

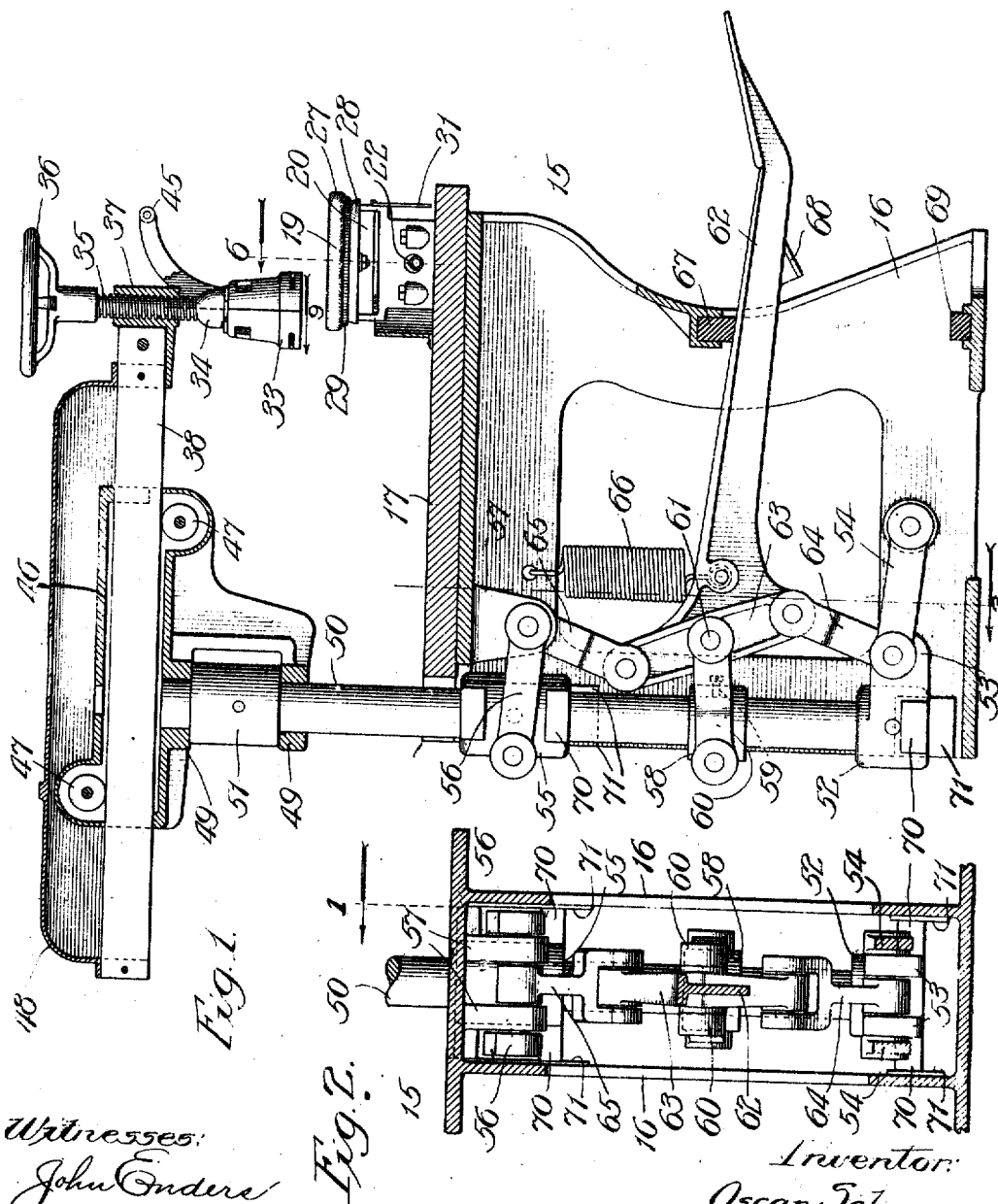
O. SCHROM.
PRESSING MACHINE.

APPLICATION FILED FEB. 18, 1910. RENEWED AUG. 11, 1911.

1,004,697.

Patented Oct. 3, 1911.

5 SHEETS—SHEET 1.



Witnesses:
John Enders
Chas. H. Buell.

Inventor:
Oscar Schrom.
By Dyrenforth, Lee, Christensen & Wiles
Attys. #

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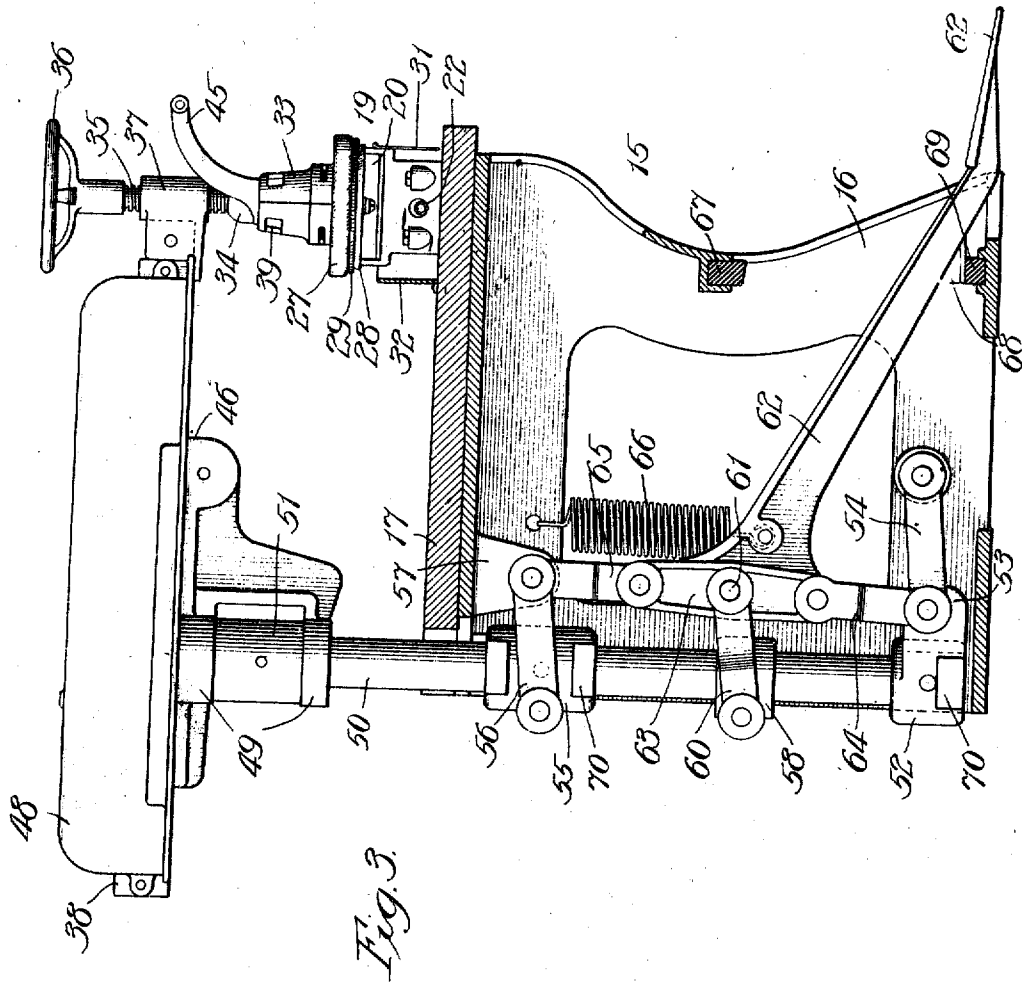


Fig. 3.

Witnesses:

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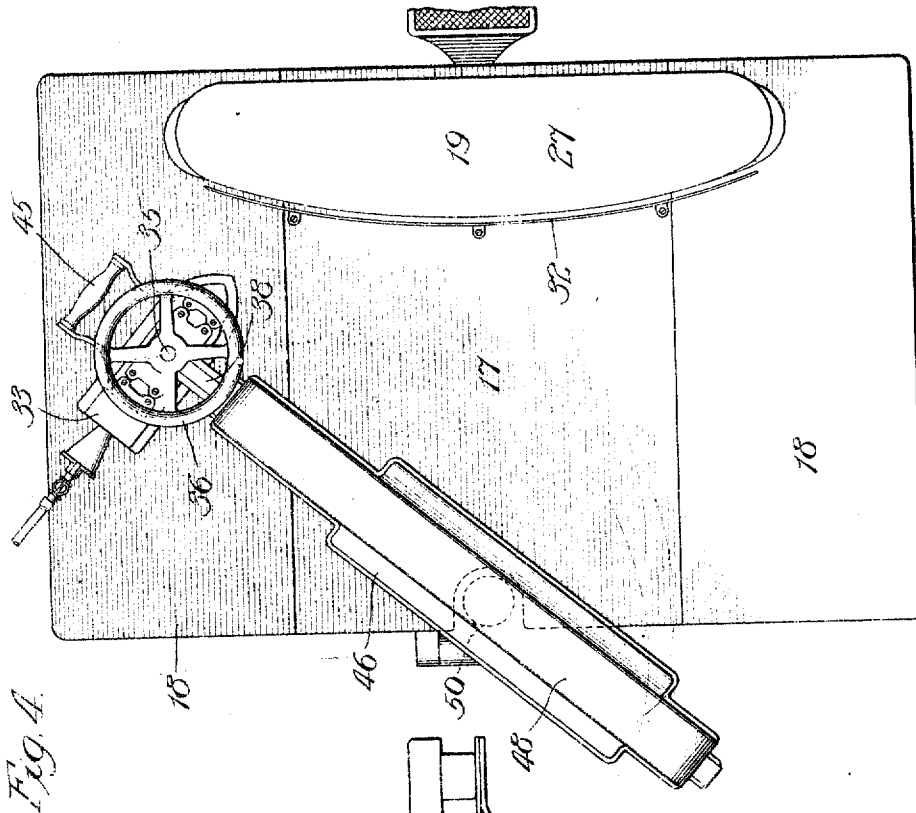


Fig. 4.

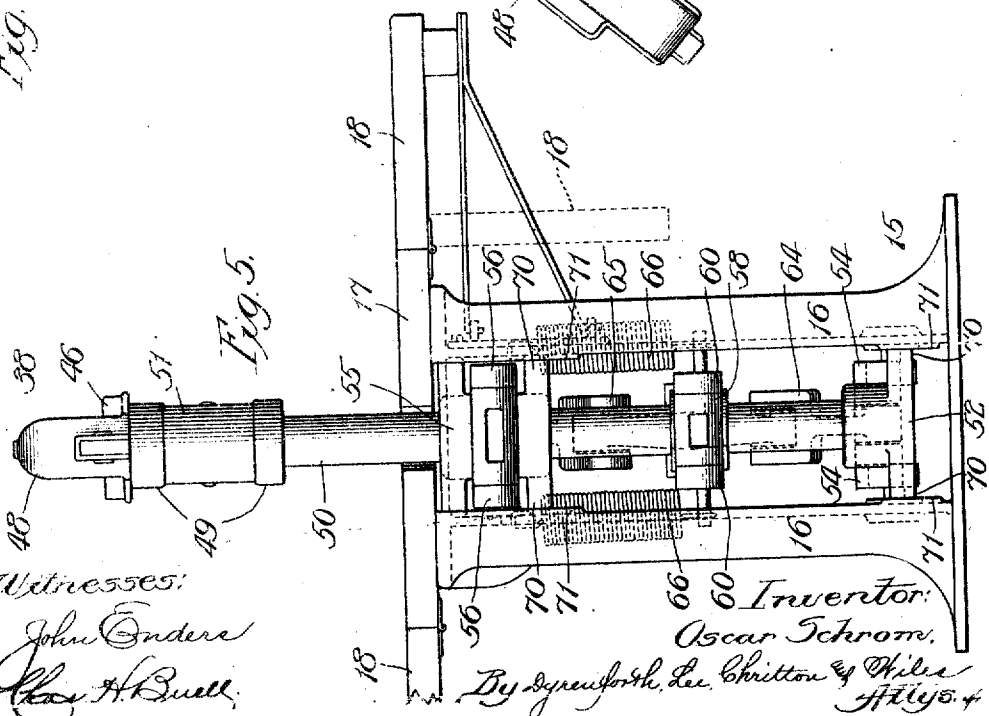


Fig. 5.

Witnesses:

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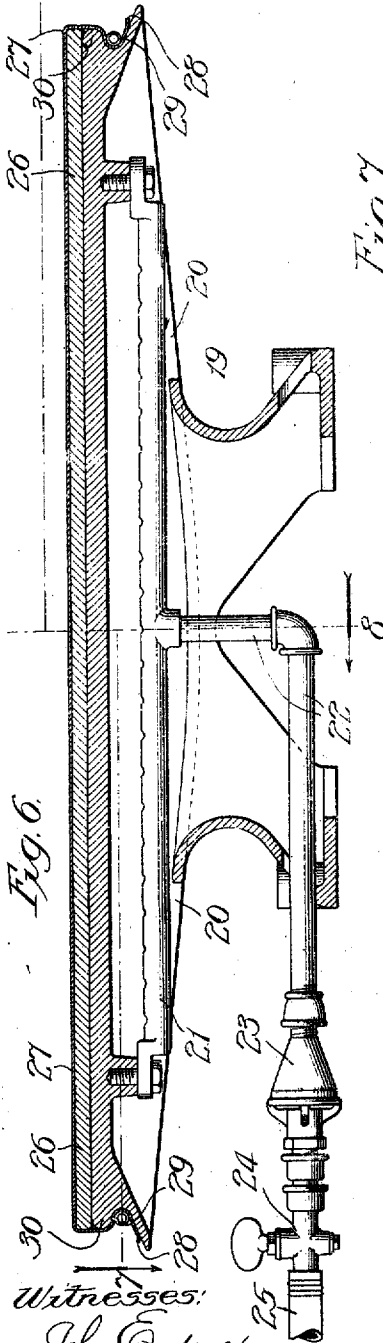


Fig. 6.

Witnesses:

John Enders
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Fig. 7.

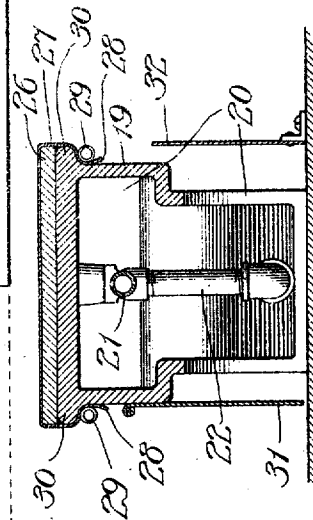
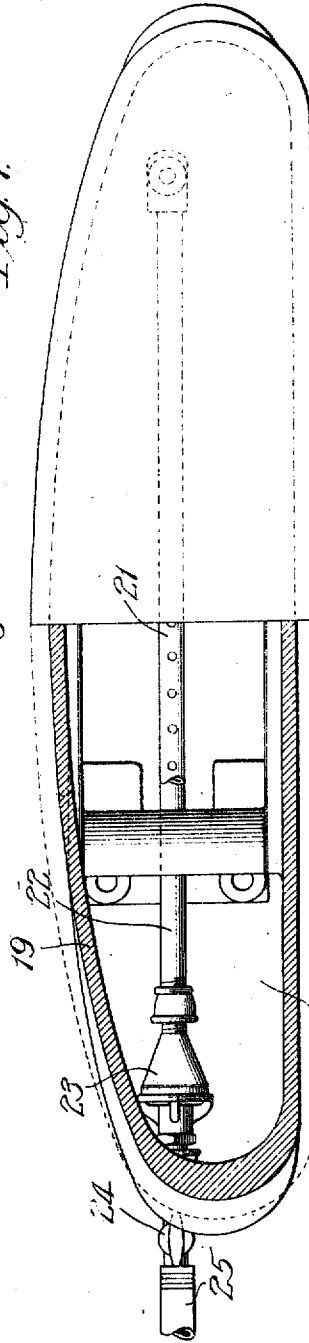


Fig. 8.

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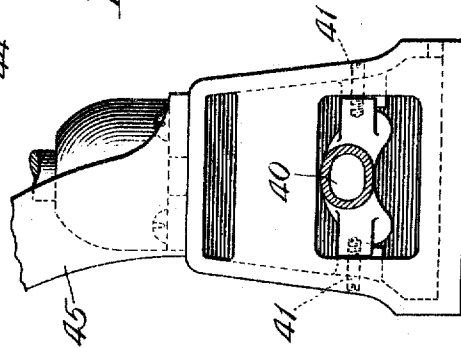
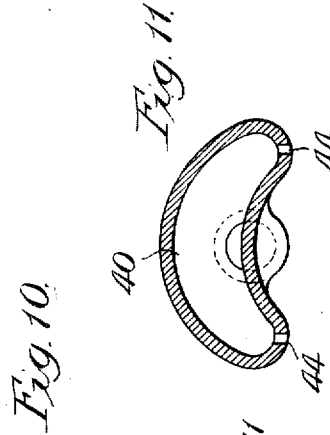
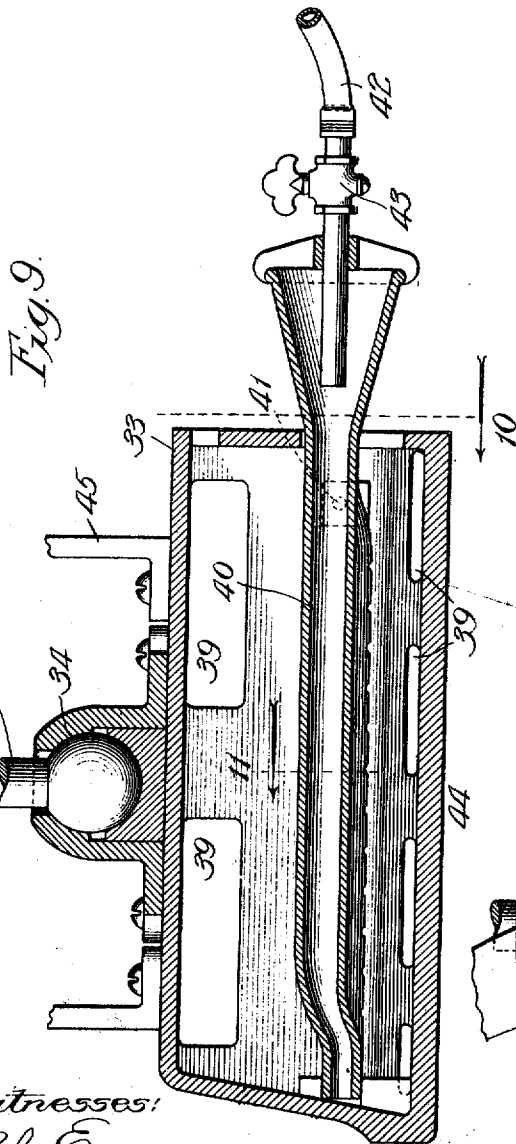
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6 SHEETS-SHEET 5.



Witnesses:

John Enders
Chas. H. Buell

Inventor:

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UNITED STATES PATENT OFFICE.

OSCAR SCHROM, OF CHICAGO, ILLINOIS, ASSIGNOR TO JOSEPH SALTZMAN, OF CHICAGO, ILLINOIS.

PRESSING-MACHINE.

1,004,697.

Specification of Letters Patent.

Patented Oct. 3, 1911.

Application filed February 18, 1910, Serial No. 544,533. Renewed August 11, 1911. Serial No. 643,642.

To all whom it may concern:

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

My invention relates to pressing machines employed by tailors for pressing the seams in garments, and my object is to provide a manually operated machine for the purpose, of strong and durable construction, capable of being easily manipulated and whereby a great pressure can be exerted with little effort on the part of the operator.

In the accompanying drawings—Figure 1 is a view of my improved machine showing the same in sectional side elevation in its normal position, the view being taken at line 1, Fig. 2; Fig. 2, a sectional elevation taken at line 2, Fig. 1, and showing the lever connections; Fig. 3, a view similar to Fig. 1, but showing the parts in operative position with the presser-head in contact with the pressing-table or "buck"; Fig. 4, a plan view of the machine with the treadle broken away; Fig. 5, a broken view in rear elevation, taken at the left-hand side of the machine as presented in Fig. 1; Fig. 6, an enlarged view in longitudinal section of the pressing-table, taken at line 6, Fig. 1; Fig. 7, a partial plan and part sectional view of the pressing-table, taken at the irregular line 7, Fig. 6; Fig. 8, a transverse sectional elevation of the pressing-table taken at line 8, Fig. 6; Fig. 9, an enlarged view in longitudinal section through the presser-head, taken at line 9, Fig. 1; Fig. 10, a sectional elevation of the presser-head, taken at line 10, Fig. 9, and Fig. 11, a sectional view through the heater employed in connection with the head, taken at line 11, Fig. 9.

A main frame 15, preferably of cast metal, is formed with two similar side-members 16, suitably spaced apart to afford a housing for lever mechanism hereinafter described. A bed 17 is secured on the frame, and leaves 18 are hinged thereto to form, when raised to the position shown in Fig. 4, extensions to the table, for supporting a garment being pressed. The body-portion of the machine comprises the frame, table and leaves, and

supports a pressing-table or "buck" 19 which is mounted on the table adjacent to its forward edge. The pressing-table is made preferably of cast metal, of hollow formation, and is provided with openings 20 at opposite sides and ends to permit of free circulation of air therethrough. A burner-tube 21 is attached at opposite ends to the under side of the table 19, though spaced therefrom as shown in Fig. 6, and gas is conducted thereto through a pipe 22 which forms a mixing-chamber for the gas and air entering the latter through an injector 23 of ordinary form and construction. A cock 24 is connected with the injector and gas is supplied to the burner through a hose or other flexible connection 25 which leads from any suitable source of gas-supply (not shown), and is coupled to the cock 24. A pad 26 of asbestos or other suitable material, of the desired thickness and density, and of a contour corresponding to that of the pressing-table, is placed upon the latter to insure only the requisite degree of heat at its working surface, and to prevent the goods being pressed, from being scorched, as would result upon their contact with the table. The pad is held in place by a covering-cloth 27 which projects at its edges beyond the pad to afford a flap 28 which is secured in taut condition by an endless spiral-spring cable 29, stretched about the pressing-table to clamp the flap beneath a flange 30.

Guards 31 and 32 are provided respectively at the front and back of the pressing table 19 to prevent contact with the pressing-table at these points, of material being pressed. The guard 31 is preferably hinged to the buck along its upper edge so that when desired it may be swung up by the operator to permit him to light the burner, or for the purpose of observing its condition or that of the flame, and the guard 32 (Figs. 1 and 4) may be curved to correspond to the curve of the pressing-table and is rigidly secured in place.

A presser-head 33 is provided to cooperate with the pressing-table and is pivoted by means of a ball-and-socket joint 34, Fig. 9, to a vertically-disposed screw-shaft 35, equipped with a hand-wheel 36 for raising and lowering the head. The screw-shaft has

a threaded engagement with a sleeve 37 rigidly secured to one end of a longitudinally-sliding bar 38 forming an extensible presser-head carrying-arm. The presser-head is hollow and provided with holes 39 to permit of circulation of air through it, and a heater 40 passes through an opening at one end and within the head is pivoted at 41. Gas is conducted to the heater through a flexible tube 42 leading from any suitable source of gas-supply (not shown), and its flow is controlled by a cock 43. Fig. 9. The heater is arch-shaped in cross-section as shown in Fig. 11, and a series of perforations 44 is provided through the lower wall adjacent to each lateral side, to direct the flames downward for heating the base. Attached to the head is the usual operating-handle 45.

The bar 38 extends to the rear of the machine and passes through a hollow swiveling head 46 in which it is movably confined between anti-friction rollers 47, one of which is located at the lower forward end thereof and the other at the upper rearward end. A hood or shield 48 extends over the head and is attached at its ends to the bar 38 and affords a stop for limiting the movement of the bar in either direction. Two collars 49 are formed on the head and loosely surround a vertically-disposed shaft 50 about which it pivots and to which it is held by a collar 51 pinned to the shaft and interposed between the collars 49. It will be seen that the bar 38, the head 46 and the shaft 50 form together a movable frame for supporting and carrying the presser-head.

At the lower end of the shaft and pinned to it is a collar 52 provided with forwardly projecting ears 53, see Figs. 1 and 2, to which are attached the rearward ends of companion links 54 secured at their opposite ends to the main frame 15. A second collar 55 is also pinned to the shaft, but at a point slightly below the head 17, and two companion links 56 are secured thereto at their rearward ends, at a point back of the shaft, while their forward ends are pivoted to ears 57 depending from the frame 15. A third collar 58 is adjustably mounted on the shaft 50, intermediate the collars 52 and 55, and held in place by a set-screw 59 shown by dotted lines in Fig. 1. Two similar links 60 are secured at their rear ends to this collar, at a point back of the shaft, from which they extend forward, and afford between them, at their ends, a floating pivot 61 for a treadle 62. The treadle terminates at its inner end in a head forming a rock-arm 63, and is supported on the pivot 61 intermediate its ends. A link 64 is pivoted at its lower end between the ears 53 and its bifurcated upper end is secured to the lower end of the rock-arm, while a similar link 65 is pivoted at its upper end between the ears

57 and its bifurcated lower end is secured to the upper end of the rock-arm 63. The treadle extends forward from its pivotal point into position convenient to be actuated by the operator, and is normally maintained in a raised position by springs 66. With the treadle in its normal or raised position as shown in Fig. 1, it bears against a buffer 67 secured in the frame and when depressed by the foot of the operator to the position shown in Fig. 3 the lag 68 thereon strikes a buffer 69. These buffers which are preferably formed of rubber serve to cushion the treadle in its movements and to reduce the noise incident to the operation of the machine.

By referring to Fig. 1 it will be noted that the presser-head 33 is raised and out of contact with the table 19 and may be swung to one side as shown in Fig. 4. After work to be pressed has been properly positioned upon the pressing-table the presser-head is swung back to the proper position whereupon it is lowered into contact with the goods through the medium of the treadle and its operating parts. After the release of the treadle by the operator, the springs 66 return it and the presser-head to their raised positions, and the operation may be continued as desired to press the garment at each downward movement of the parts.

The links 54, 56 and 60 are all of the same length, and as the shaft 50 is moved it is caused to travel in an upright position by the links 54 and 56 which support the shaft in suspended condition and are disposed in parallel planes. To prevent any lateral movement of the shaft, it is guided in its course by lugs 70 projecting from the collars 52 and 55 into sliding contact with bearing surfaces 71 on the inner surfaces of the side members of the main frame.

It will be further noted that the arrangement of the rock-arm on the treadle which is pivoted at 61, and the toggle-links 64 and 65 positioned at the angles shown in Fig. 1, form a double or compound toggle so that comparatively great force may be exerted with the expenditure of but little pressure on the treadle.

In the operation of the machine, which will be readily understood from the foregoing detailed description, it is desirable to depress the treadle to its limit of movement at each time it is actuated, for the purpose of bringing the toggles to a dead center, and to compensate for the variation in thickness of goods being pressed and to regulate the degree of pressure of the head thereon, the latter may be adjusted through the medium of the hand-wheel 36. After each pressing-operation the springs 66 return the treadle and its connecting mechanism to their normal position to raise the pressing-head from the garment after which the head may be

swung to one side out of the way, or the bar 38 carrying the same may be forced rearwardly for the same purpose.

What I claim as new and desire to secure 5 by Letters Patent, is—

1. In a machine of the class described, the combination with a stationary frame carrying a pressing-table, of a movable frame, a presser-head carried by the movable-frame 10 to cooperate with the pressing-table, a swinging link-connection between the frames, an operating-treadle having a head, a floating pivot on which the head is fulcrumed, links connecting the head at opposite sides of its fulcrum with the respective frames and 15 forming with the head a movable-frame-depressing compound toggle, and a spring for raising the lever and movable frame.

2. In a machine of the class described, the combination with a stationary frame carrying a pressing-table, of a vertically-movable frame, a horizontally-swinging and longitudinally-sliding bar mounted in the movable frame, a manually operated adjusting screw 20 in the forward end of the bar, a presser-head swiveled upon the lower end of said screw to cooperate with the pressing-table, upper and lower swinging links connecting the frames, a treadle having a head, a link 25

connecting the head between its ends with 30 the movable frame, links connecting the head at its upper end with the stationary frame and at its lower end with the movable frame, and forming with the head a compound movable-frame-depressing toggle 35 lever, and a spring for raising the lever and movable frame.

3. In a machine of the class described, the combination with a stationary frame carrying a pressing-table, of a movable frame, a 40 presser-head carried by the movable-frame to cooperate with the pressing-table, a swinging-link connection between the frames, an operating-treadle having a head, a floating pivot on which the head is fulcrumed, links connecting the head at opposite 45 sides of its fulcrum with the respective frames and forming with the head a movable-frame-depressing compound toggle, bearing-members between said frames for 50 guiding the movable frame as it is raised and lowered, and a spring for raising the lever and movable frame.

OSCAR SCHROM.

In presence of—

CHAS. E. GAYLORD,
RALPH A. SCHAEFER.