elevator driving-belt, and J the carrier driving-belt.

The chute, which is triangular in shape and incloses the lower portion of the saw, is secured at its upper side to the saw-frame and has its lower angle extended into the elevator near the lower end thereof. A lid, K, is hinged to one of the upper edges of the chute and extends nearly to the saw. Said elevator is secured to the saw-frame in an inclined position by means of

rods L. The lower end of the elevator is inclosed, as usual, and has a pulley, M, upon one end of the shaft carrying the lower endless-apron roller, and another pulley, N, upon one end of the shaft carrying the upper endless-apron roller.

Under the upper end of the elevator, and at a distance below said end, the carrier is secured in a nearly horizontal position by means of the strip O and the rods P. To one end of the shaft carrying the endless-apron roller in the attached end of the carrier is secured a pulley, Q. The elevator driving-belt passes over the saw-shaft, and is given a quarter-twist and passed over the pulley M, thus giving motion to the elevator, whose apron gives motion to pulley N, and the carrier driving-belt passing over said pulley and the pulley Q gives motion to the carrier.

The chute is made large enough to permit the sawdust to pass through it to the elevator without any liability to clog, and then the top is partially closed by a lid, to prevent pieces of bark and splinters from dropping through it into the elevator, and so stopping the latter.

The attached end of the carrier-frame extends back far enough beyond the roller located at that end to give sufficient space for any sawdust which may fail to drop onto the carrier-apron as it falls from the elevator; also to allow such dust being taken up by the cups or slats upon said apron.

The elevator-apron and carrier-apron are of the usual form, being provided with cups or with flanged slats, as shown, according to the situation or location of said elevator and carrier.

The location of the elevator-carrier is such as will provide for placing the lower end of the triangular chute nearly under the back edge of the saw, as it is toward that edge that the dust is thrown by the saw as it cuts through the timber. Said location, also, being a little at one side of the vertical line through the saw-shaft, provides for placing the pulley M directly under said shaft.

Having thus fully described my invention, I claim—

1. The combination, with a circular saw, of a triangular chute inclosing the lower portion

of said saw and a lid partially closing the upper end of the chute, said chute being secured to the saw-frame in such a manner as to place its lower end nearly under the back edge of the saw, substantially as and for the purpose set forth.

2. The combination of the circular saw, the saw-frame, the triangular chute with its lid, the endless-apron elevator secured by rods to said frame in an inclined position and at one side of the vertical line through the saw-shaft, the endless-apron carrier secured in a nearly horizontal position under and at a distance below the upper end of said elevator, the belt

passing over the saw-shaft and around the pulley attached to the shaft of the lower apron-roller of the elevator, and the belt connecting the pulleys, attached, respectively, to the shaft of the upper apron-roller of the elevator and to the shaft of one of the carrier-apron rollers, substantially as shown and described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

CHARLEY A. T. DAY.

Witnesses:

LOUIS CURRY,
J. E. DANIEL.