

No. 626,889.

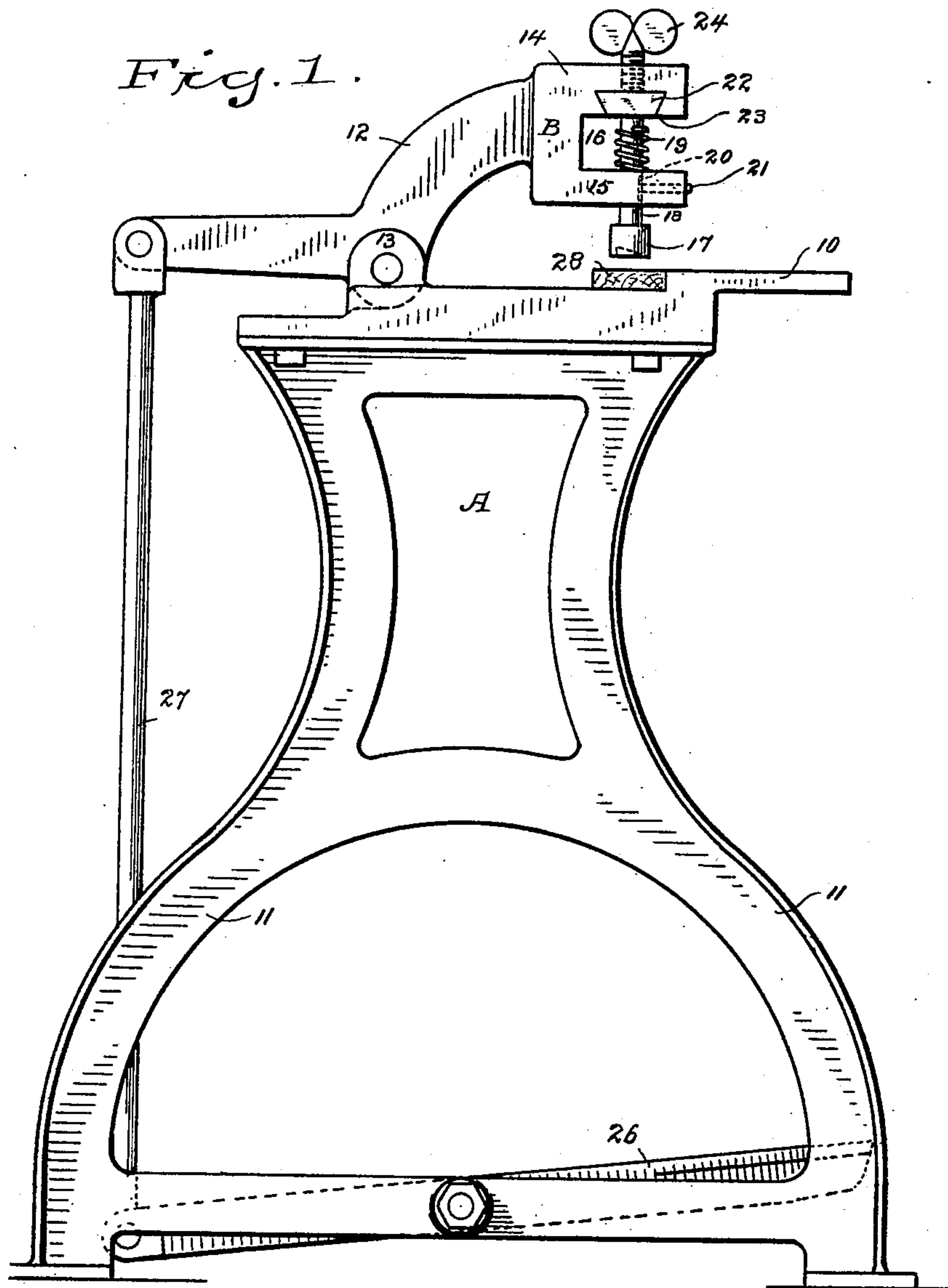
Patented June 13, 1899.

B. F. DUNHAM.
MACHINE FOR MARKING HAT BODIES.

(Application filed Feb. 20, 1899.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES

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Fig. 2.

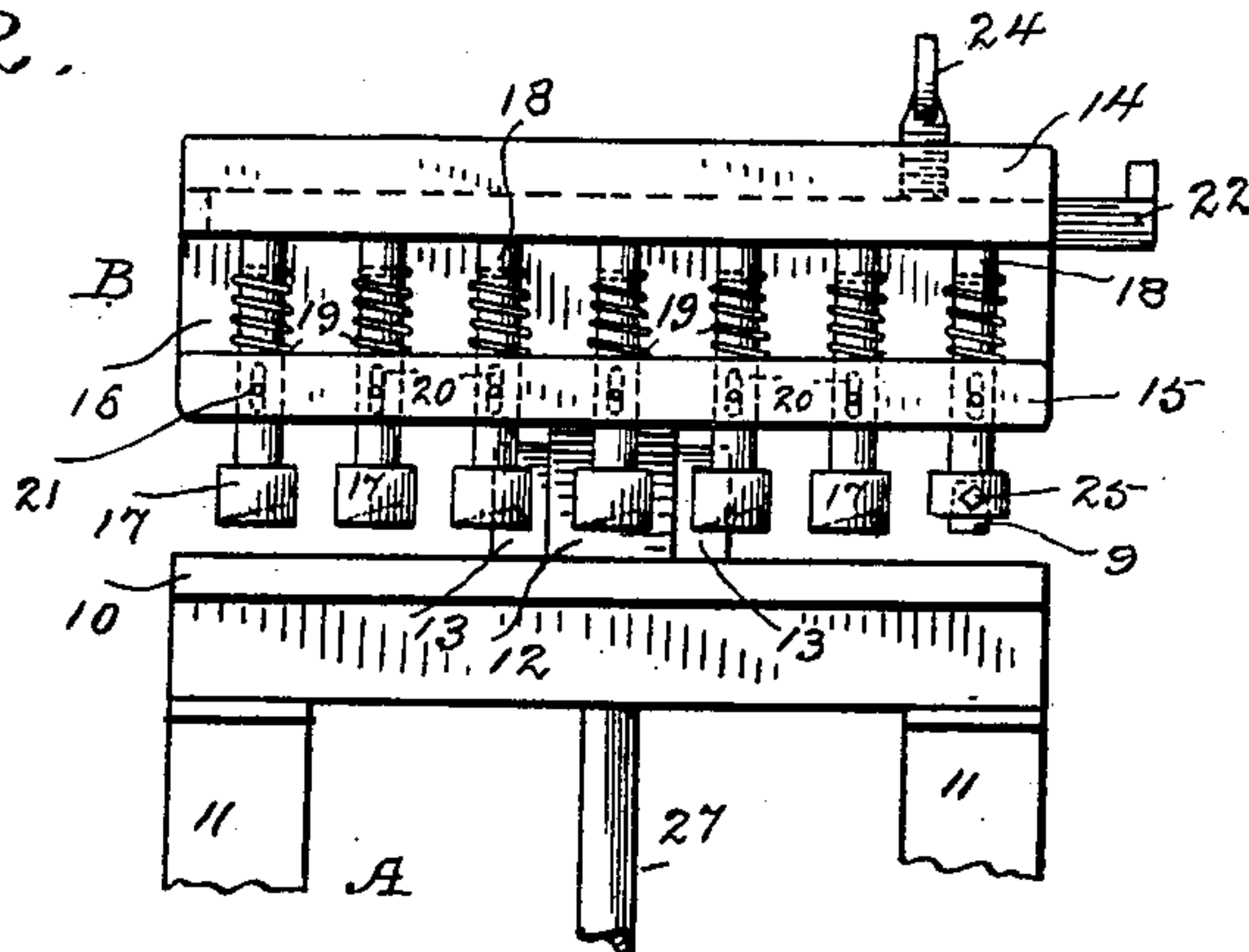


Fig. 3.

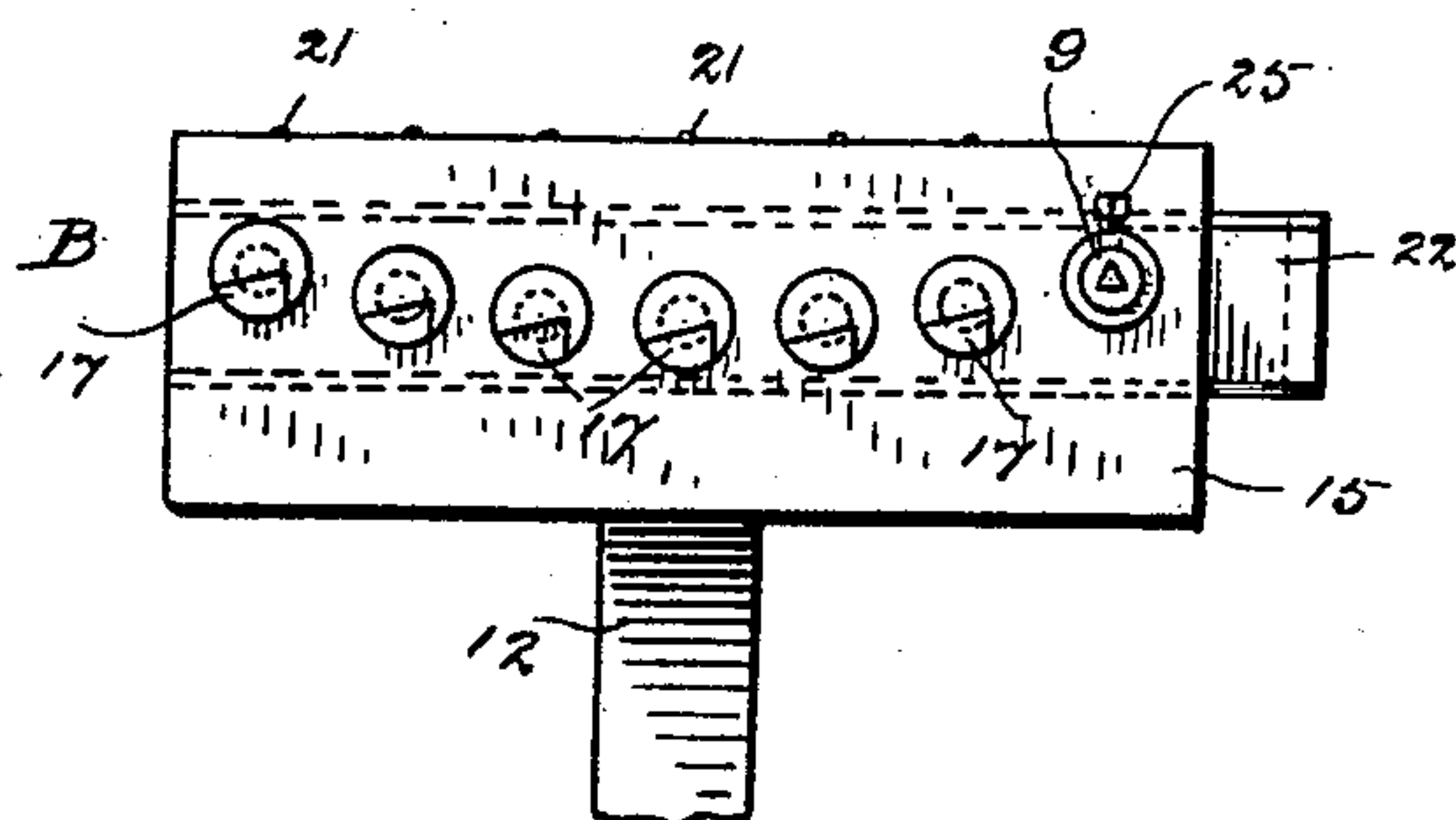


Fig. 4.



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UNITED STATES PATENT OFFICE.

BENJAMIN F. DUNHAM, OF DANBURY, CONNECTICUT.

MACHINE FOR MARKING HAT-BODIES.

SPECIFICATION forming part of Letters Patent No. 626,889, dated June 13, 1899.

Application filed February 20, 1899. Serial No. 706,238. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. DUNHAM, a citizen of the United States, residing at Danbury, county of Fairfield, State of Connecticut, have invented a new and useful Machine for Marking Hat-Bodies, of which the following is a specification.

My invention relates to the manufacture of hat-bodies, and has for its object to provide a simple and inexpensive machine for placing upon a number of hat-bodies simultaneously a mark indicating their grade or quality and also for placing upon each body, in addition to the quality-mark, a mark to indicate the special team of workmen by which any of the bodies in a large lot are being handled.

It is of course well understood by those familiar with the art to which this invention relates that during many of the operations to which hat-bodies are subjected in the process of manufacture—for example, the operation of dyeing—hat-bodies of different grades or qualities are all treated together and that during many of these operations it is difficult without very careful examination to distinguish one quality of hat-body from another. For this reason it has been common to clip one or more notches by hand in the edges of hat-bodies in order to indicate the grade or quality of each body. It will also be understood by those familiar with the art that the hat-bodies in lots go through the hands of a certain gang, or, as it is commonly called, “team” of workmen, the men in each team being responsible for the work upon the lot of hat-bodies which passes through their hands. For this reason it has been common in many factories to place upon the hat-bodies, in addition to the quality-mark, a mark commonly known as a “team-mark,” this mark also being placed on the hat-bodies by hand and necessitating, in connection with the grade or quality marks, quite an appreciable loss of time. In order to prevent loss of time in this manner and to provide a simple and inexpensive means for producing upon a number of hat-bodies simultaneously and almost instantaneously any desired quality-mark and also a team-mark, I have devised the simple and in-

expensive machine for marking hat-bodies, of which the following description, in connection with the accompanying drawings, is a specification, reference characters being used to designate the several parts.

Figure 1 is a side elevation of the machine complete; Fig. 2, a front elevation of the operative portion of the machine; Fig. 3, an inverted plan view of the head; and Fig. 4 is a view of a portion of a hat-brim marked with notches to indicate a certain quality and also with a team-mark.

A indicates framework of the machine, which may be of any ordinary or preferred construction. In the present instance I have shown a table 10, attached to legs 11. The size and shape of these parts are not of the essence of my invention, it being simply required that the table be large enough and extend forward a sufficient distance to conveniently receive a stack of hat-bodies nested together, the crowns lying one within the other, it being perfectly practicable to operate upon six or more hat-bodies at a time. B denotes the head of the machine, which is carried by an arm 12, pivoted in any suitable manner to the table, in the present instance to ears 13, cast upon the table. The shape of the head is not of the essence of my invention. I have found the shape illustrated in the drawings—that is, a head substantially U shape—as thoroughly practical in use. The head in the present instance comprises an upper portion 14 and a lower portion 15, having between them a transverse recess 16.

17 denotes punches for marking the quality of the bodies, and 9 a punch for making a team-mark, all of said punches being carried by shanks 18, which pass through the lower portion of the head. These shanks are held at a raised position by springs 19, which may be arranged in any suitable manner. In the present instance I have shown the upper end of each spring as connected to one of the shanks and the lower end as bearing against the upper side of portion 15 of the head.

20 denotes slots in the shanks, which are engaged by pins 21, driven in from the front of portion 15 of the head. These pins serve to retain the punches against rotary move-

ment, the slots in the shanks being amply long enough to permit the necessary vertical movement of the punches, as will be apparent.

22 denotes a slide adapted to move in an undercut groove 23 in portion 14 of the head. The groove may be made dovetailed or of any suitable shape to retain the slide therein and to permit the slide to be locked in any required position by any suitable means, as a set-screw 24, which engages the upper side of the slide and forces it against the dovetail or overhanging portions of the slot.

In the present instance I have shown the head as provided with seven punches and have shown them as arranged in an arc of a circle conforming substantially with the curvature of the edge of the brims of hat-bodies. This arrangement of the punches, while preferable, is not essential, nor is the number of punches an essential feature of my invention. In the present instance I have shown six of the punches as adapted to cut notches from the edges of hat-bodies to indicate quality and one of the punches as adapted to cut a triangular hole near the edge of the brim to make a team-mark. If it is desired to cut other marks or indications at or near the edges of the brims, it is simply necessary to remove punches and substitute others in their stead, the team-punch being shown as secured to its shank by a set-screw 25.

In Fig. 4 I have shown the edge of a hat-brim bearing the marks of all seven of the punches, this view showing the result of the operation of the punches as arranged in Fig. 2, in which all of the punches are in operative position, owing to the fact that the slide is moved in far enough toward the left to be engaged by the upper ends of all of the shanks. Suppose that it is desired to place upon the hat-bodies the marks of three of the quality-punches instead of six. The slide will be released by turning set-screw 24 backward and then drawn out toward the right, as seen in Fig. 2, far enough to clear the shanks of the fifth, sixth, and seventh punches, counting from the right. As soon as the slide is drawn out the springs 19 will act to raise the punches and shanks, the shanks passing into groove 23 and lifting the punches out of operative position, the machine being so constructed as to permit the shanks and punches to be raised high enough when the slide is withdrawn to prevent the punches from coming in contact with the brims of the hat-bodies in use. The head may be operated in any suitable manner, as by means of a treadle 26, from the rear end of which a rod 27 extends to the rear end of arm 12, which carries the head. The parts are so proportioned relatively to each other that the head is normally retained at the raised position and is moved downward to mark hat-bodies by downward movement of the treadle caused by the foot of the operator.

28 denotes a cutting-plate made of wood,

soft metal, or any suitable material which is rigidly secured to the body in position to receive the impact of the punches after cutting through the hat-bodies.

In use the operator simply adjusts slide 22 so as to place the required number of punches in use, the others being thrown out of operative position by springs 19 as soon as the slide is withdrawn, after which the operator simply takes six or more hats nested together, the crowns lying within each other, places the edges of the superposed brims far enough under the head to be in line with the punches, and then swings the head downward by movement of the treadle, thereby cutting all of the required marks upon a number of hat-bodies simultaneously and practically instantaneously, so that at any stage of the process of manufacture the quality of each hat-body can be told at a glance from the quality-marks and also by the team-mark, the special team operating upon the lot of bodies to which any selected body may belong.

Having thus described my invention, I claim—

1. In a machine for marking hat-bodies, the combination with a vertically-movable head, of a series of punches having shanks engaging the head, springs whose normal action is to raise the shanks and punches, said springs bearing on a portion of the head at one end and connected with said shanks at their other ends, and a slide carried by the head and lying in the path of the punches, said slide being adapted to engage any number of the punches commencing at one end of the series to retain the engaged punches in operative position, the punches not engaged being thrown out of operative position by the springs, the said punches and the springs and the slide being bodily movable with said head.

2. In a machine of the character described the combination with a vertically-movable head comprising portions 14 and 15 having a transverse recess between them, of a series of punches, shanks therefor which pass through portion 15 of the head, springs acting to raise the shanks and punches and a slide in portion 14 of the head which is adapted to retain the punches in operative position and which when moved out of engagement with the shanks of punches permits the corresponding springs to move said punches out of operative position.

3. In a machine of the character described the combination with a vertically-movable head, comprising portions 14 and 15, said portion 14 having an undercut groove 23, of a series of punches, shanks therefor which pass through portion 14 of the head, a slide lying in the transverse groove, springs acting to hold the upper ends of the shanks against the slide and to lift them into the groove when the slide is withdrawn and means for locking the slide in position to render any desired number of the punches operative or inoperative.

4. In a machine of the character described
the combination with a vertically-movable
head comprising portions 14 and 15, of a se-
ries of punches, shanks therefor which pass
5 through portion 15 of the head and are pro-
vided with grooves 20, pins engaging said
grooves by which the shanks are held against
rotation, springs acting to raise the shanks
and a slide adapted to be engaged by the

shanks whereby the punches may be ren- 10
dered operative or inoperative.

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

BENJAMIN F. DUNHAM.

Witnesses:

ALFRED H. EDGERLEY,
THOMAS SMITH.