

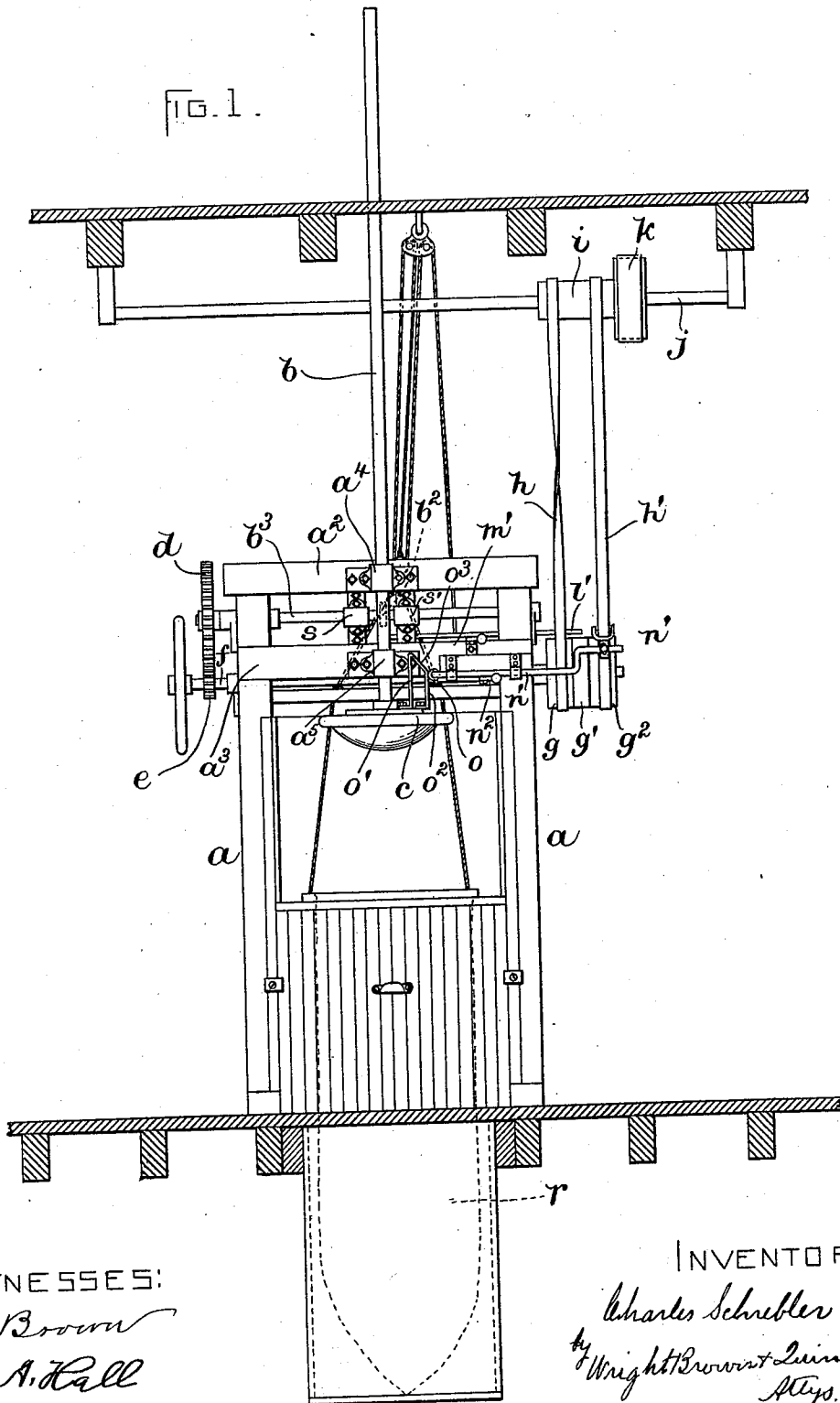
(No Model.)

4 Sheets—Sheet 1.

C. SCHREBLER.
BAGGING MACHINE.

No. 560,432.

Patented May 19, 1896.



WITNESSES:

H. Brown
H. A. Hall

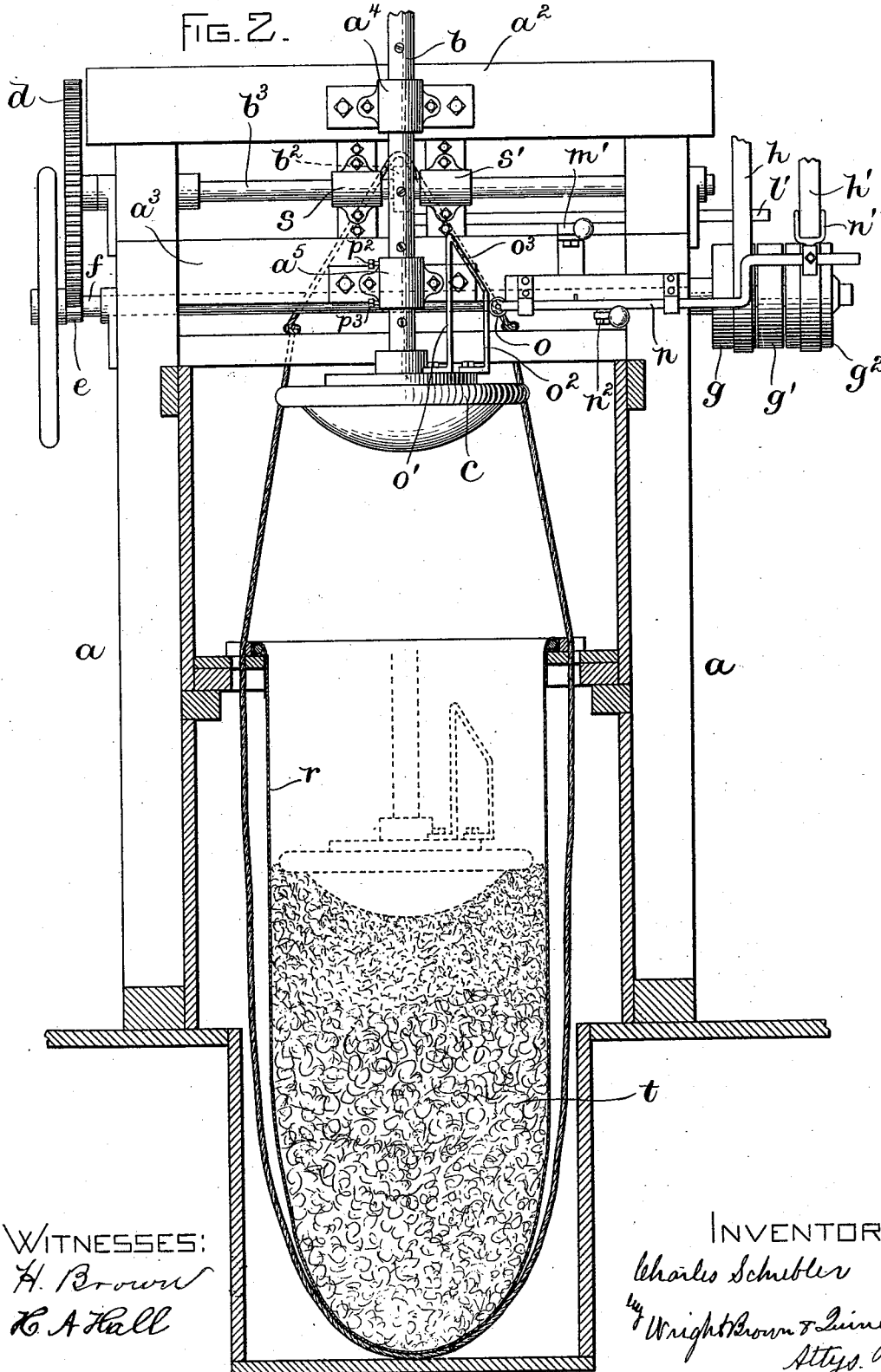
INVENTOR:

Charles Schrebler
by Wright, Brown & Limby
Atty's.

C. SCHREBLER.
BAGGING MACHINE.

No. 560,432.

Patented May 19, 1896.



(No Model.)

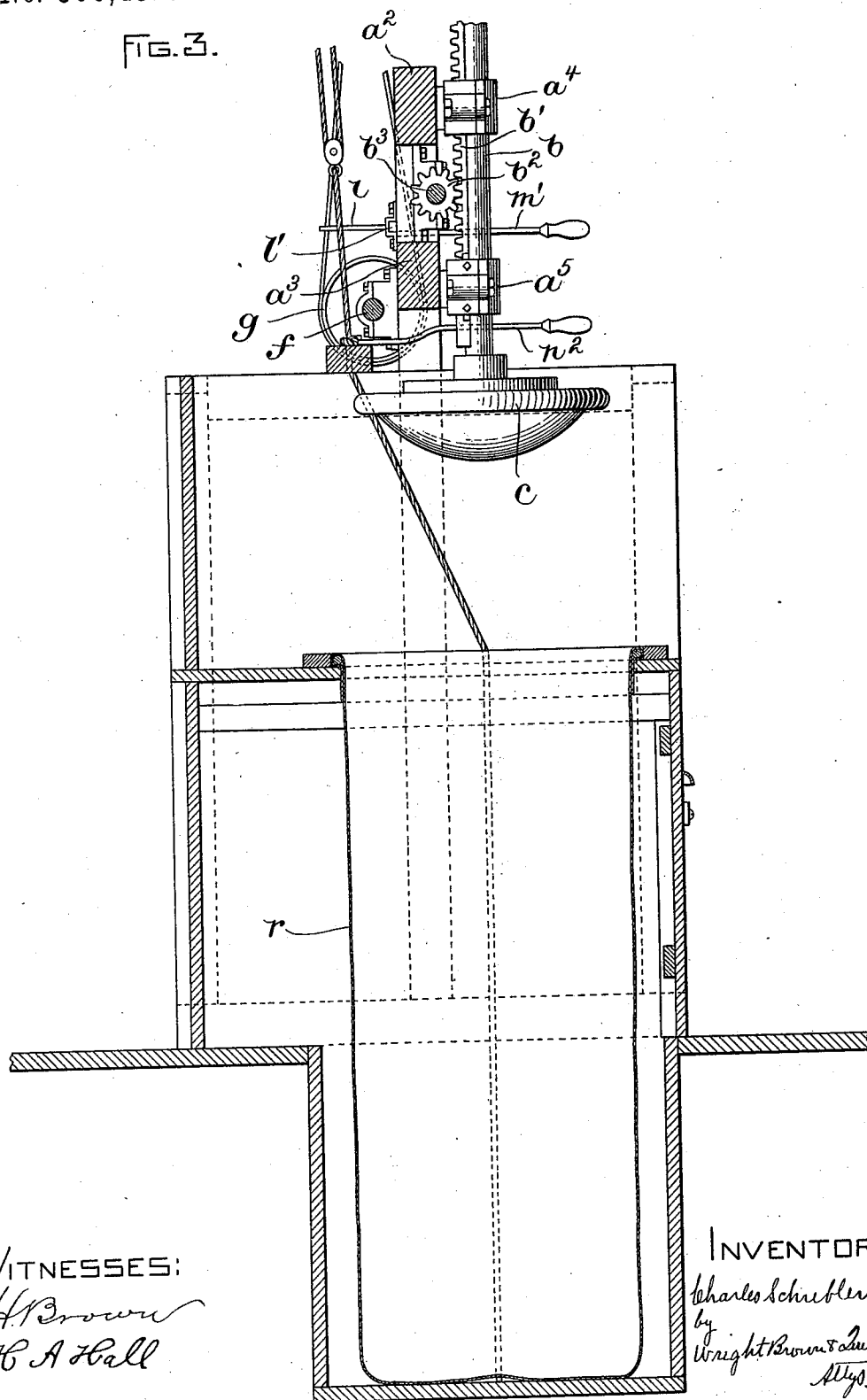
4 Sheets—Sheet 3.

C. SCHREBLER.
BAGGING MACHINE.

No. 560,432.

Patented May 19, 1896.

FIG. 3.



WITNESSES:

H. Brown
H. A. Hall

INVENTOR:

Charles Schrebler
by Wright Brown & Co.
Atty.

(No Model.)

4 Sheets—Sheet 4.

C. SCHREBLER.
BAGGING MACHINE.

No. 560,432.

Patented May 19, 1896.

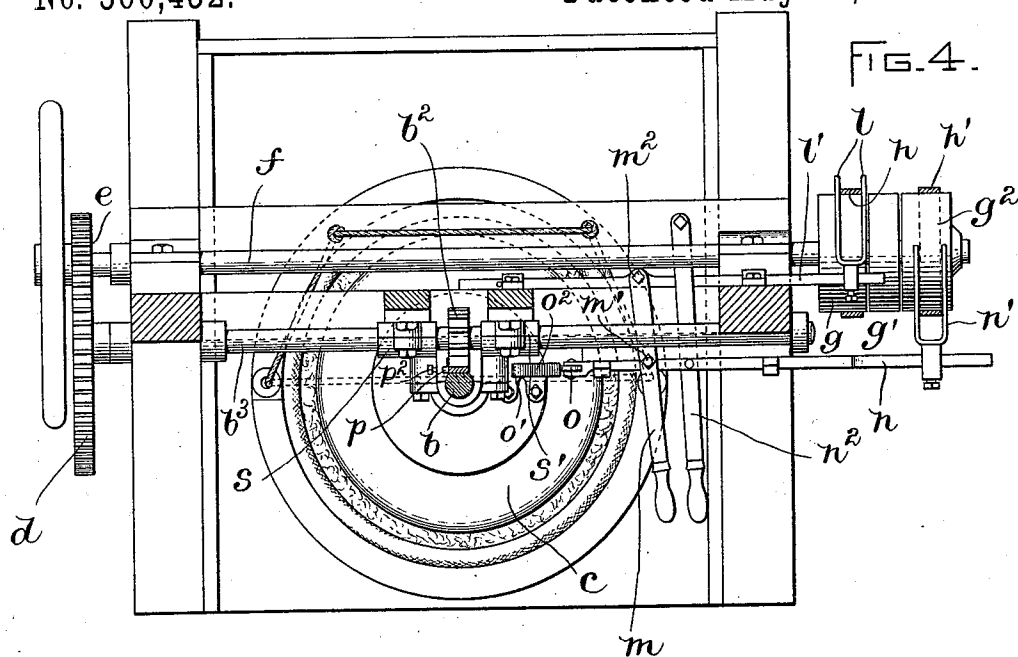


FIG. 5.

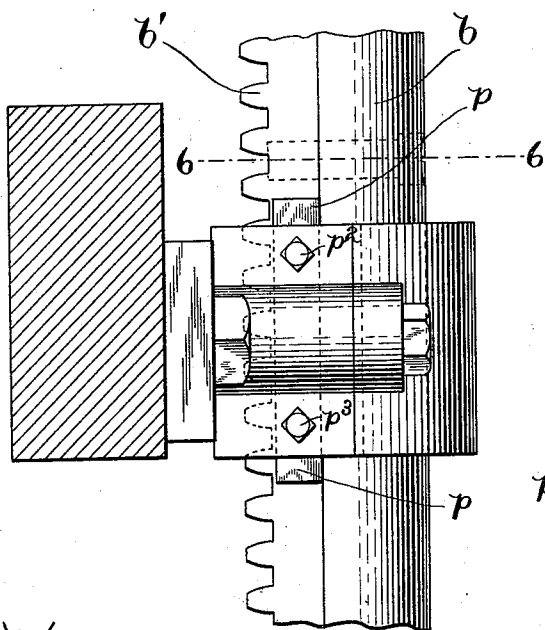
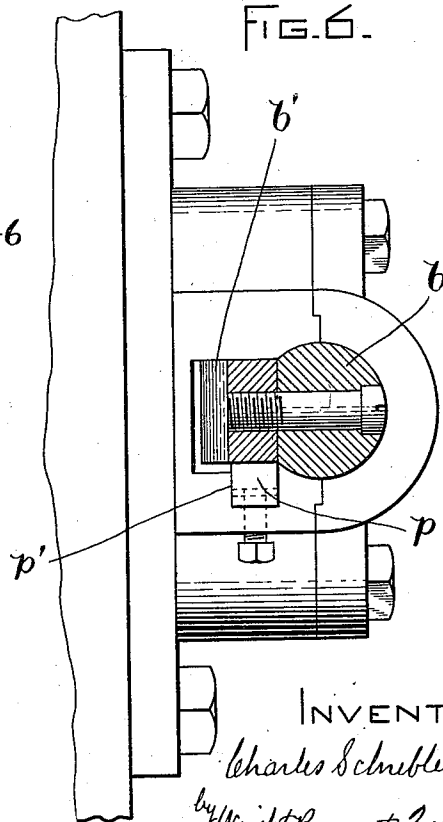


FIG. 6.



WITNESSES:

H. Brown
H. A. Hall

INVENTOR:

Charles Schrebler
by Wright Brown & Lundy
attys

UNITED STATES PATENT OFFICE.

CHARLES SCHREBLER, OF LAWRENCE, MASSACHUSETTS.

BAGGING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 560,432, dated May 19, 1896.

Application filed September 14, 1895. Serial No. 562,533. (No model.)

To all whom it may concern:

Be it known that I, CHARLES SCHREBLER, of Lawrence, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Bagging-Machines, of which the following is a specification.

This invention relates to machines for compressing material (preferably wool) into sacks; and it has for its object to provide means whereby the operation may be facilitated and the expense attendant thereon be reduced to the minimum.

To these ends the invention consists in the novel construction and combination of elements which I will now proceed to describe and claim.

Of the drawings accompanying this specification and forming a part of the same, Figure 1 represents a front elevation of an organized machine embodying my improvements. Fig. 2 represents a longitudinal transverse section of the lower portion of the same on an enlarged scale. Fig. 3 represents a vertical sectional view of my machine. Fig. 4 represents a section on line 4 4, Fig. 2. Figs. 5 and 6 represent detail views hereinafter described.

The same letters of reference indicate the same parts in all the figures.

In carrying out my invention I provide a frame *a*, the upper portion of which is provided with cross-beams *a*² *a*³, adapted to support guide-boxes *a*⁴ *a*⁵, which boxes receive a rod *b*, having upon one side thereof a rack *b*¹, which rack is adapted to mesh with a pinion *b*², secured to a shaft *b*³, journaled in suitable bearings upon the frame *a*. To the lower end of the rod *b* is secured a packing disk or plunger *c*. Said disk with its attached rod is adapted to be moved longitudinally in opposite directions by means of the pinion *b*², meshing with the rack *b*¹ upon the rod *b*, said pinion being (as before stated) secured upon a shaft *b*³, journaled in bearings *s* *s*¹, secured to the frame *a*, the outer end of said shaft being provided with a gear *d*, meshing with a pinion *e* upon a shaft *f*, journaled in bearings upon the rear side of the frame, Figs. 3 and 4, and having upon its opposite end pulleys *g* *g*¹ *g*², which are engaged by belts *h* *h*¹, which

belts engage a pulley *i* upon a counter-shaft *j*, suitably arranged to be driven by a belt *k*, connected with any suitable driving-shaft.

The pulley *g*¹ is rigidly secured to the shaft *f*, and the pulleys *g* *g*² are loosely mounted upon the same and adapted to be engaged by the belts *h* *h*¹ when the machine is in operation. The belt *h* is crossed between the driving and driven pulley, and the belt *h*¹ has straight connection between the same, which arrangement causes the driven pulley *g*¹ to be rotated in opposite directions, the arrangement being such that the belts are adapted to be alternately shipped onto the pulley *g*¹ to advance and retract the packing-disk through the connections above described.

The belt *h*, which advances the packing-disk, is controlled entirely by the operator, said belt being engaged by a shipper-fork *l*, suitably secured to a shipper-rod *l*¹, secured to the frame *a* and adapted to be operated in opposite directions by a lever *m*, pivoted at *m*¹ to the frame and at *m*² to said shipper-rod. The belt *h*¹, which operates the means for retracting the packing-disk, is brought into engagement with the pulley *g* by means of a shipper-rod *n*, having a fork *n*¹ attached thereto, and an operating-lever *n*², arranged substantially the same as the shipper devices above described, in connection with belt *h*, and is moved out of engagement with pulley *g* automatically by the following means: The shipper-rod *n* has mounted at one end thereof an antifriction-roller *o*, and the packing-disk *c* has fastened upon its upper side and projecting upward therefrom a cam-piece *o*¹ (here shown as a piece of strap metal bent to form a leg *o*²) and an inclined side *o*³ for coaction with the roller *o*, the arrangement being such that as the packer returns to the position shown in Fig. 1 the incline *o*³ will engage the roller *o*, which causes the shipper-lever to transfer the belt *h*¹ to loose pulley *g*² and bring the packing-disk to a stop.

The advantage of the above-described method of automatically stopping the packing-disk at the proper point of its upward movement is that it constitutes a safeguard against the negligence of the operator and also increases the efficiency of the machine,

inasmuch as the operator is enabled to assemble the material for filling the bag while the packing-disk is ascending.

It is necessary in the operation of the packing-disk to provide means whereby it can be maintained in position vertically when not in operation. To this end I have provided a gib p , resting in a groove p' , formed in one side of the guide-bearings $a^4 a^5$. Said gib is adapted to be held against the side of the rack b' by set-screws $p^2 p^3$, Fig. 5, with sufficient force to cause frictional contact of one side of the rack with said gib and also between the opposite side of the rack and the guide-box, as shown in Fig. 5.

In the operation of the machine, the packing-disk being in the position shown in Fig. 1, a bag r is arranged thereunder, as shown more clearly in Figs. 2 and 3, and said bag is then supplied with material t . The attendant then, through the medium of the lever m and shipper-rod l' , causes the belt h to engage the pulley g' and the packing-disk is caused to descend upon the material by the means already described until the material is sufficiently compressed, when the belt is returned to its loose pulley. The operator now, by means of shipping-lever n^2 and shipper-rod n , causes the belt h' to be brought into engagement with pulley g' , which operates the pulley in the opposite direction, causing the packing-disk to be retracted from the bag. The above-described operation of the shipper-rod n brings the roller o upon the end of said rod into the path of the incline o^3 of the cam-piece o' , so that just before the packing-disk c reaches the limit of its upper movement the roll o is engaged by the incline and the shipper-rod n is moved to shift the belt h' onto the loose pulley g^2 , which movement arrests the upward movement of the packing-disk, which, through the frictional devices heretofore mentioned, causes the disk

to remain normally in this position until the operation just described is repeated. The operator is then at liberty to close the opening of the bag and remove the same from the pit by means of the hoisting-tackle, (shown in Fig. 1,) which, being connected with a sling passing under the bottom of the bag, and by the removal of a door in the front of the machine, the bag is readily removed, as will be clearly understood by the drawings.

Having thus explained the nature of my invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all the modes of its use, what I claim, and desire to secure by Letters Patent, is—

In a bagging-machine, in combination, a rack-bar, bearings in which said bar is arranged to slide, means, including a spur-gear for operating said bar, a shipper mechanism connected to said means, a plunger connected to said rack-bar, a cam carried by said plunger, and arranged to engage said shipper mechanism to operate the latter, a loose gib mounted in a groove in one of said bearings, and set-screws arranged in said bearing, and adapted to force said gib against said rack-bar on a side adjacent to the side occupied by its rack-teeth to grip said bar between said gib and the opposite side of said bearing, with sufficient force to hold said bar when not operated by said means, without affecting the engagement of the teeth of said bar with said gear.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 12th day of September, A. D. 1895.

CHARLES SCHREBLER.

Witnesses:

A. D. HARRISON,
W. P. ABELL.