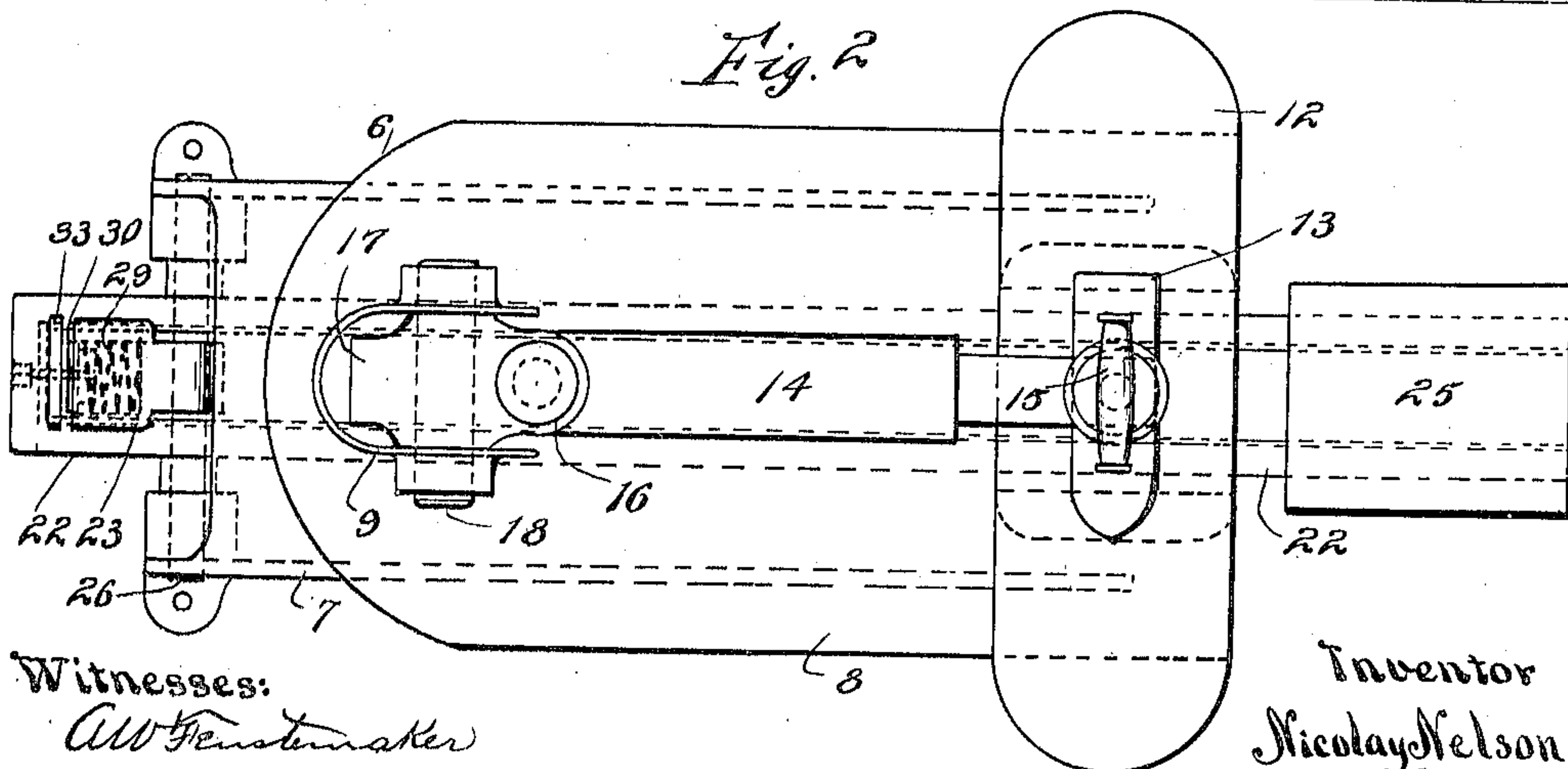
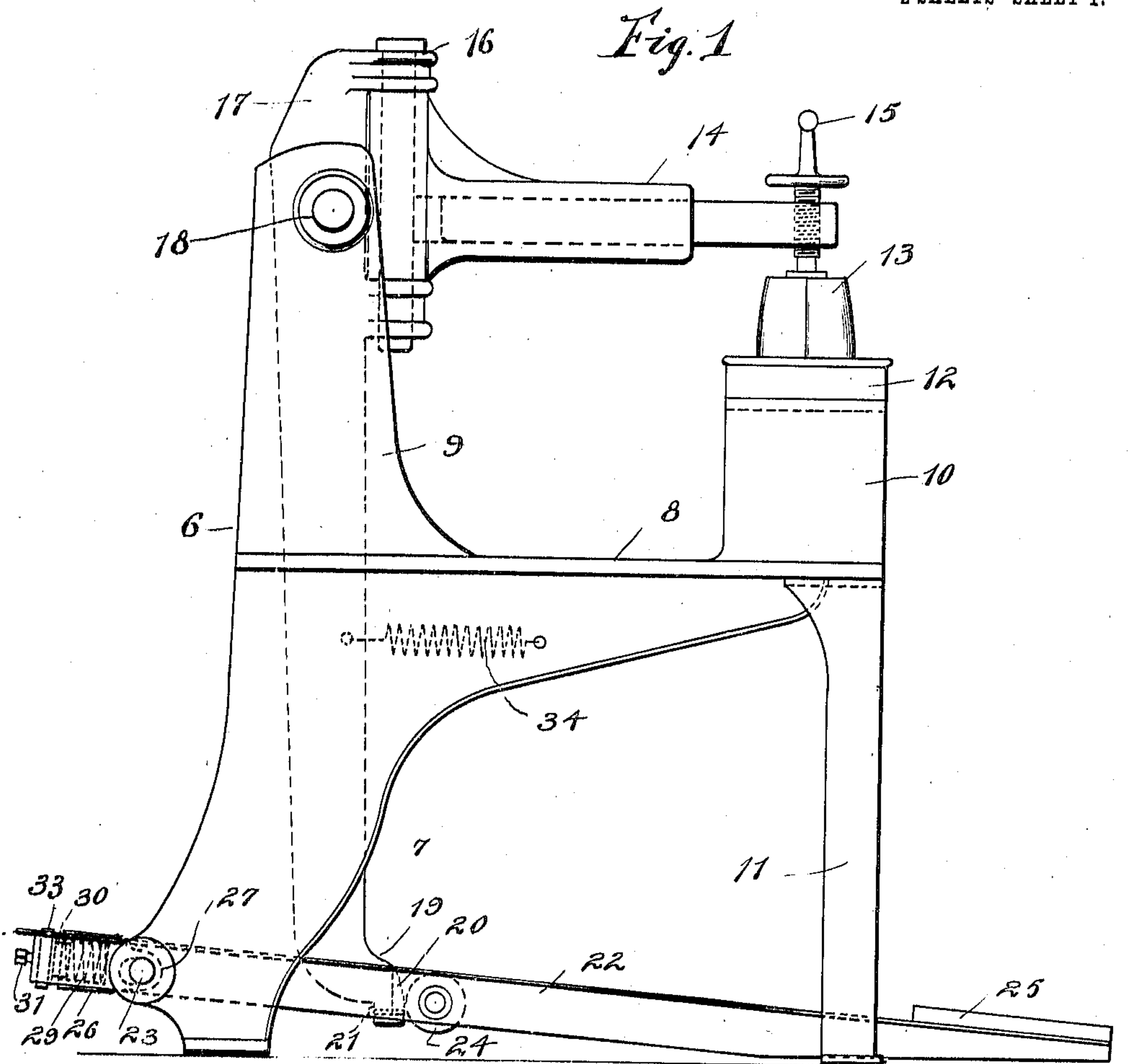


N. NELSON.  
GARMENT PRESSER.  
APPLICATION FILED NOV. 30, 1908.

917,346.

Patented Apr. 6, 1909.  
2 SHEETS—SHEET 1.

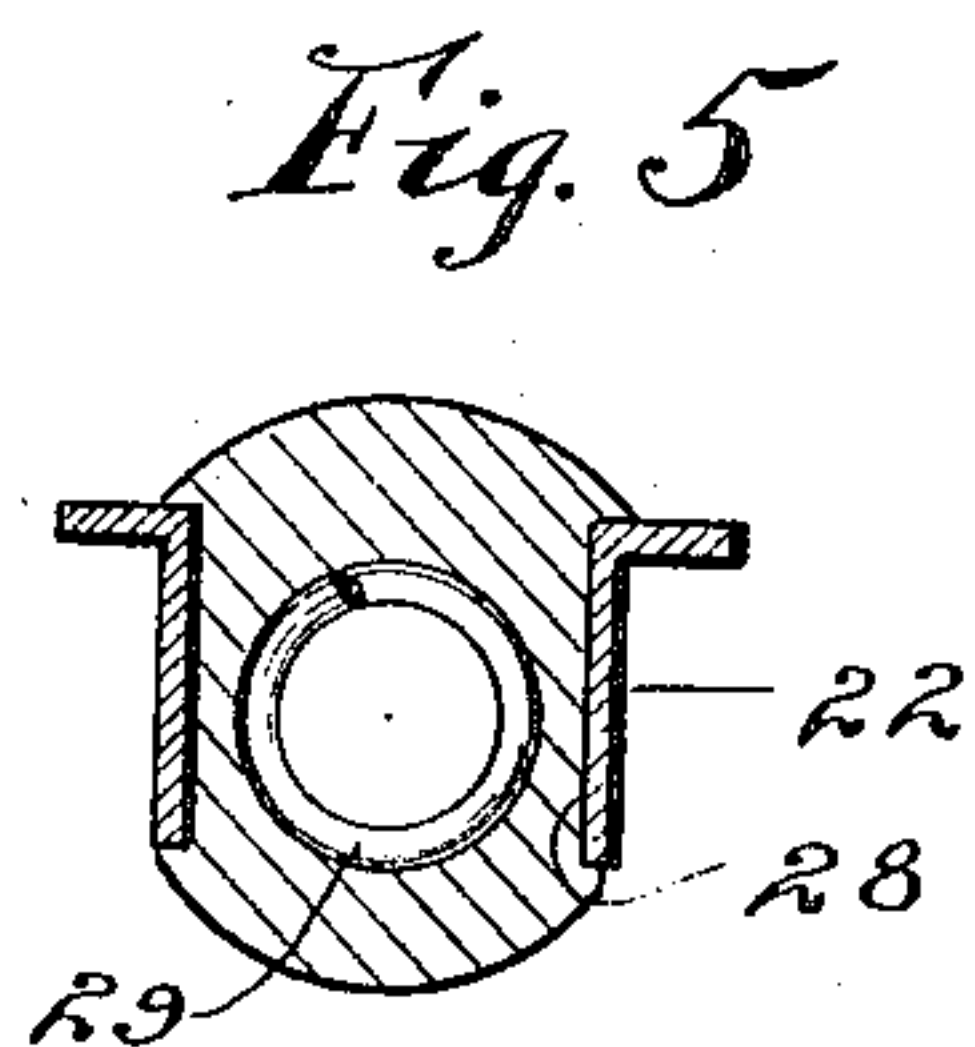
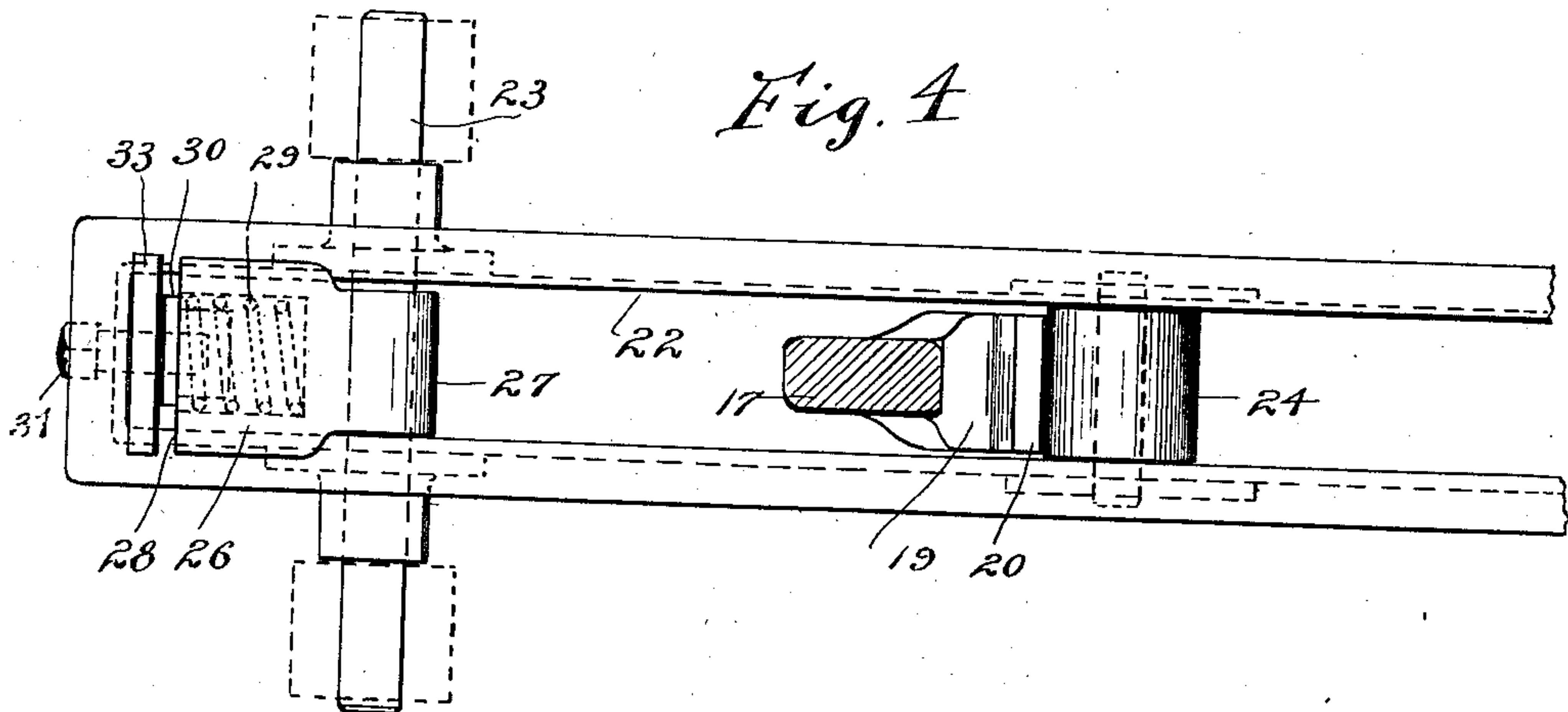
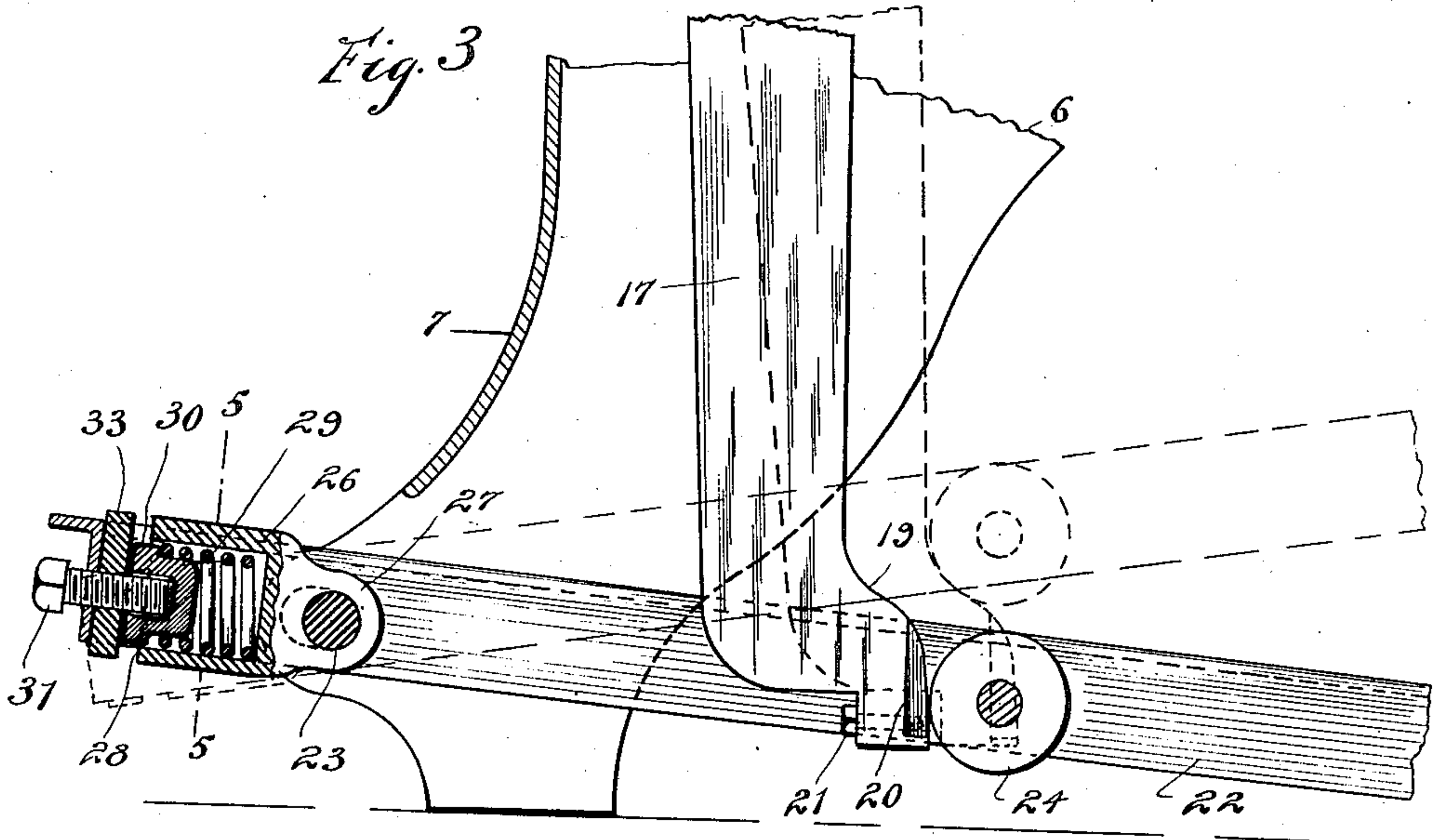


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917,346.

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2 SHEETS—SHEET 2.



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# UNITED STATES PATENT OFFICE.

NICOLAY NELSON, OF WAUKEGAN, ILLINOIS.

## GARMENT-PRESSER.

No. 917,346.

Specification of Letters Patent.

Patented April 6, 1909.

Application filed November 30, 1908. Serial No. 465,121.

*To all whom it may concern:*

Be it known that I, NICOLAY NELSON, a citizen of the United States, residing at Waukegan, in the county of Lake and State of Illinois, have invented certain new and useful Improvements in Garment-Pressers, of which the following is a specification.

This invention relates more particularly to that class of presser machines or devices in which a large amount of pressure is desired to be exerted upon the garment or article being pressed, such pressure being preferably exerted through the action of the operator and transmitted to the presser-iron through suitable transmission mechanism. However, as will appear from the following description, certain features of this invention may also be used in connection with power presses. Its objects are to provide convenient and effective means whereby a large amount of pressure may be readily exerted on the presser-iron by means of a comparatively small weight or force applied to the transmitting mechanism, to provide an improved form of foot lever for operating the machine, to provide an improved and effective device for transmitting the power from the foot lever to the presser arm-lever, to provide a rigid and substantial framework, and such other novel features and combinations as will appear hereinafter.

I have illustrated my improved device in the following drawings, in which—

Figure 1 is a side elevation of a garment presser embodying this invention; Fig. 2 is a top plan view; Fig. 3 is an enlarged sectional detail showing one end of the foot lever and its connection with the frame and method of operating the presser arm-lever; Fig. 4 is a plan view of the parts shown in Fig. 3; and Fig. 5 is a sectional view taken on a line 5—5 of Fig. 3.

As shown in these drawings, 6 indicates a frame comprising supporting legs 7, bed 8, upwardly-extending presser arm support 9, presser table support 10, all preferably cast in one piece, and legs 11 which, for convenience, may be cast separately from the main portion of the frame. The object of forming the main frame portions integrally is not only for convenience in construction, but to provide a substantial and rigid device for receiving or transmitting the strains incident to the operation of the presser.

A presser table 12 is mounted on the support 10 at the front of the machine and is

adapted to receive the garment or material to be pressed. The presser-iron 13 is adjustably mounted in the end of the adjustable presser arm 14 and is adapted to be guided by means of a handle 15. The arm 14 is pivotally mounted at 16 in bearings at the upper end of a presser-arm-lever 17. The arrangement of the presser-arm and iron is such that the arm may be swung laterally and the bar supporting the iron drawn out so that the iron may be operated over a considerable distance along the board 12. The presser arm-lever 17 is pivoted at 18 in the upper end of the support 9 and extends down substantially to the bottom of the machine, the lower end being curved or extended forwardly as indicated at 19. The front face of the lower end of the lever 17 is preferably provided with a wedge-shaped hardened plate 20, which is held in position by means of a screw or bolt 21.

A foot-lever 22 is mounted at the bottom of the machine, being pivoted at 23 in the lower portions of the legs 7. This lever may be made in any desired manner, but I prefer to construct the same of an angle-iron arranged as shown in the drawings. This foot lever is provided with a roller 24 which engages with the lower end of the lever 17, and is also provided at its forward end with a treadle or foot piece 25. In order to provide a somewhat yielding movement between the roller 24 and the lever 17, I provide a tension device at the rear end of the foot lever 22. This tension device is best seen in Figs. 3, 4 and 5, and comprises a cylinder or spring-retaining member 26 which is provided with a bearing 27 engaging with the pivot or pin 23. This cylinder 26 is also provided at its sides with guideways 28 for engagement with the sides of the foot lever 22, the arrangement being such that the foot lever may be moved longitudinally with respect to said cylinder, the holes in the sides of said foot lever, where it engages with the pivot 23, being slightly elongated or enlarged to allow for such movement. A spring 29 is mounted in the cylinder 26 and engages at its outer end with a plunger or follower 30, which plunger or follower may be adjusted by means of a screw 31 passing through the end portion of the foot lever 22 and through a threaded plate or nut 33. This arrangement is such that, when the screw is tightened, the pressure on the spring may be adjusted to any desired tension.



The presser arm lever 17 is provided with a spring 34 which tends to hold the lower end of the lever normally moved to its forward position, so that the presser arm 14 and presser iron 13 will be in raised position, ready for inserting the garment or article to be pressed between the presser iron and the board or table 12. With the lever 17 in this forward position, for instance as indicated by dotted lines in Fig. 3, the operation of the foot lever and connected parts will be readily understood.

The operator, by pressing down on the treadle or foot plate 25, moves the outer end of the lever 22 downwardly, causing the roller 24 to move down along the face of the curved end of the lever 17. This causes a comparatively rapid movement of the lever, with a corresponding downward movement of the presser arm and iron. Then, as the roller comes in engagement with the wedge-shaped or inclined face of the plate 20, the lateral movement of the lever 17 will be more gradual and a greater pressure will be exerted on the iron 13, the greatest pressure being available as the iron reaches its lowermost position. While this action is taking place, the compression spring or tension arrangement at the rear end of the lever 22 provides for a somewhat yielding action between the roller 24 and the lever 17, and the pressure to be exerted on the lever may be regulated by increasing or decreasing the tension on the spring 29. After the lever 22 has reached its lowermost position, it is then released and the parts may again assume their normal position. It will be noted that, by means of this roller and wedge-like connection between the foot lever and the presser arm lever, I am able to exert an enormous pressure on the presser iron and at the same time am enabled to secure a comparatively rapid action of the machine, with a relatively small movement of the foot lever. Furthermore, by having all of the operative parts connected to the rigid frame, there will be little or no give to the frame and the machine will perform more effective service.

Having thus described my invention, which I do not wish to limit to the exact construction or arrangement of parts shown and described, what I claim and desire to secure by Letters Patent is:

1. In a garment presser, the combination of a frame, a lever for operating the presser arm, said lever being provided at its lower end with a curved and beveled engaging face; a foot lever, and a roller mounted in said foot lever for engaging with said face, the arrangement being such that the roller moves away from the pivot of the first-named lever as the pressure is increased.

2. In a garment presser, the combination

of a frame, a lever pivotally mounted in said frame, said lever having a curved and beveled engaging face at its lower end, a presser arm pivotally mounted on said lever, a foot lever pivotally mounted at the bottom of said frame, and a roller on said foot lever adapted to engage with the lower end of said first-named lever to transmit pressure to the same.

3. In a garment presser, the combination of a lever for operating the presser arm, said lever being provided at its lower end with a curved and wedge-like engaging face; a foot lever having a roller adapted to press against said face, and yielding means for regulating the pressure between said roller and the end of said lever, the arrangement being such that the first portion of the downward movement of the foot lever causes the roller to engage with the curved portion of the engaging face and gives a quick movement to the first-named lever, while the latter portion of the downward movement of the foot lever causes the roller to engage with the wedge-like portion of the face and gives a slower but more powerful action to said first-named lever.

4. In a garment presser, the combination of a frame, a lever for operating the presser iron, mounted in said frame, said lever being provided with an irregularly-shaped engaging face at its lower end; a foot lever pivotally mounted in the bottom of said frame, a roller on said foot lever, adapted to engage with said irregular face to swing said first-named lever as the foot lever is pressed downwardly, and an adjustable spring arranged between said foot lever and its pivot pin, for regulating the pressure between said roller and the said first-named lever.

5. In a garment presser, the combination of a rigid frame, a lever pivotally mounted in said frame, an adjustable presser arm pivotally mounted on said lever, an adjustable presser iron mounted on said arm, said lever being provided at its lower end with a beveled engaging plate; a foot lever formed of a bent angle-iron, pivotally mounted at the bottom of said frame, a spring-retaining cylinder slidably mounted in said foot lever and having one end engaging with the pivot for said lever, a spring in said cylinder, an adjustable follower for regulating the tension of said spring, the pivot holes of said foot lever being enlarged to allow a longitudinal movement thereof, and a roller mounted in said foot lever and adapted to engage with said beveled plate, whereby pressure exerted on the outer end of said foot lever will be transmitted to said first-named lever.

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Witnesses:

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