C. M. FULLER & R. M. PARKERSON.

Flour-Sack Packer.

No. 168,387. Patented Oct. 5, 1875.

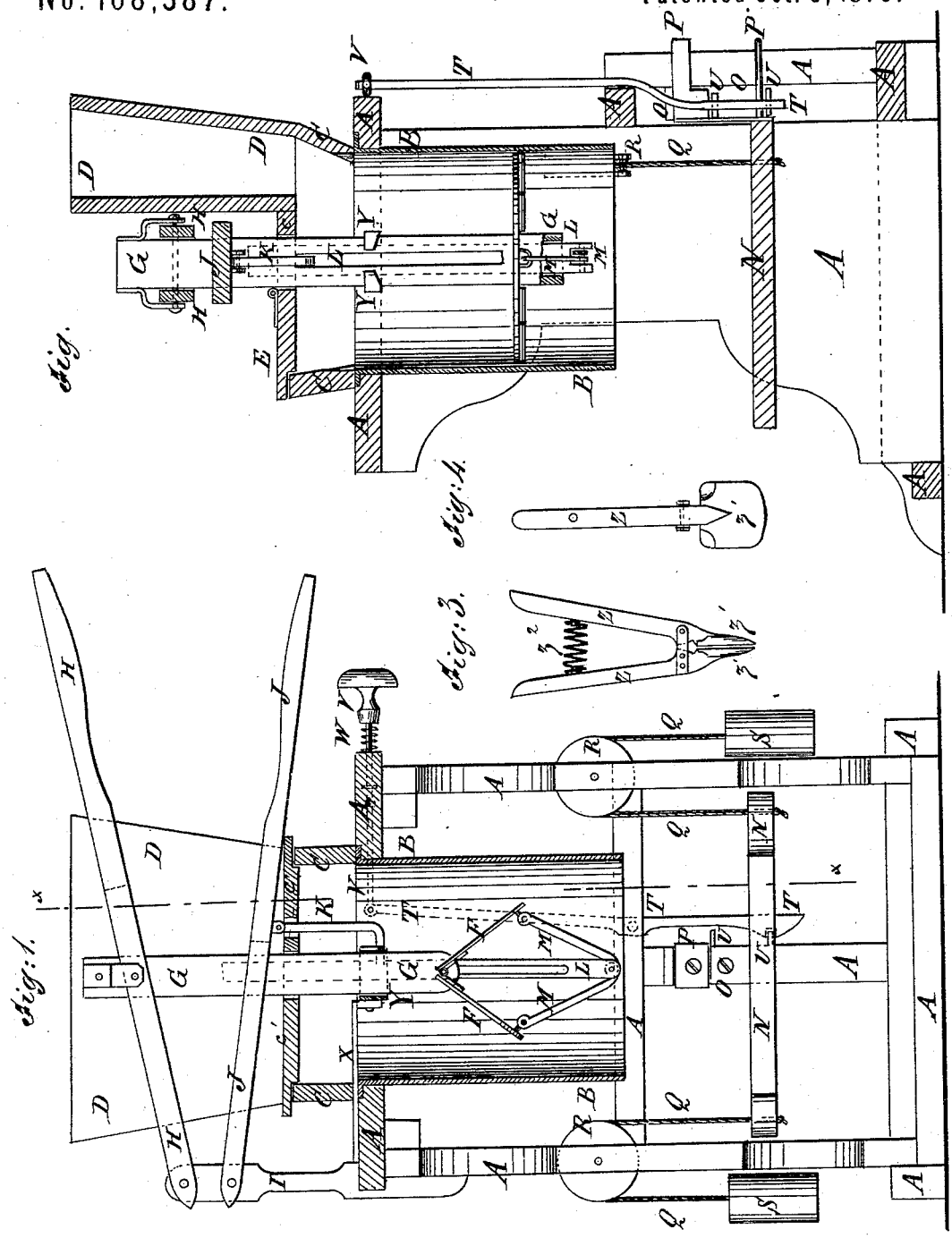

Fig. 1.

Fig. 4.

Fig. 3.

WITNESSES:

Chas. Nida.
A. F. Terry

INVENTOR:

C. M. Fuller and
R. M. Parkerson
By Munn & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHARLES M. FULLER AND ROBERT M. PARKERSON, OF BATAVIA, N. Y.

IMPROVEMENT IN FLOUR-SACK PACKERS.

Specification forming part of Letters Patent No. **168,387**, dated October 5, 1875; application filed September 17, 1875.

To all whom it may concern:

Be it known that we, CHARLES MASON FULLER and ROBERT MINOR PARKERSON, of Batavia, in the county of Genesee and State of New York, have invented a new and useful Improvement in Flour-Sack Packer, of which the following is a specification:

Figure 1 is a front view of our improved machine, partly in section, to show the construction. Fig. 2 is a vertical section of the same, taken through the line *x x*, Fig. 1. Figs. 3 and 4 are detail views of a tool for tightening the sack upon the tube.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved hand-machine for filling sacks, barrels, &c., with flour and packing it, which shall be simple in construction, convenient in use, and effective in operation.

The invention consists in the combination of the hinged semicircular plates, the sliding hollow and slotted shaft, the two levers, the arm, the sliding inner slotted shaft, and the pivoted bars with each other, and with the tube, the hopper, and the frame; and in the combination of the rigid upright arm, the keepers, the catches, and the latch with the platform, the cords, the weights, and the frame, as hereinafter fully described.

A is the frame of the machine, to the top of which is attached the upper end of a tube, B, of such a size as to fit into the mouth of the sack or barrel into which the flour is to be packed. To the top of the frame A, around the mouth of the tube B, is secured a hopper, C, the middle part of the top of which is provided with a stationary cover, *c'*. With the top of the hopper C, at one side of the stationary cover *c'*, is connected a spout or hopper, D, which is designed to be connected with the discharge-spout of the flour bin or reservoir. The top of the hopper C, at the other side of the stationary cover *c'*, is provided with a door, E, to give access to the interior of the tube B when desired. F are semicircular disks or plates, which are hinged at their straight edges to the lower end of a shaft, G. The shaft G passes up through a hole in the stationary cover *c'*, and its upper end is pivoted to a lever, H, one end of which is pivoted to a standard, I, attached to the frame A. To the standard I, a little below the lever H, is pivoted the end of the lever J, through a hole or slot in which the shaft G passes, and to which, a little at one side of the said shaft G, is pivoted the upper end of the rod or arm K. The rod or arm K passes down through a hole in the stationary cover *c'*, and its lower end is bent at right angles, passes in through a longitudinal slot in the shaft G, and is attached to a shaft, L, which is placed in a cavity formed in the said shaft G to receive it. The shaft L is slotted longitudinally for the passage of the pin that hinges the wings or plates F to the shaft G, and to its lower end are pivoted the inner ends of two bars, M, the outer ends of which are pivoted to the under side of the outer parts of the flaps or plates F. The sacks rest, while being filled, upon a platform, N, which moves up and down within the frame A, and to the rear edge of which is rigidly attached an upright arm, O. The arm O slides up and down along a post of the frame A, and is provided with keepers P, fitting and sliding upon the said post. The arm O and keepers P keep the platform N in a horizontal position when moving up and down. To the ends of the platform N are attached cords Q, which pass over guide-pulleys R, pivoted to the frame A. To the other ends of the cords Q are attached weights S, of such a size as to overbalance the platform N, but will be overbalanced by said platform when the weight of the filled sack is added to it. T is a lever, pivoted to a cross-bar of the frame A, and having a notch formed in its lower end to take hold of one or the other of the catches U, attached to the arm O of the platform N, so as to lock the said platform in place and hold it steady both when lowered and when raised. The lower end of the latch T is beveled off or inclined above and below its notch, so that it may take hold of the catch U automatically as the platform N comes into position in its upward and downward movements. To the upper end of the latch T is pivoted the end of a rod, V, which works in keepers attached to the frame A, and its other end projects at the front of the machine, and has a knob or other handle attached to it. The lower end of the latch T is held in position to catch upon the

catches U by a coiled spring, W, placed upon the rod V. X is an arm attached to the frame A, and to the inner end of which is attached, or upon it is formed, a guide-keeper, Y, through which the lower part of the shaft G moves up and down to keep the said shaft in a vertical position. Z is a gripe, made with wide jaws z^1, flat upon their inner sides, and rounded off upon their outer sides, and which are pressed together by a spring, z^2, interposed between their handles. The gripe Z is designed for use in tightening the sack upon the tube B when desired.

In using the machine both levers H J are lowered, and the flour is admitted into the tube B, and rests upon the plates F. The lever H is then raised, which inclines the plates F, and allows the flour to flow into the sack. When the sack is full the lever J is raised, which raises the plates F and stops the outflow of the flour. The levers H J are then lowered, which presses the flour down into the sack and packs it. The platform T is so arranged that it may descend a few inches when the flour first plunges into the sack, and may thus relieve the sack from the sudden pressure. The latch T is then operated to release the platform N and allow it to descend, so that the filled sack can be conveniently removed and an empty one placed upon the tube B. The latch T is again operated to release the platform N and allow it to ascend to support the sack while being filled. The upper lever H is then raised to incline the plates F, and allow the flour to flow out into the sack, and so on.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination of the hinged semicircular plates F, the sliding hollow and slotted shaft G, the levers H J, the arm K, the sliding inner slotted shaft L, and the pivoted bars M with each other, and with the tube B, the hopper C, and the frame A, substantially as herein shown and described.

2. The combination of the rigid upright arm O, the keepers P, the catches U, and the latch T with the platform N, the cords Q, the weights S, and the frame A, substantially as herein shown and described.

CHARLES MASON FULLER.
ROBERT MINOR PARKERSON.

Witnesses:
MALCOLM L. NASH,
WILLIAM WHITE.