

(No Model.)

C. J. MATTISON.

MACHINE FOR PACKING PULVERULENT SUBSTANCES.

No. 383,136.

Patented May 22, 1888.

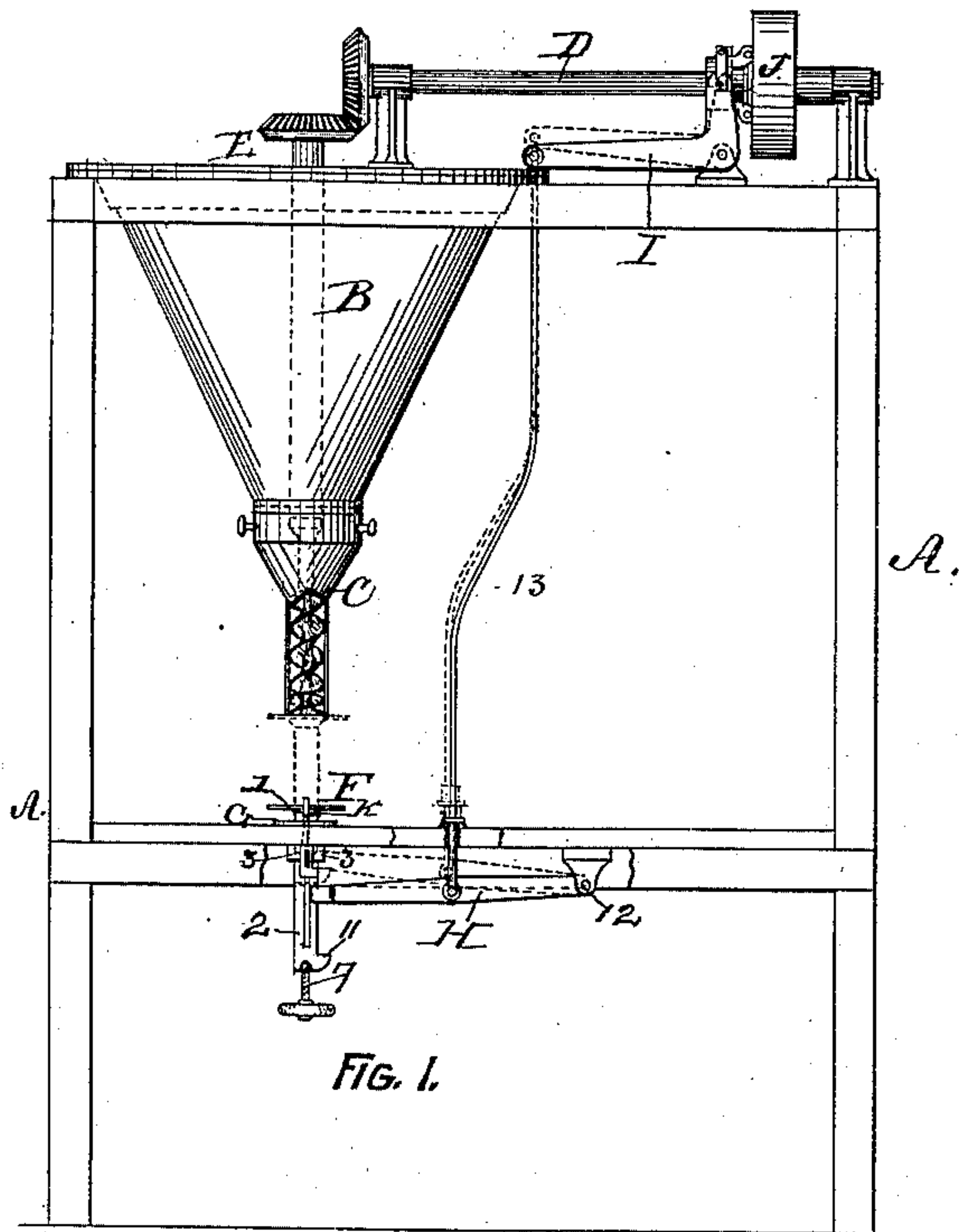


FIG. 1.

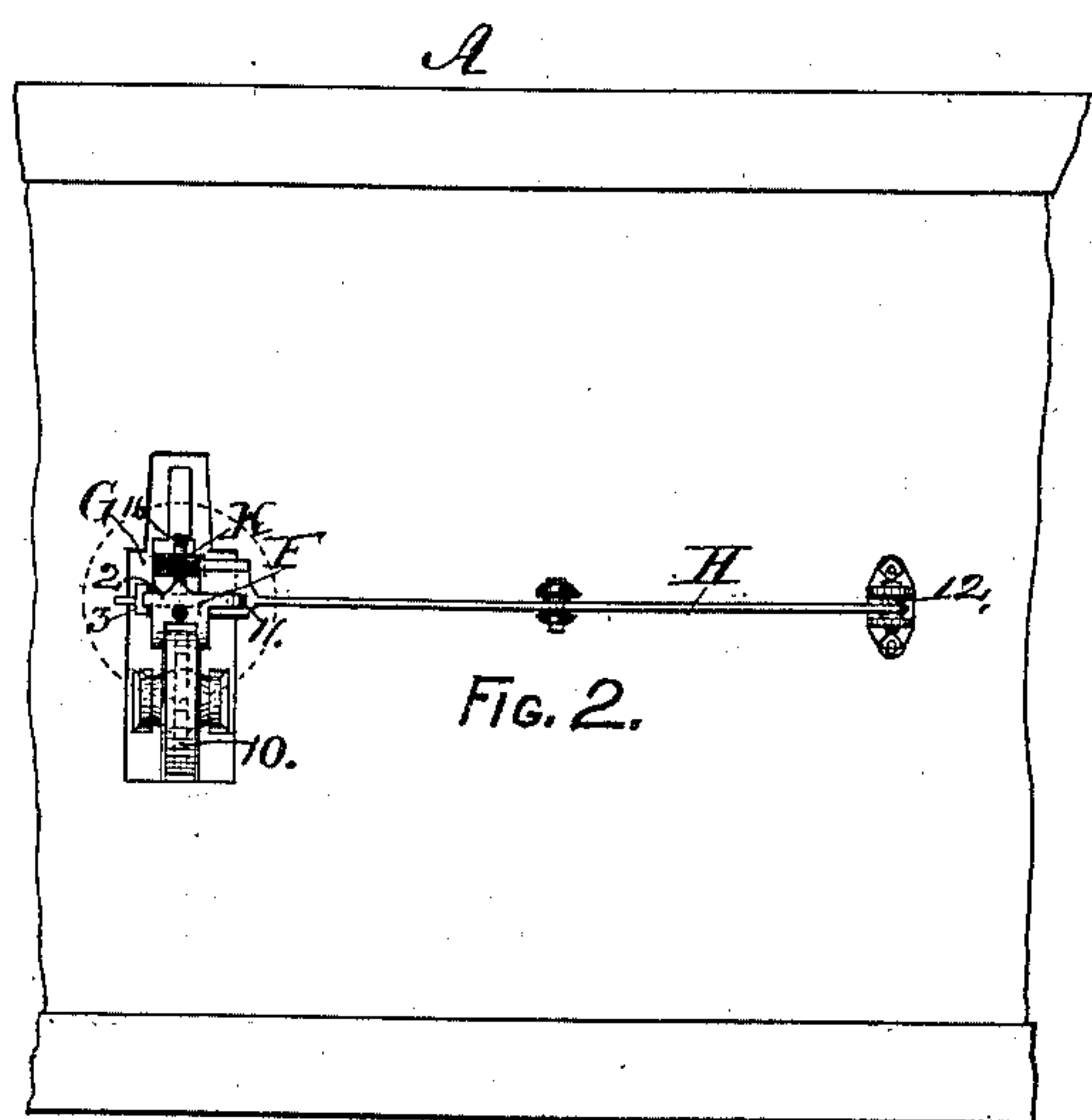


FIG. 2.

A.

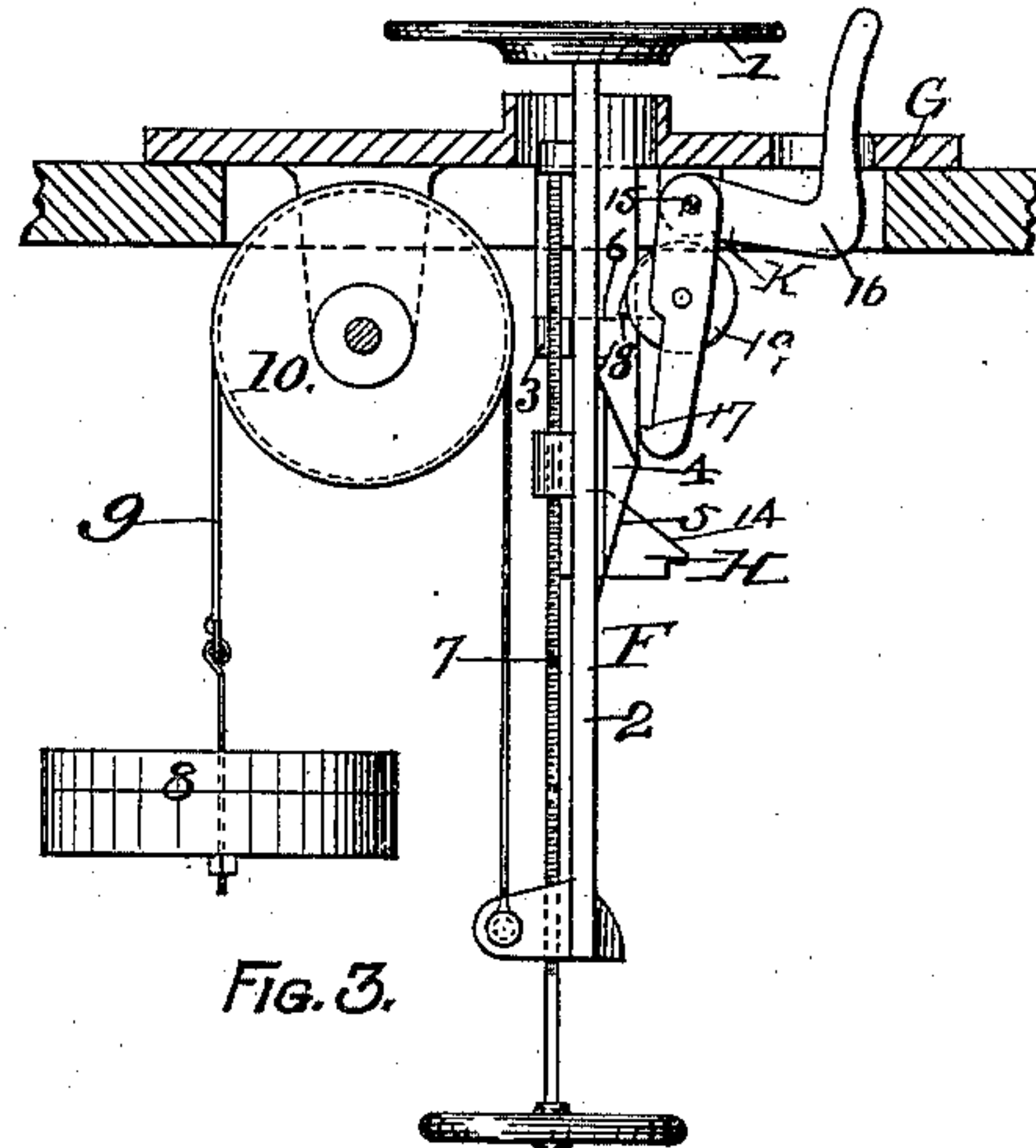


FIG. 3.

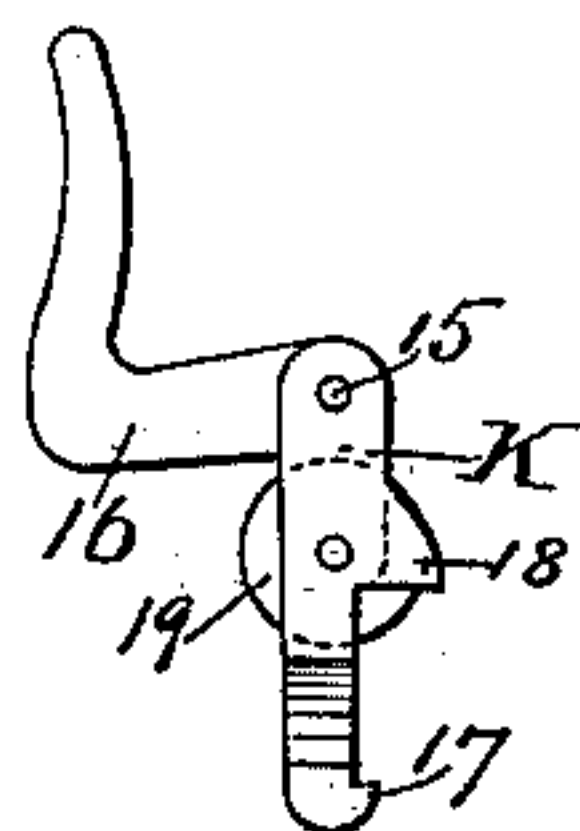


FIG. 6.

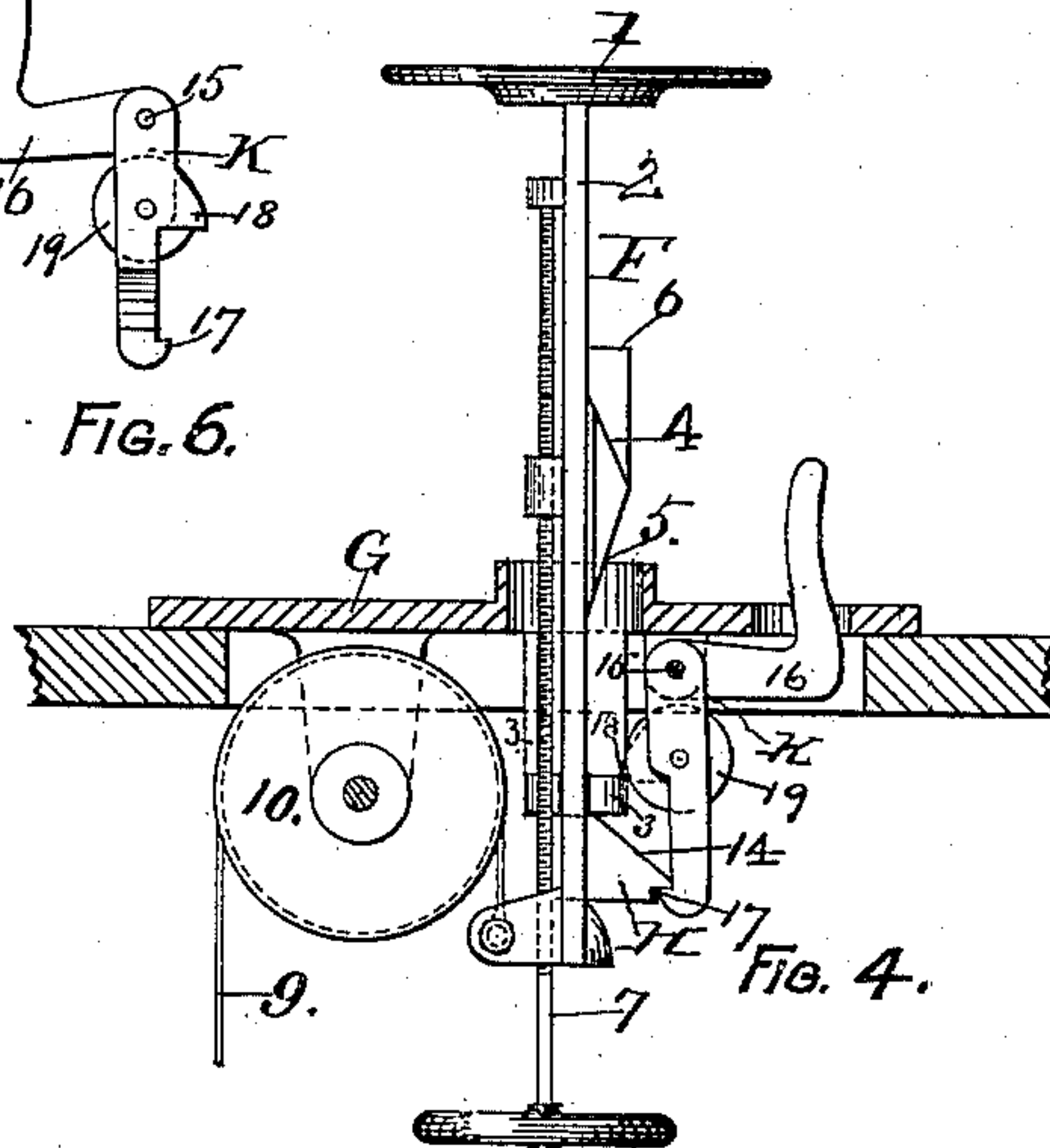


FIG. 4.

FIG. 5.

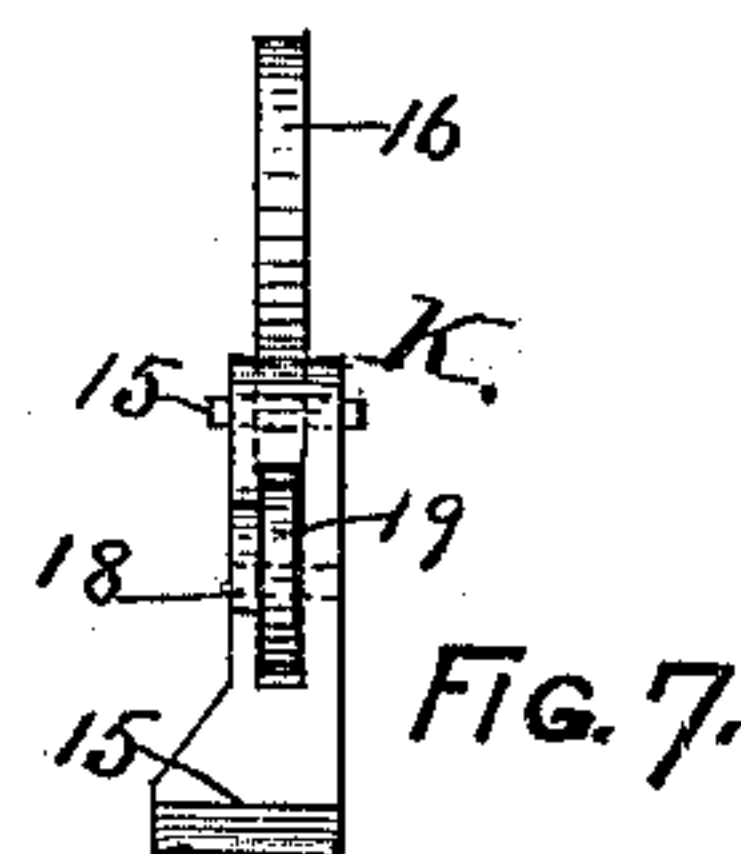
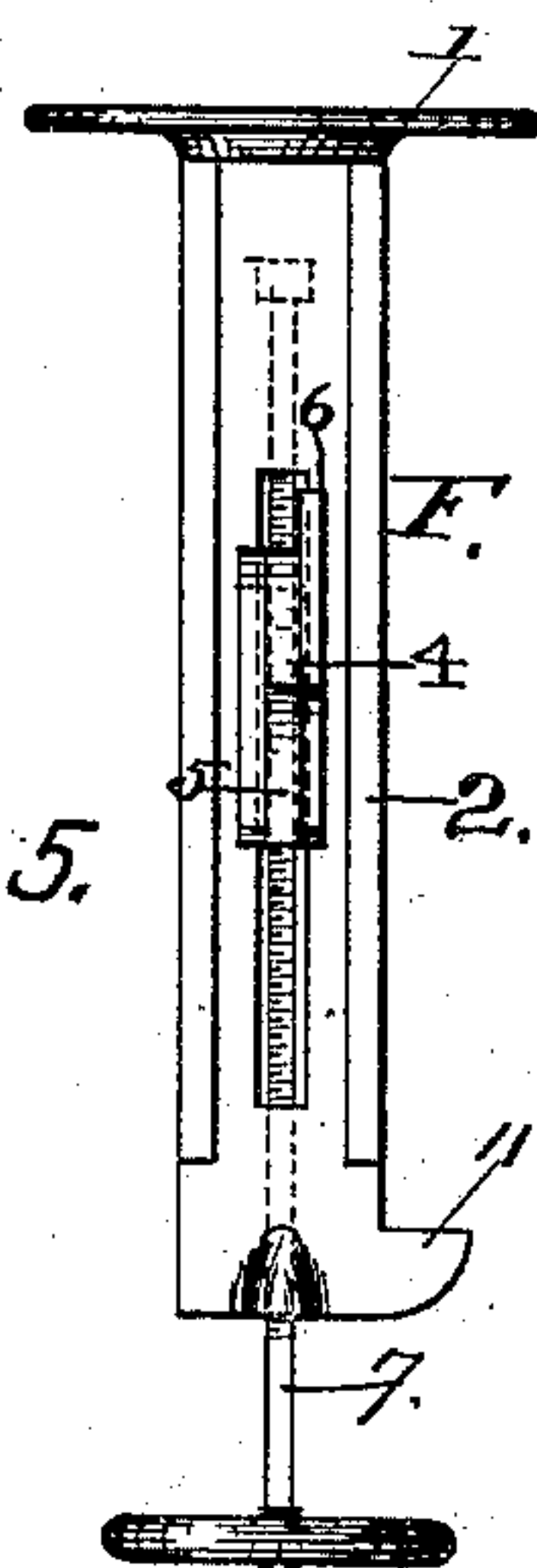


FIG. 7.

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UNITED STATES PATENT OFFICE.

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MACHINE FOR PACKING PULVERULENT SUBSTANCES.

SPECIFICATION forming part of Letters Patent No. 383,136, dated May 22, 1888.

Application filed February 7, 1888. Serial No. 263,274. (No model.)

To all whom it may concern:

Be it known that I, CHARLES J. MATTISON, of the city and county of Oswego, in the State of New York, have invented new and useful
5 Improvements in Machines for Packing Granular and Pulverulent Substances, of which the following is a specification.

My invention relates to improvements in machines for packing into merchantable pack-
10 ages granulated and pulverized substances; and the object of my invention is to simplify the construction of this class of machines and to render them more perfect in their operation. This object I attain by the mechanism illus-
15 trated in the accompanying drawings, which are herein referred to and form part of this specification, and in which—

Figure 1 is a front elevation of a packing-machine provided with my improvements,
20 with part of the frame-work broken away to expose underlying parts. Fig. 2 is an enlarged inverted plan view of the table of the machine. Fig. 3 is a side elevation of the movable support on which the packages are filled, shown
25 in its lowered position. Fig. 4 is a like elevation of the same in its raised position. Fig. 5 is a detached front elevation of the sliding plate and head of the movable support, and Figs. 6 and 7 are respectively a side elevation
30 and a rear elevation of the latch for holding the releasing-lever.

As represented in the drawings, A indicates the frame-work of a packing-machine, B the
35 hopper, C the spout, D the driving-shaft, and E the packing-shaft, all of which are of an old and well-known construction, and form no part of my invention.

F is a movable support on which the cases for the packages to be filled are placed. Said
40 support consists of a head, 1, that is secured to the upper end of a vertically-sliding plate, 2, which moves in guides 3, formed in the opening of a plate, G, that is fixed on the table of the machine, so as to bring the head 1 di-
45 rectly under the spout C. The sliding plate 2 is provided with an adjustable cam-piece, 4, which has near its lower end an inclined cam-face, 5, and at its upper end a shoulder, 6. Said cam-piece is regulated by an adjusting-
50 screw, 7, by which it can be set at any required height on the sliding plate. Counter-weights

8 are attached by means of a strap, 9, which passes over a sheave, 10, to the lower end of the sliding plate 2, for the purpose of obtain-
ing resistance against the downward move- 55 ment of the movable support F, and thereby acquiring the required degree of density of the substances forced into the packages by the operation of the packing mechanism. A lug, 11, is formed on one edge of the sliding plate 2, 60 near the lower end of the latter, for a purpose hereinafter explained.

H is a releasing-lever, which is pivoted, as at 12, to the table of the machine, and is connected by the rod 13 to the operating-lever I 65 of a friction-pulley, J. The connection of the last-named parts is made in such manner that by raising the releasing-lever H the friction-pulley J will be thrown into gear to rotate the driving-shaft D, and by depressing said re- 70 leasing-lever the friction-pulley J will be thrown out of gear to instantly stop the rotations of said driving-shaft. In raising the movable support F to hold the case for a pack- age in place on the spout C the lug 11 will be 75 brought into contact with the movable end of the releasing-lever H, and the latter will be moved thereby into the position indicated by dotted lines in Fig. 1. The movable end of the releasing-lever H is beveled downwardly 80 toward the front of the machine, as shown at 14 in Figs. 3 and 4, for a purpose hereinafter explained.

K is a locking-lever for securing the releas-
ing-lever H in its elevated position and the 85 movable support F in its depressed position. Said locking-lever is pivoted, as at 15, and is provided with an offset handle, 16, so arranged that the weight of said handle will tend to swing said lever toward the sliding plate 2. 90 Said locking-lever has at its lower end an upwardly-turned hook, 17, and near its middle a downwardly-faced projection, 18, and a friction-wheel, 19. The hook 17 is fitted to en-
95 gage under the releasing-lever H, as shown in Fig. 4, and retain said lever in position to hold the friction-pulley J in gear during the time the packing mechanism is required to be in operation. The projection 18 is fitted to
100 engage with the shoulder 6 to retain the movable support F in its depressed position, and the friction-wheel 19 is fitted to roll upward

on the inclined cam-face 5 to swing the locking-lever K backward, and thereby effect the disengagement of the hook 17 from the releasing-lever H.

5 When preferred, the shoulder 6, instead of being formed on the adjustable cam-piece 4, can be formed on the sliding plate 2, and the same result in a modified degree will thereby be obtained; but when the machine is designed
10 for packing packages of different heights I prefer to form said shoulder on the adjustable cam-piece, for the reason that when so arranged the movable support will not require to be depressed to the same degree as when
15 said shoulder is formed on the sliding plate, and consequently considerable time will thereby be saved in packing a given number of packages.

The operation of my invention is as follows:
20 The case in which the material is to be packed is fixed upon the spout C, the locking-lever K is moved to release its projection 18 from the shoulder 6, and the movable support F is raised to or nearly to the lower end of said spout to
25 support the aforesaid case. In the operation of raising the movable support the lug 11 is brought in contact with the movable end of the releasing-lever H, and thereby the latter is raised until it is retained by the hook 17,
30 and the friction-pulley J is thrown into gear to rotate the driving-shaft D, and through the latter the packing-shaft E, to set in motion the packing mechanism. By the operation of said packing mechanism the material in the hop-
35 per B is forced into the case on the spout C,

and, the cam 5 being adjusted at the proper height, the filling of the package causes the movable support to move downward until said case has received its required charge, at which moment the cam 5 will force the locking-lever 40 K to swing backward to disengage the hook 17 from the releasing-lever H, thereby permitting the latter to swing downward to throw the friction-pulley J out of gear and effect a
45 stoppage of the packing mechanism. The movable support F is then depressed until the projection 18 engages over the shoulder 6, to permit of a removal of the filled package and the fixing of another case upon the spout C, and when this is accomplished the machine 50 will be in condition for a repetition of the operation just described.

I claim as my invention—

In a packing-machine, the combination of a movable support having a shoulder projecting 55 therefrom, an adjustable cam attached to the sliding plate of said movable support, a releasing-lever connected by an intermediate rod to move the operating lever of a friction-pulley, and a locking-lever provided with a 60 hook and a projection, said hook being fitted to engage said releasing-lever, and the projection being adapted to engage the shoulder on said movable support, as and for the purpose herein specified.

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