

No. 670,064.

Patented Mar. 19, 1901.

J. SCHULTE.

BAND CUTTER FOR THRESHING MACHINES.

(Application filed Oct. 5, 1900.)

(No Model.)

Fig. 1.

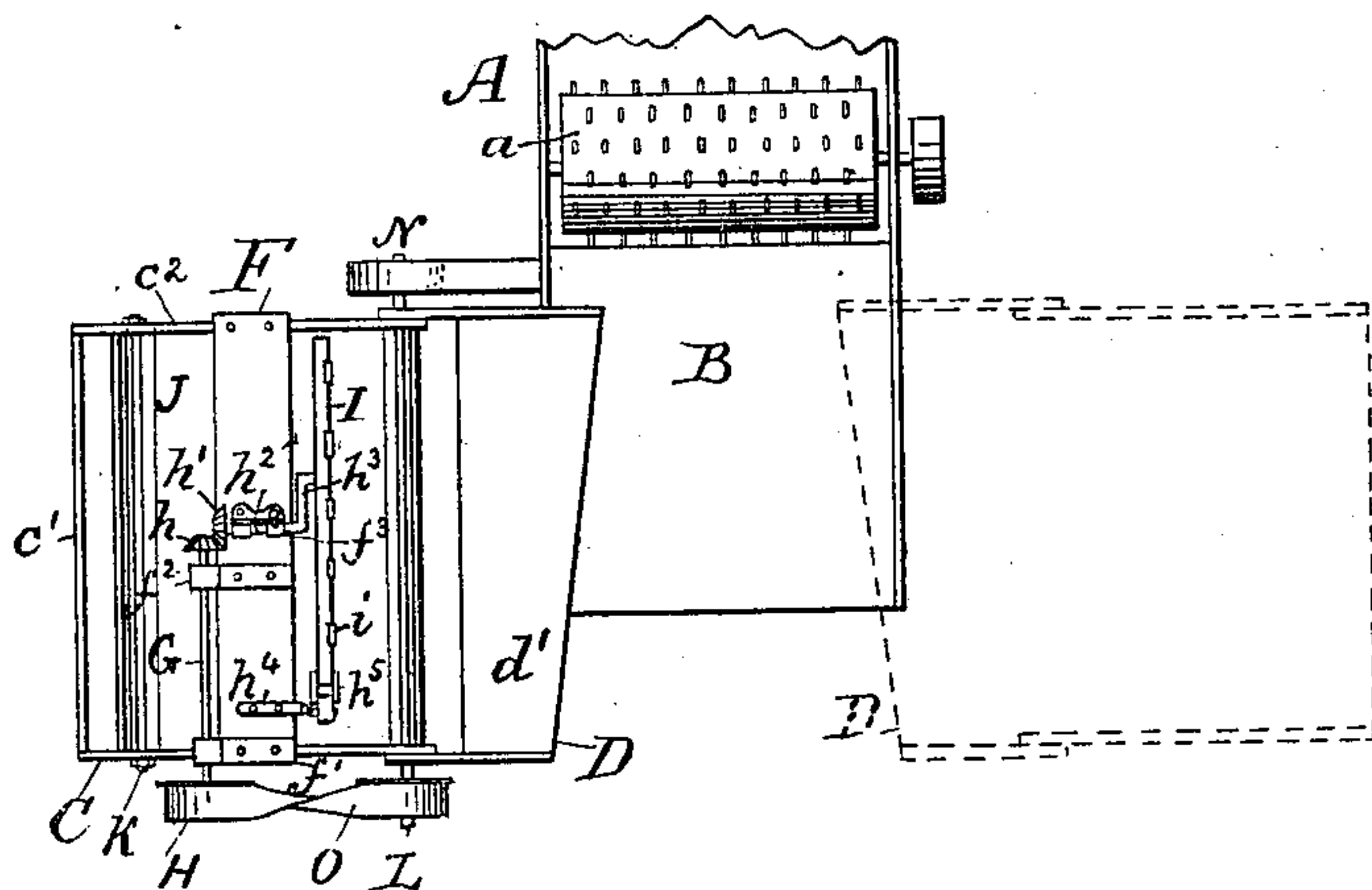


Fig. 2.

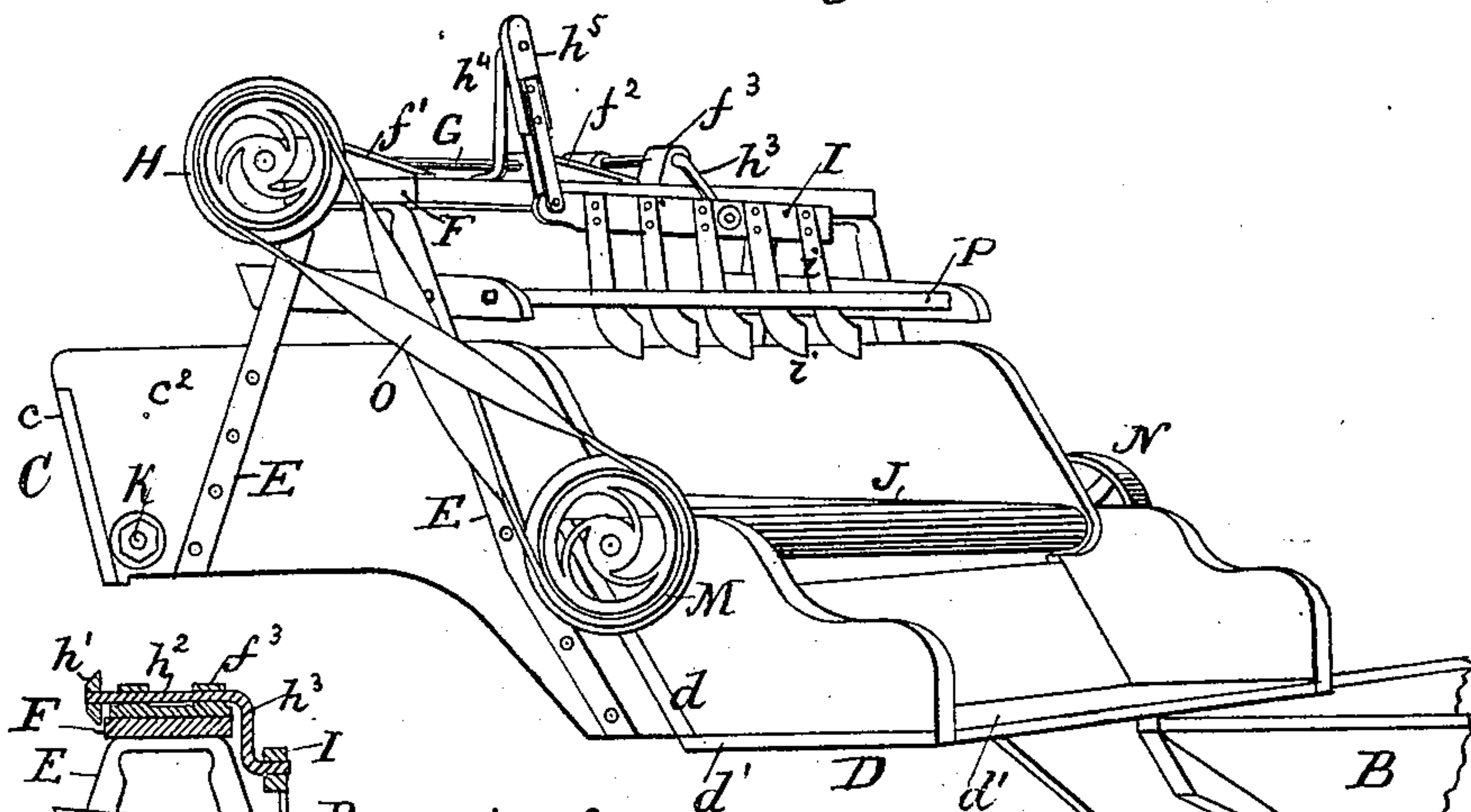


Fig. 3.

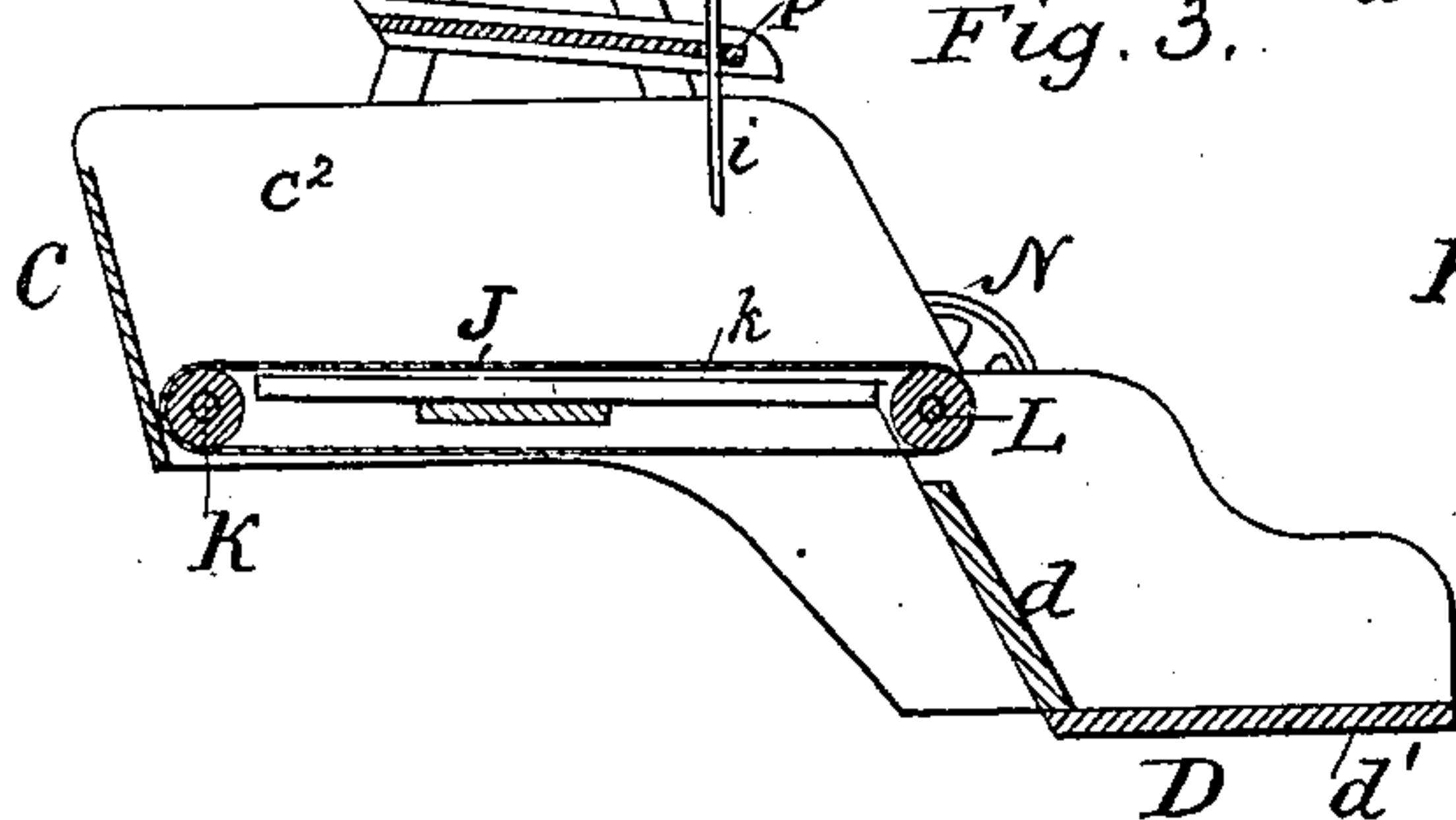
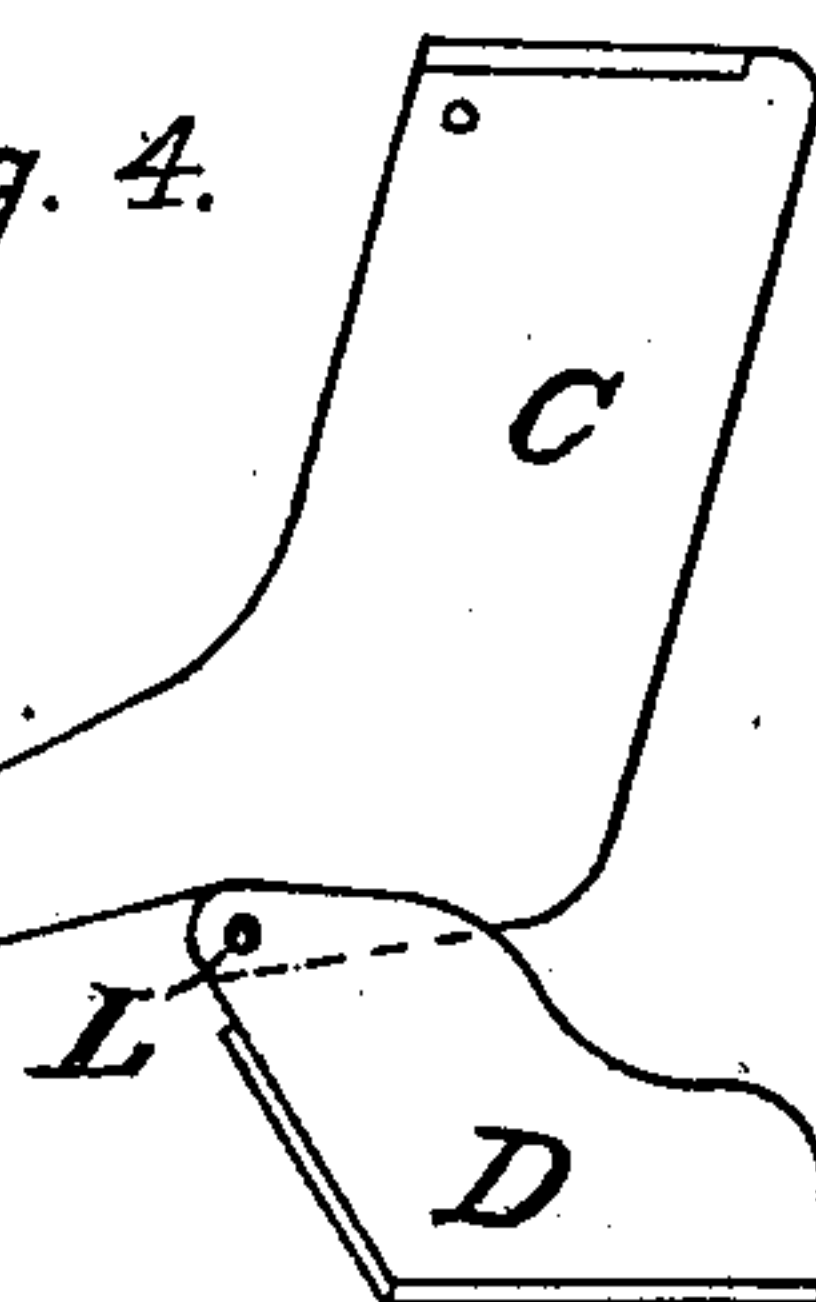


Fig. 4.



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# UNITED STATES PATENT OFFICE.

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## BAND-CUTTER FOR THRESHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 670,064, dated March 19, 1901.

Application filed October 5, 1900. Serial No. 32,176. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN SCHULTE, a citizen of the United States, residing at Albany, in the county of Stearns and State of Minnesota, have invented certain new and useful Improvements in Band-Cutters for Threshing-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to band-cutters for threshing-machines, and more particularly to manually-fed machines, the object being to provide novel mechanism for the purpose stated which will dispense with the labor of one or two men.

The invention consists in a sheaf-band-cutting mechanism of peculiar construction attached to the feed-board of the device.

It consists also in boxes or receptacles hinged together on the apron or carrier operating shaft for respectively receiving the bound sheaf and the sheaf with the band cut and in an endless carrier for conveying the bound sheaf from its box or trough forward to the band-cutters and thence to the second box and mechanism for operating said carrier.

The invention finally consists in the novel construction, arrangement, and combination of parts thereof, all as will be hereinafter described, and defined in the claim.

The nature, characteristic features, and scope of the invention will be more readily understood from the following description, taken in connection with the accompanying drawings, forming a part hereof, in which—

Figure 1 is a top plan view of allied parts of a threshing-machine with my improvements applied, showing the general arrangement of the same, the dotted lines indicating how my attachments may be duplicated. Fig. 2 is a perspective view of the boxes or receptacles for the sheaf, the band-cutter, the endless conveyer, the power-transmitting means, and a portion of the feed-table. Fig. 3 is a cross-section through the band-cutters and the sheaf-boxes, showing also the endless apron or conveyer. Fig. 4 is a side view of the upper sheaf-box turned on its hinge-shaft over the lower box.

In said drawings, A is part of the main frame supporting the threshing-cylinder *a*

and feed-table B, which are of the usual construction.

C is a box or trough comprising a back *c'* and two side members *c''*. The dimensions of these will naturally vary according to the capacity of the machine; but I have obtained excellent results from a trial apparatus when the box was four feet wide, three feet long, and twelve inches high. The box C is intended for the reception of the bound sheaf and is above and in rear of a second box D and is hinged to the latter on a shaft L, the back *d* of the box D being inclined or sloped in front of the box C. The bottom *d'* of box D is of irregular shape, being four feet wide on the front and rear edge, sixteen inches long on the side farthest from the threshing-cylinder to give room to the operator, and twenty inches long on the side nearest the thresher, so that it will rest upon the latter, its rear part being supported by the brace *d''*. The box D has its back *d* inclined and receives the sheaf as it issues from box C with its band cut.

Above the lateral walls *c''* of the box C are brace-rods E, which support a transverse plank or platform F, which sustains the bearing-blocks *f'* *f''* *f'''*, in the first two of which is mounted a shaft G, extending parallel with the sustaining-plank F. The shaft G carries at its outer end a pulley H and at its inner end a bevel-gear *h*, which meshes with a similar gear *h'* on a crank-shaft *h''*, journaled in bearing *f'''*. The crank *h'''* of said shaft connects with a rocking bar I, which carries curved or similar-like knife-blades *i* in any desired number, there being five in the present instance. An angular brace-rod *h''''* is also mounted vertically upon the plank F and carries a journal-pin as a pivot for the connecting-rod *h'''''* of the bar I.

In the bottom of the trough C is a constantly-moving apron or conveyer J, which runs over rolls K L, journaled at either end of the trough, the roll L carrying belt-pulleys M N. The apron is guided over ways *k*, as clearly to be seen in Fig. 3. The pulley N receives motion from the thresher in any suitable manner, and a belt O, connecting pulleys H and M, transmits motion to the band-cutters, the belt being usually crossed, as shown in Fig. 2.



In practice the bound sheaf is thrown into the box C with the heads toward the threshing-machine. The apparatus being set in motion, the apron J moves the sheaf forward and the bar I is actuated, causing the knives to move in a downward and rearward reciprocating direction away from the thresher, causing the band of the sheaf to be severed with a draw cut. A bar or fender P is provided horizontally, as shown in Fig. 2, to guide the knives and prevent the straw from choking them. The unbound sheaf is now carried forward upon the apron and falls into the receiving-box D, from whence it is removed by the operator and fed to the thresher.

The dotted lines, Fig. 1, illustrate how my attachment can be duplicated, so as to operate from both sides of the machine.

It will be obvious to those skilled in the art to which the invention appertains that modifications may be made in detail without departing from the spirit and scope thereof. Hence I do not limit myself to the precise con-

struction and arrangement of parts hereinabove described, and illustrated in the accompanying drawings; but,

Having thus described the nature and objects of the invention, what I claim is—

In a band-cutting attachment for threshing-machines an initial box or receptacle for the bound sheaf, and a second receptacle for the unbound sheaf, the initial box being hinged to the second box and adapted to be folded upward over the second box, said second receptacle having its bottom wider toward the threshing-machine cylinder than on its outer side and extended part way over the opening leading into the threshing-machine substantially as described.

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

JOHN SCHULTE.

Witnesses:

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ANDREW C. ROBERTSON.