

H. LINDESTROM.

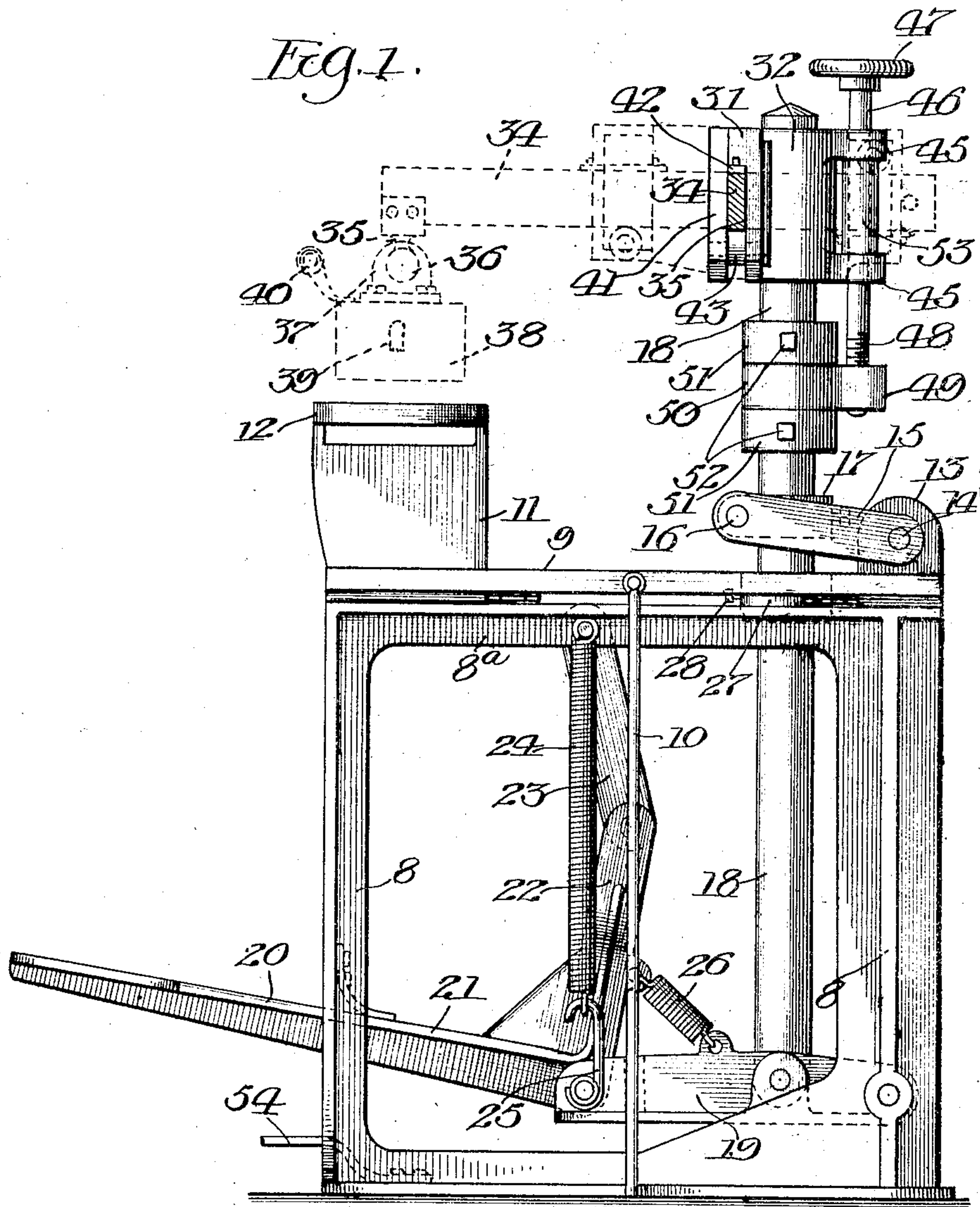
PRESSING MACHINE.

APPLICATION FILED SEPT. 11, 1908.

Patented June 15, 1909.

2 SHEETS—SHEET 1.

925,205



Witnesses
Orr. Vermich
M. A. Nyman.

Inventor
Hjalmar Lindstrom
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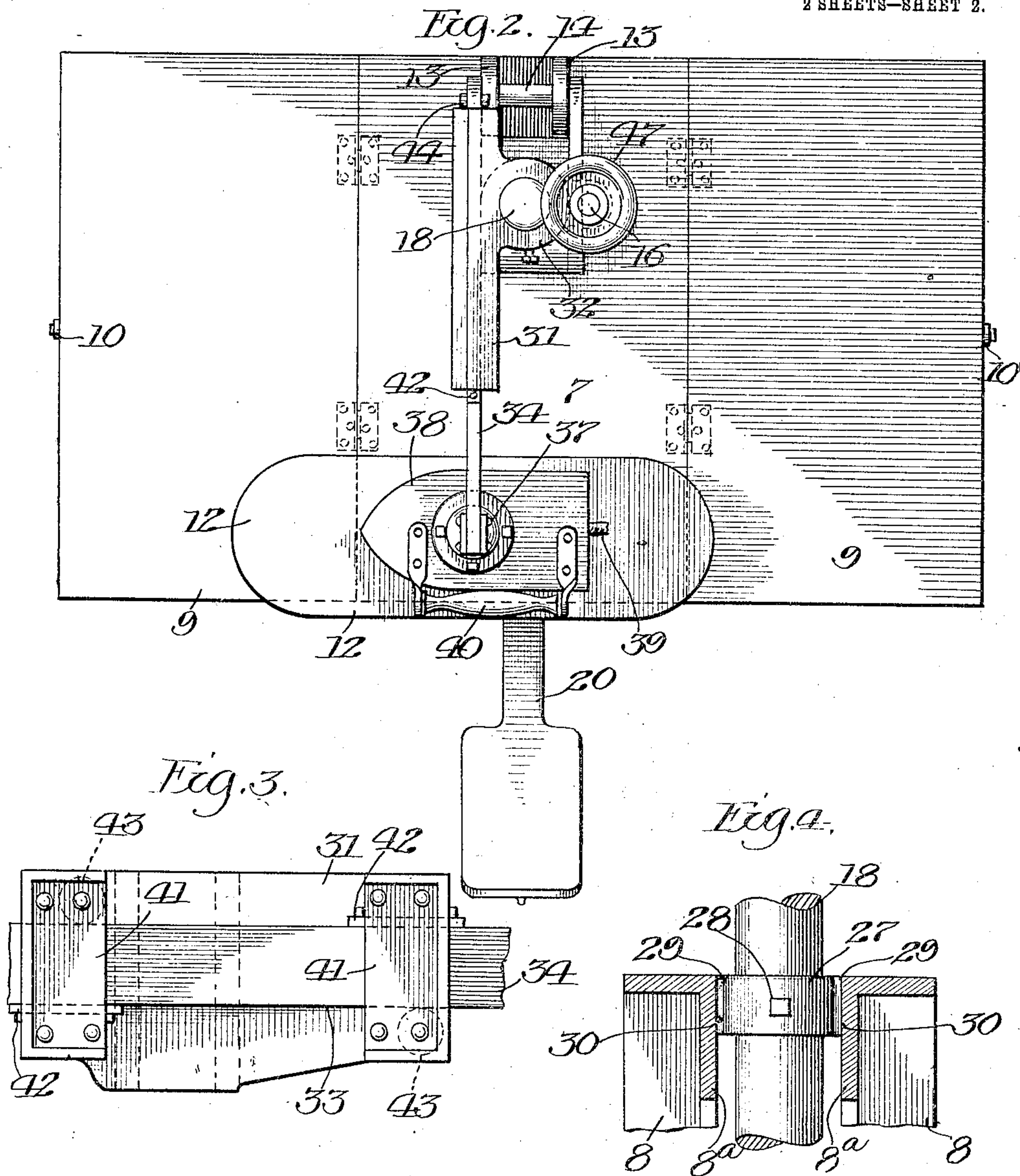
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UNITED STATES PATENT OFFICE.

HJALMAR LINDESTROM, OF CHICAGO, ILLINOIS, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE LEADER MACHINE COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

PRESSING-MACHINE.

No. 925,205.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed September 11, 1908. Serial No. 452,636.

To all whom it may concern:

Be it known that I, HJALMAR LINDESTROM, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Pressing-Machines, of which the following is a specification.

This invention relates to improvements in a machine to be used for pressing garments and cloth, and consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The principal object of the invention is to provide a garment or cloth pressing machine which shall be simple and inexpensive in construction, strong, durable and effective in operation, and so made that the desired amount of pressure may be applied to the smoothing-iron by foot power while said iron may be manipulated by the hand of the operator.

Another object of the invention is to provide means for adjustably supporting the iron with respect to the ironing-board or platform to the end that the proper pressure may be applied to the garment or cloth through the iron, and so that the latter may be swung from over the board or platform to permit of the cloth and garments being properly placed thereon.

Other objects and advantages of the invention will be disclosed in the subjoined description and explanation.

In order to enable others skilled in the art to which my invention pertains, to make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 is a view in side elevation of a pressing machine embodying the invention, showing by dotted lines the positions to which the iron and its support may be turned ready for the operation of pressing; Fig. 2 is a top plan view of the machine; Fig. 3 is an enlarged view in side elevation of a portion of the beam which supports the smoothing-iron, showing it mounted on the head or carrier therefor; Fig. 4 is a detail view partly in section and partly in elevation of a portion of the supporting-frame and a part of the vertical shaft which carries the support for the smoothing-iron.

Like numerals of reference, refer to cor-

responding parts throughout the different views of the drawings.

The reference numeral 7 designates the main or central portion of the horizontally disposed table or top of the machine, which is supported by means of a frame 8, of any suitable size, form and material, but preferably rectangular in shape as shown in Fig. 1 of the drawings. Hinged to each of the side edges of the top 7 is a leaf or section 9 which may be supported in horizontal positions by means of legs or rods 10 secured to their outer edges at about the middle thereof.

Mount 11 on suitable uprights 11 at the front portion of the top 7 is a horizontally disposed board or platform 12 which may be of any suitable size and shape and on which the cloth or garments are adapted to rest while being pressed or ironed. The rear portion of the top 7 has at about its middle two upwardly extended and spaced apart projections 13 which are transversely apertured to receive a shaft 14 on which is mounted at each of its ends a forwardly extending link 15, between the front portions of which is pivotally secured on a transverse shaft 16 a vertically apertured block 17 through which is extended the supporting-shaft 18 for the iron carrying head, which block may be secured to said shaft by means of a set-screw, see dotted lines in Fig. 1, and in connection with the links 15 is employed to assist in holding the shaft 18 vertically in its movements. By this arrangement it is apparent that the block 17 may be raised to a suitable distance on the shaft 18 and there fixed by means of the set-screw which it carries so as to counteract or overcome the rearward pressure on the upper portion of said shaft and in such a way as to prevent the pressing iron sliding inwardly. Fulcrumed on the rear portion of the main frame 8 and extended forwardly under the table or top 7 is a lever 19 to which the lower portion of the supporting-shaft is pivotally secured, as is clearly shown in Fig. 1 of the drawings. To the front portion of the lever 19 is pivotally secured at its rear portion a foot-lever 20 which is in the form of a bell-crank lever, and has its longer arm 21 extended through the front portion of the frame 8 and its shorter arm 22 projected upwardly and pivotally secured to the lower end of a link 23, the other end of which is similarly

secured to the upper portion of the main frame 8 at about the middle of the central portion of the table or top. Secured at its upper end to the upper portion of the frame 8 is a spring 24 which has its other end connected by means of a link 25, or otherwise, to the front portion of the lever 19, and said spring is employed to hold the lever 19 and the supporting-shaft 18 normally in their raised positions. Connected to the shorter arm 22 of the bell-crank or foot-lever at a point above its fulcrum is one end of a spring 26 the other end of which is secured to the lever 19 in front of the shaft 18, and said spring is employed to retract the shorter arm 22 so as to normally hold the front portion of the foot-lever in its raised position. Surrounding the supporting-shaft 18 at the upper portion of the main frame 8 is a collar 27 which may be fixed to the shaft 18 by means of a set-screw 28, and has diametrically disposed projections 29 to fit in vertical guide-ways 30 formed in spaced apart transversely extending portions 8^a of the supporting-frame at about the middle rear portion thereof.

As will be understood by reference to Figs. 1 and 2 of the drawings the shaft 18 is extended vertically through a suitable opening in the top 7, and has rotatably mounted on its upper portion the iron-carrying-head which consists of a horizontally disposed beam 31 having a vertically apertured enlargement 32 near one of its ends to receive the shaft 18, and provided on its opposite surface with a longitudinal groove 33 to receive a horizontally-disposed and adjustable bar 34 which has secured at its front end a pendant 35 having on its lower portion a ball or spherical enlargement 36 to fit within a correspondingly-shaped cavity of a socket piece 37 which is secured to the upper surface of the iron 38, or tailor's goose, which iron or goose is preferably of such construction as may be heated by means of gas supplied through a tube 39 leading from a supply of gas to a suitable burner within the iron. This iron is provided with an upwardly and laterally extending handle 40 to be used for manually operating the same, for it is apparent that its position may be changed, as desired, by reason of the joint provided by the ball 36 and socket 37 at the end of the adjustable bar 34 which supports them. The adjustable bar 34 is movably held in position within the groove 33 of the head by means of straps 41 which are vertically secured to the beam 31 near its ends and across the groove therein. Located in the upper front portion and in the rear lower part of the groove 33 are horizontally disposed bearing plates 42, and journaled at the rear upper portion and lower front portion of said groove are rollers 43 which rollers and plates serve to act as guides or

bearings for the bar 34, thus permitting it to be moved back and forth with great ease. The rear end of the bar 34 may be provided with a transverse pin 44 to prevent it being accidentally withdrawn from the head. The enlarged portion 32 of the head is provided at its upper and lower portions with vertically apertured and spaced apart projections 45 through which is extended an adjusting-rod 46 which has in its upper portion a knob or hand-wheel 47 to turn the same, and is provided on its lower portion with screw-threads 48 to engage a screw-threaded opening in a projection 49 on a collar 50 which is rotatably mounted on the shaft 18 between two collars 51 which may be secured at the desired positions by means of set-screws 52 with which they are provided. The adjusting-rod 46 is provided with an enlargement 53 between the projections 45 so that the head will be raised or lowered on the shaft 18 by turning the adjusting-rod 46 in the proper direction.

From the foregoing and by reference to the drawings it will be seen and clearly understood that the head carrying the iron supporting-bar 34 may be adjusted vertically to any suitable point on the supporting-shaft 18 therefor, and that the bar 34 which carries the iron 38 may be extended back and forth with respect to the head, and that as the iron is supported by means of the ball and socket joint it will have such movement that will enable the operator to manipulate it as desired on the garments or cloth in the operation of pressing the same. By placing the foot of the operator on the forward or free end of the lever 20 it is apparent that the desired pressure may be imparted to the iron, and it will be understood that as the shorter arm 22 of the bell-crank or foot-lever is pivotally connected to the lower end of the pivoted link 23 a toggle-joint will thereby be produced, thus providing great power or pressure. In order to prevent the toggle joint formed by the link 23 and shorter arm 22 of the bell-crank-lever from passing forwardly over the dead center I provide the lower portion of the frame 8 with a spring 54 which is located in the path of the lever 20 at a suitable distance below the same, so that when said lever is forced downwardly it will strike the spring 54 and prevent the toggle being moved forward of its dead center.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters-Patent, is—

1. In a pressing machine, the combination with a main frame, of a supporting-shaft mounted for vertical movement thereon, a lever fulcrumed on the main frame and pivotally connected to the lower portion of said shaft, a bell-crank-lever pivotally secured to the front portion of the first-named

lever and having its longer arm extended forwardly, a link pivotally secured at one of its ends to the upper end of the shorter arm of the bell-crank-lever and pivotally secured at its other end to the main frame, a spring uniting the said shorter arm and the first-named lever, a head rotatably mounted on the upper portion of the supporting-shaft and having a horizontally disposed guide-way, a bar movably mounted in said guide-way, and in iron loosely connected to the front portion of said bar.

2. In a pressing machine, the combination with a main frame, of a supporting-shaft mounted for vertical movement thereon, a spring-actuated-lever suitably fulcrumed and pivotally connected to the lower portion of said shaft, a bell-crank-lever pivotally secured to the front portion of the first-named lever and having its longer arm extended forwardly, a link pivotally secured at one of its ends to the frame and at its other end to the shorter arm of the bell-crank-lever, and a spring uniting said shorter arm and the first-named lever.

3. In a pressing machine, the combination with a main frame, of a supporting-shaft mounted for vertical movement thereon, a spring-actuated-lever suitably fulcrumed and pivotally connected to the lower portion of said shaft, a bell-crank-lever pivotally secured to the front portion of the first-named lever and having its longer arm extended forwardly, a link pivotally secured at one of its ends to the frame and at its other end to the shorter arm of the bell-crank-lever, a spring uniting said shorter arm and the first-named lever, a head rotatably and adjustably mounted on the upper portion of the supporting-shaft and having a horizontally disposed guide-way, a bar movably mounted in said guide-way, and an iron loosely connected to the front portion of said bar.

4. In a pressing machine, the combination with a main frame having on its rear portion upward extensions, of a supporting-shaft mounted for vertical movement on said frame near said extensions, a block adjustably mounted on the shaft and loosely connected to said extensions, a lever suitably fulcrumed and pivotally connected to the lower portion of the supporting-shaft, a bell-crank-lever pivotally secured to the front portion of the first-named lever and having its longer arm extended forwardly,

a link pivotally secured at one of its ends to the upper end of the shorter arm of the bell-crank-lever and pivotally secured at its other end to the main frame, a spring uniting the said shorter arm and the first-named lever, a head rotatably mounted on the upper portion of the supporting-shaft and having a horizontally disposed guide-way, a bar movably mounted in said guide-way, and an iron loosely connected to the front portion of said bar.

5. In a pressing machine, the combination with a main frame having on its rear portion upward extensions, of a supporting-shaft mounted for vertical movement on said frame near said extensions, a block mounted on the shaft and loosely connected to said extensions, a lever suitably fulcrumed and pivotally connected to the lower portion of the supporting-shaft, a bell-crank-lever pivotally secured to the front portion of the first-named lever and having its longer arm extended forwardly, a link pivotally secured at one of its ends to the upper end of the shorter arm of the bell-crank-lever and pivotally secured at its other end to the main frame, a spring uniting the said shorter arm and the first-named lever, a head rotatably mounted on the upper portion of the supporting-shaft and having a horizontally disposed guide-way, a roller journaled at the lower front portion and rear upper portion of said guide-way, a bearing-plate located at the upper front portion and rear lower portion of the guide-way, a bar movably mounted in said guide-way, and an iron loosely connected to the front portion of said bar.

6. In a pressing machine, the combination with a main frame, of a supporting-shaft mounted for vertical movement thereon, a spring-actuated-lever suitably fulcrumed and pivotally connected to the lower portion of said shaft, a spring-actuated-bell-crank-lever pivotally secured to the front portion of the first-named lever and having its longer arm extended forwardly, a link pivotally secured at one of its ends to the frame and at its other end to the shorter arm of the bell-crank-lever, and a spring located below and in the path of the longer arm of the bell-crank-lever.

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Witnesses:

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