

(No Model.)

G. H. OLNEY.
PEA SHELLING MACHINE.

No. 585,118.

Patented June 22, 1897.

Fig. 1.

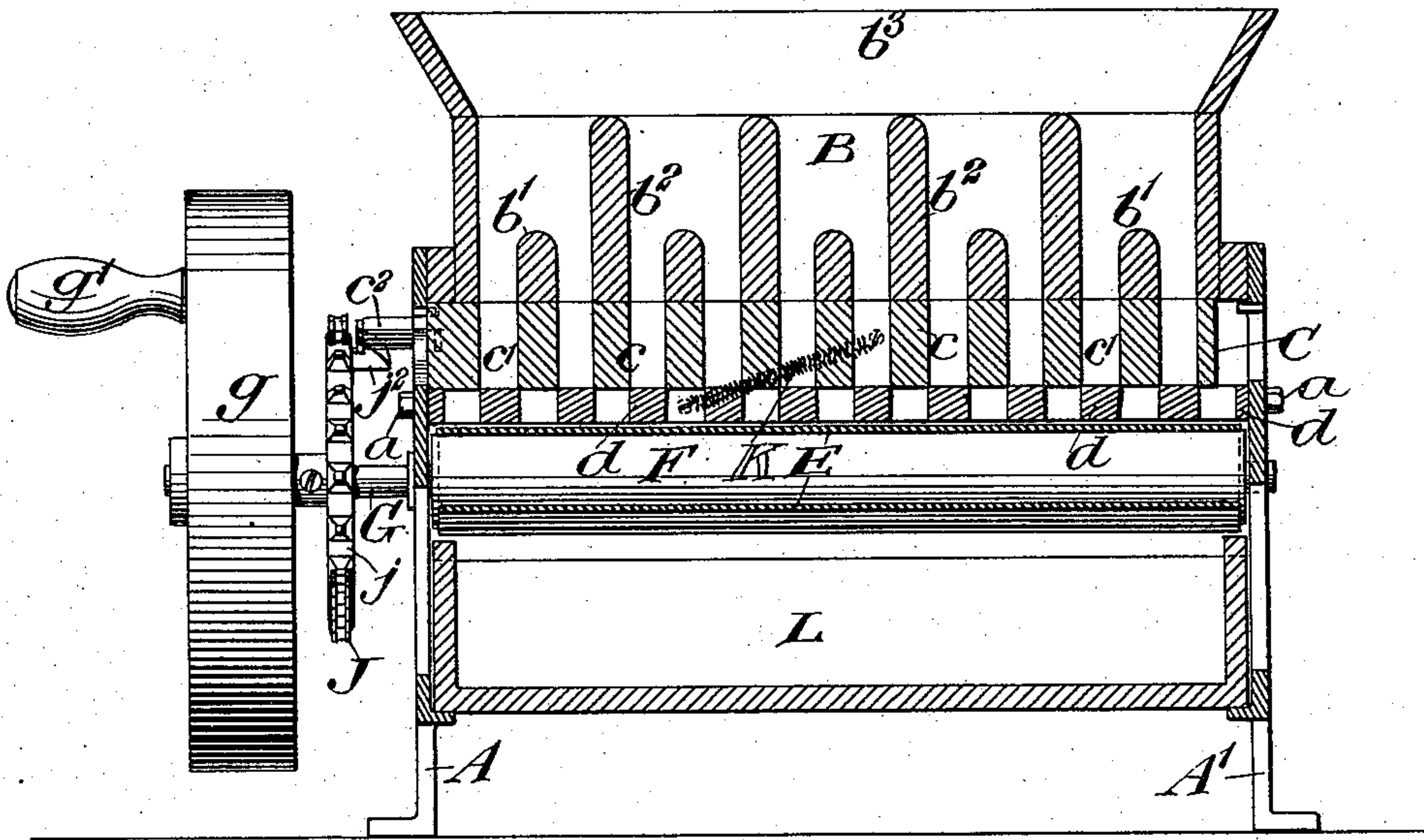


Fig. 2.

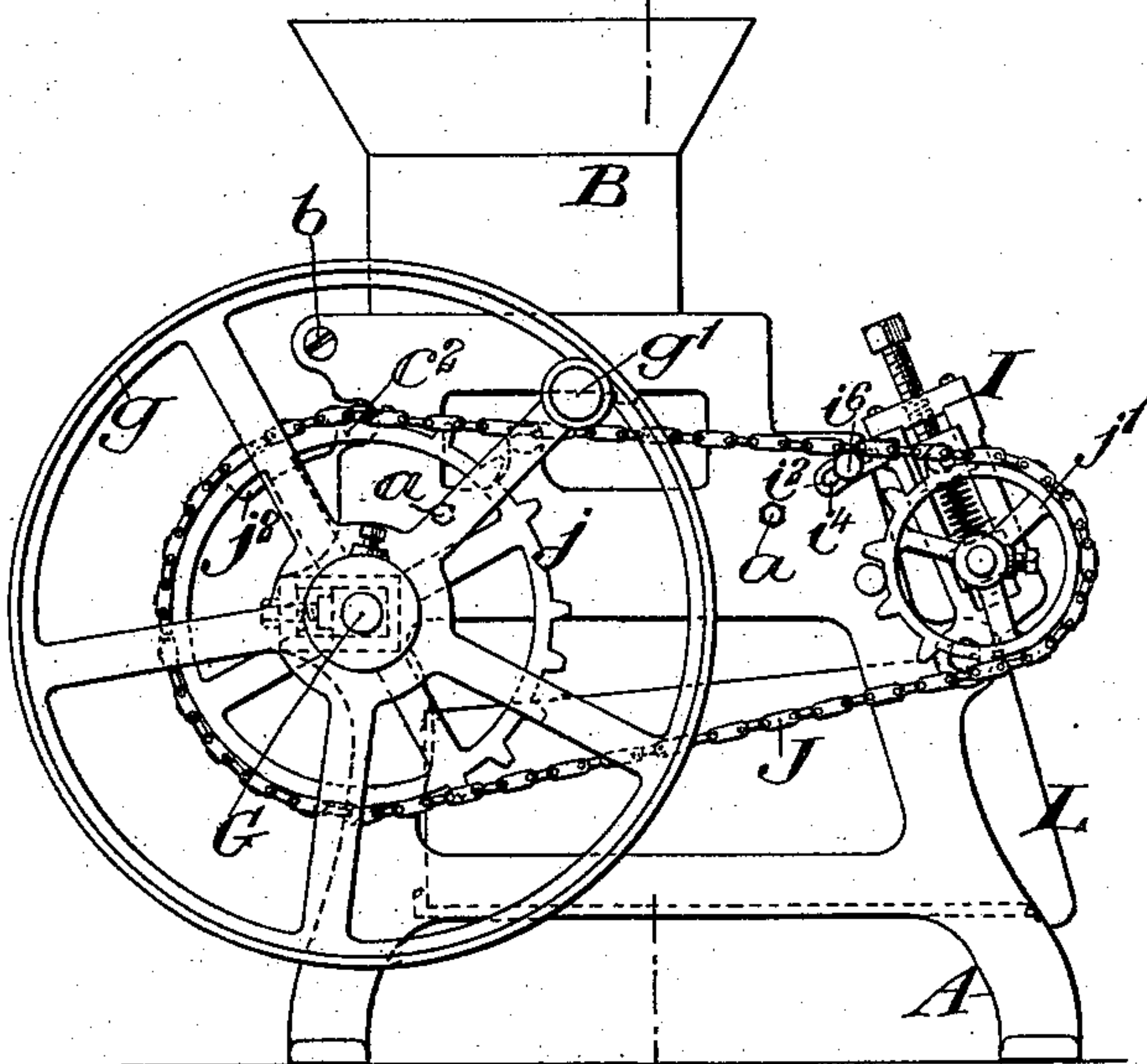
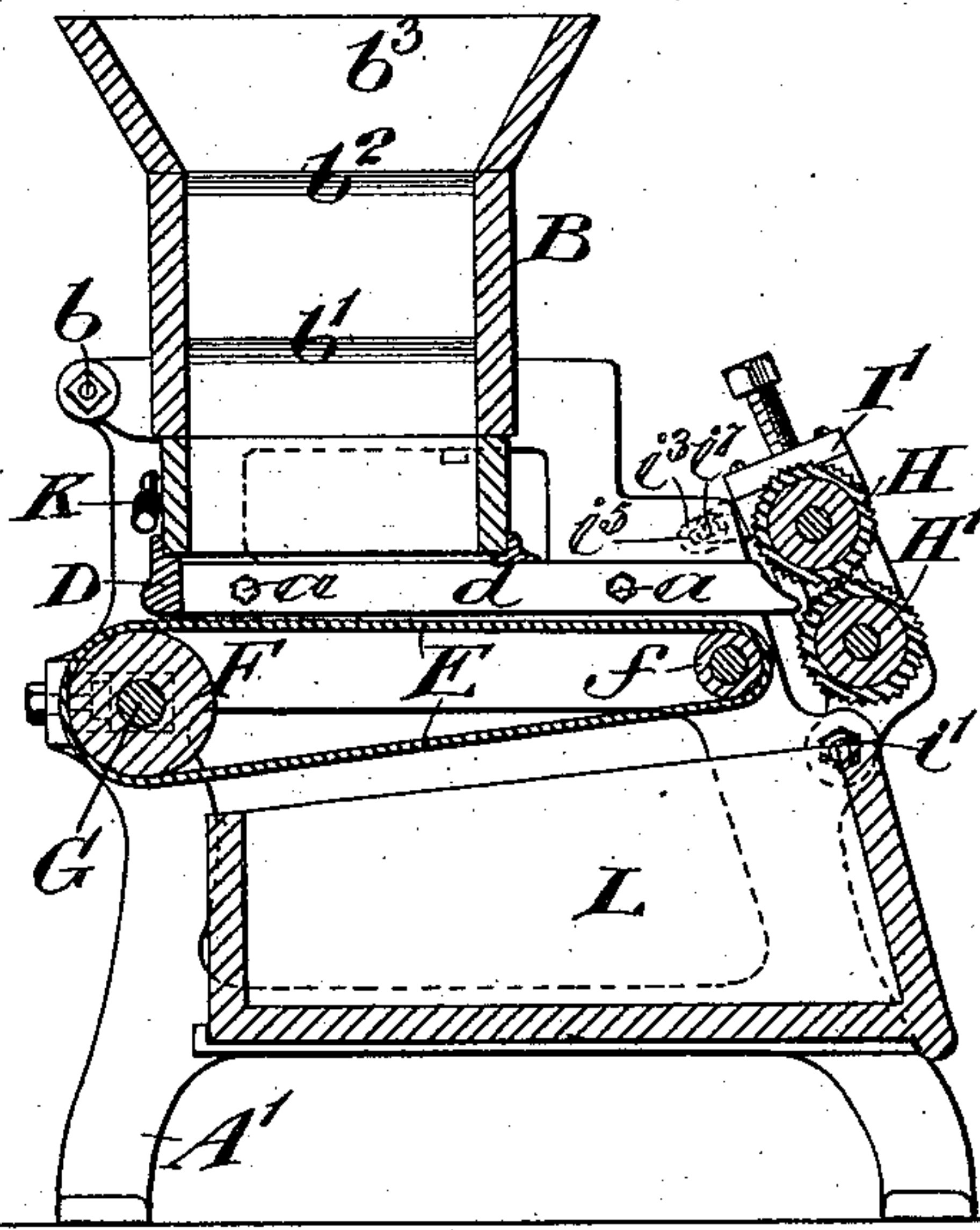


Fig. 3.



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GEORGE H. OLNEY, OF BROOKLYN, NEW YORK.

PEA-SHELLING MACHINE.

SPECIFICATION forming part of Letters Patent No. 585,118, dated June 22, 1897.

Application filed May 14, 1896. Serial No. 591,508. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. OLNEY, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Pea-Shelling Machines, of which the following is a specification.

My invention relates to an improvement in pea-shelling machines, the object being to provide a simple and effective machine for shelling peas, the machine being capable of being adjusted so as to effectually shell peas of varying sizes, as may be required.

A practical embodiment of my invention is represented in the accompanying drawings.

Figure 1 represents a transverse vertical section on the line 1 1 of Fig. 2. Fig. 2 is a side view of the machine, and Fig. 3 is a vertical section from front to rear through the machine.

The side frames of the machine are denoted by A A'. A hopper B is located at the top of the machine between the two side frames A A', the said hopper in the present instance being hinged to the side frames, as shown at b, whereby it may be swung backwardly out of the way when so desired.

Within the hopper B and extending transversely thereto I locate partitions b' b². These partitions are spaced apart a sufficient distance to allow the pods to fall between them, when they are deposited lengthwise of the machine, and preferably certain of the partitions, such as the partitions b², extend a distance above the partitions b', so as to more effectually dispose the pods longitudinally. The top of the hopper is preferably of funnel shape, as shown at b³.

A transversely-moving distributor C is located wholly beneath the hopper B, and it consists of an oblong frame subdivided by cross-partitions c, forming spaces c', corresponding to the spaces formed between the partitions b' and b² in the hopper B. This distributor C is given a transverse sliding movement by means hereinafter to be described.

Beneath the distributor C is located a series of guide-bars d, extending lengthwise of the machine and joined together at their rear ends by a suitable cross-bar D. The spaces between these guide-bars d are preferably of

about the same width as the spaces in the distributor and hopper.

Beneath the series of guide-bars d is located the pod-advancing means, which consists in the present instance of an endless belt E, driven by a suitable roller F, located at the rear of the machine, and passing around a roller f, located at the front of the machine. This endless belt or apron E extends substantially the entire width of the machine and is driven in the following manner: A cross-shaft G extends transversely to the machine and is mounted in suitable bearings in the side arms A A'. This shaft G carries thereon a drive-wheel g. This drive-wheel g is provided with a suitable handle g', whereby the shaft G may be rotated either by a suitable belt engaging the drive-wheel g or by hand by the use of the handle g'. The drive-roller F is mounted on the shaft G to rotate therewith, whereby, as the shaft G is rotated, the endless belt or apron E is advanced.

The shelling-rollers are denoted by H H' and are mounted in suitable bearings in swinging brackets I I', located at the front of the machine. These rollers H H' are located a short distance in front of the guide-bars d and the endless apron E in such a position that they will grasp the ends of the forward pods as they are advanced toward the rollers by the apron and will strip them of the peas, the peas falling through the space between the apron E and the roller H'.

When the peas are small, it is desirable to have the shelling-rollers H H' as near to the apron E as possible to insure the gripping of the pods. As the peas grow larger it is necessary to move the said rollers away from the apron E to form a larger space between the roller H' and the apron, through which the larger peas, after they have been shelled, can fall.

The swinging brackets I I', hereinbefore mentioned, which support the bearings for the rollers H H', are hinged at their lower ends, the one to the side frame A, as shown at i, and the other to the side frame A', as shown at i'. The upper ends of these brackets I I' are provided with rearward extensions i² i³, in which are formed elongated slots i⁴ i⁵, which slots are concentric with the pivots i i'.

Locking-bolts i^6 i^7 engage the said elongated slots in the rearward extensions and secure the brackets I I' to the side frames of the machine in any desired adjustment.

5 It will thus be seen that as the peas grow larger the brackets I I' may be gradually swung outwardly away from the apron E .

The shelling-rollers H H' are driven from the main drive-shaft G by means of a suitable chain J , passing around a sprocket-wheel j on the shaft G and a sprocket-wheel j' on the shaft of the roller H' .

15 The distributor C is positively forced in one direction by means of a cam j^2 on the sprocket-wheel j , which engages a pin c^2 on the distributor C . A spring K , secured at one end to the bar D and at its opposite end to the distributor C , serves to return the distributor to the limit of its movement opposite to that
20 given to it by the cam j^2 .

While I have shown the belt or apron E as having a plane surface, I may, if found more desirable, place small abutments thereon for enabling the belt to more positively advance
25 the peas toward the shelling-rollers.

The several parts are held in their proper position between the two side arms A A' by means of bolts or screws a , extending through the side frames into engagement with the
30 outer guide-bars d .

A suitable drawer L may be inserted in position between the side frames beneath the apron E for receiving therein the peas as they are shelled.

35 In operation the pods with the peas therein are deposited longitudinally of the machine in the spaces between the partitions b' b^2 in the hopper B and from thence drop into the spaces c' in the distributor C . Then, when

the distributor C is slid longitudinally, the 40 peas are dropped onto the endless apron E between the guide-bars d and are from there fed forwardly into position to be shelled by the rollers H H' .

The shelling-rollers H H' are preferably 45 longitudinally corrugated on their peripheries for more positively gripping the pods and shelling the peas.

It is evident that slight changes might be resorted to in the construction and operation 50 of the several parts without departing from the spirit and scope of my invention. Hence I do not wish to limit myself strictly to the structure herein set forth; but

What I claim is—

1. A pea-shelling machine, comprising a receptacle for the unshelled peas, shelling-rollers, a carrier for conveying the unshelled peas from the receptacle to the shelling-rollers, means for operating the carrier and shelling- 60 rollers, and means for adjusting the rollers toward and away from the front of the carrier, substantially as set forth.

2. A pea-shelling machine, comprising a receptacle for the unshelled peas, a pair of 65 shelling-rollers, the swinging brackets in which the rollers are mounted, a carrier for conveying the unshelled peas from the receiver to the rollers, means for operating the carrier and rollers, and means for adjusting 70 the brackets and thereby the rollers toward and away from the front of the carrier, substantially as set forth.

GEORGE H. OLNEY.

Witnesses:

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