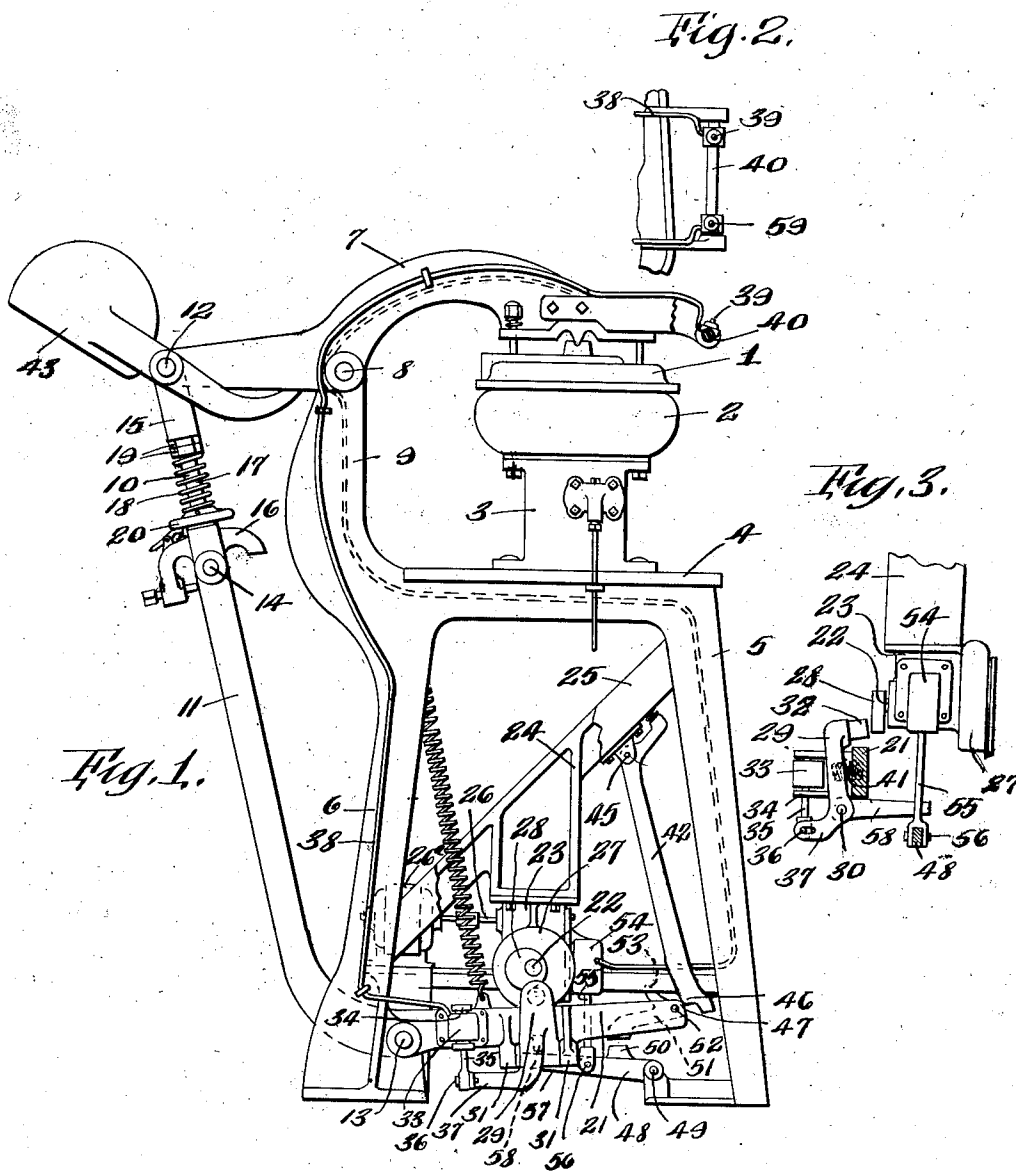


April 27, 1926.

P. N. BRAUN
GARMENT AND LAUNDRY PRESS

Filed Dec. 4, 1922

1,582,243



Philip N. Braun.

INVENTOR.

BY

Pearson & Bodell.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

PHILIP N. BRAUN, OF SYRACUSE, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO
LIBERTY NATIONAL BANK, TRUSTEE, OF SYRACUSE, NEW YORK.

GARMENT AND LAUNDRY PRESS.

Application filed December 4, 1922. Serial No. 604,715.

To all whom it may concern:

Be it known that I, PHILIP N. BRAUN, a citizen of the United States, and a resident of Syracuse, in the county of Onondaga and State of New York, have invented a certain new and useful Garment and Laundry Press, of which the following is a specification.

This invention relates to power pressing machines for pressing garments and laundry and has for its object a particularly simple and efficient means for controlling the application of the power and the opening of the press. The invention consists in the novel features and in the combinations and constructions hereinafter set forth and claimed.

In describing this invention, reference is had to the accompanying drawings in which like characters designate corresponding parts in all the views.

Figure 1 is a side elevation of a pressing machine embodying my invention.

Figure 2 is a fragmentary plan view of the handle for the movable or upper pressing element and contiguous parts.

Figure 3 is an enlarged sectional view on line 3—3, Fig. 2.

The power press comprises upper and lower pressing elements having relative movement one toward and from the other, actuating mechanism including a movable as a rocking motion transmitting member, and actuating mechanism comprising a constantly driving member, a connector carried by the motor transmitting member and movable into and out of connection with the driving member and operator controlled electromagnetic means for shifting the connector.

This connector is shiftable by the electromagnetic means into driving connection with the driving member preferably against the action of means as a spring which moves it out of such driving connection, and in this embodiment of my invention, means as a latch holds the motion transmitting member in its position occupied when the press is closed and additional operator controlled magnetic means are used to release the latch.

The pressing machine here illustrated is of the type comprising upper and lower pressing elements 1, 2, the lower pressing element being mounted upon a standard or goose neck 3 which is mounted on a table 4 supported by front and rear legs 5, 6, there being but one rear leg and this being located centrally of the frame.

The upper pressing head 1 is carried by a lever 7 in the form of a yoke pivoted at 8 to an upward extension 9 of the rear leg 6, and this lever is operated in any well known manner as by toggle links 10 and 11 pivoted respectively at 12 and 13 to the rear arm of the yoke lever 7, and to the rear leg near the lower end thereof, these being pivoted together at 14.

The link 10 is composed of clevises 15 and 16 which are pivoted at 12 and 14 respectively, a rod 17 threading into to one clevis as the clevis 15 and slidable in the other clevis 16. A spring 18 encircling the rod and interposed between spring adjusting nuts 19 on the rod and a wheel 20 slidably keyed to the rod. Turning of the wheel threads the rod 17 more or less in the clevis 15 and thus regulates the length of the link to the thickness of the articles being pressed. Adjustment of the nuts tensions the spring and determines the amount of pressure to be applied by the spring.

This form of toggle forms no part of my invention and for similar toggles reference is had to patent to Austin, Nos. 1,252,988, Jan. 8, 1918, and 1,335,151, March 30, 1920, and to the joint applications of Clisson and applicant, Sr. No. 573,017, filed July 5, 1922, and Sr. No. 580,019, filed August 7, 1922.

The toggle link 11 is formed with a forwardly extending arm 21 rigid therewith, this arm constituting a motion transmitting member.

The actuating mechanism comprises a constantly rotating element here shown as a shaft 22 journaled in a frame 23 which is supported on a bracket 24 provided on a brace 25 extending between the front and rear legs. The shaft 22 is actuated in any suitable manner, and as here shown, it is driven by a shaft 26 which is connected to the armature shaft of a constantly running motor 26^a.

The motion is transmitted from the shaft 26 to the shaft 22 by a worm and worm gear mounted respectively on said shafts and located within a casing 27 forming part of the frame 23. The shaft 22 is here shown as provided with the cam 28 arranged adjacent to the arm or motion transmitting member.

The motion is transmitted from the shaft 26 to the shaft 22 by a worm and worm gear mounted respectively on said shafts and located within a casing 27 forming part of the frame 23. The shaft 22 is here shown as provided with the cam 28 arranged adjacent to the arm or motion transmitting member.

ber 21 and such shaft 22 is arranged at substantially a right angle to the vertical plane of the arm 21.

The connector which operates to momentarily clutch the member 21 to the shaft 22 through the cam 28 as here shown, comprises a rock arm 29 mounted on a shaft 30 carried in suitable bearings 31 on the arm 21 and having a cam follower 32 movable into and out of the path of the cam 28.

This connector is normally out of the path of the cam 28 and is shiftable under the cam by electromagnetic means comprising a magnet 33 carried by brackets 34 projecting laterally from the arm 21 and having its armature, here shown as a sliding core 35 connected at 36 to an arm 37 extending radially from the hub of the connector 29. The wires 38 through which the current is supplied to the coils of the magnet are connected to a switch as a push button switch 39 mounted on the handle 40 associated with the press head or the supporting lever 7 thereof and operable to bring the head 1 down toward the lower pressing element 2 into a position where it is separated therefrom. These wires are also connected in a suitable supply circuit, the flow of current through which is controlled by the switch 39. The connector 29 is thrust out of its operative position by a spring 41.

The means for holding the arm 21 depressed as here shown comprises a latch 42 arranged to engage the arm after it is depressed and hold it depressed and hence hold the upper pressing element or head 1 down onto the garment on the lower pressing element 2. To open the press, the latch 42 is released so that the counterbalancing weight 43 and spring 44 is free to act to open the press in the usual manner.

The latch 42 is here shown as an arm pivoted at 45 at its upper end to the press 24 and is so hung as to swing rearwardly by gravity on its pivot to hook a shoulder 46 at its lower end over a shoulder 47 on the front end of the lever 21. This latch is released or swung forwardly on its pivot by a trip lever 48 pivoted at 49 to the frame and having a shoulder 50 arranged to thrust against a lever 51 pivoted at 52 to the arm 21 and rock said lever so that it pushes or permits the arm 42 to slip off the arm 21. The shoulder 46 instead of seating directly on the arm 21 seats on the rounding hub of this lever 51. The lever 51 also has a support 55 arranged to push against the lever or latch 42 when said latch is being tripped. The trip lever 48 is here shown as actuated by electric magnetic means and comprises magnet windings 54, carried by the frame 23 which carried the rotating shaft 22 and a solenoid core or rod 55 pivoted at 56 to the trip lever 48. The trip lever 48 also has an arm 57 which extends under a radial arm

58 projecting from the hub of the connector 29. The feed wires for the coils 54 are connected in the electric circuit including a switch 59 mounted on the handle 40.

In operation, the operator after placing the garment on the lower pressing bed or element initially pulls down on the handle 40 and at any time during the pulling down operation presses the button 39 which causes the magnet 33 to be energized and throw the connector 29 into the path of the cam 28. This cam which is constantly rotating depresses the lever 21 until the latch 42 holds the lever 21 in its depressed position. Upon release of the switch 39 the spring 41 presses the connector to its inoperative position but the press remains closed owing to the latch 42. To open, the press switch 49 is closed whereupon the magnet 54 draws the trip lever 48 upwardly causing it to operate the lever 51 on the arm 21 and push the latch 42 in to its inoperative position as shown in Fig. 1 so that the counterbalancing weight and springs are free to act to open the press.

If for any reason the connector is not moved by this spring to its inoperative position, the extension 51 of the trip lever acting on the arm 58 of the connector moves the connector out of the path of the constantly rotating cam. This cam is so shaped that its lower point is spaced apart so that the cam follower can enter into the path of the high surface of the cam.

What I claim is:

1. The combination with a pressing machine comprising upper and lower pressing elements having relative movement one toward and from the other, and actuating mechanism for the movable element comprising an intermittently movable motion transmitting member connected to the movable element, of a constantly rotating driving member and means for rotating the driving member, a connector carried by the motion transmitting member and movable into and out of connection with the driving member, operator-controlled electro-magnetic means independent of the former means for shifting the connector and means for holding the motion transmitting member in the position to which it is moved by the driving member, substantially as and for the purpose described.

2. The combination with a pressing machine comprising upper and lower pressing elements having relative movement one toward and from the other, and actuating mechanism for the movable element comprising an intermittently movable motion transmitting member connected to the movable element, of a constantly rotating driving member and means for constantly actuating the driving member, a connector carried by the motion transmitting member

and movable into and out of connection with the driving member, a spring arranged to shift and hold the connector out of engagement with the driving member, operator-controlled electro-magnetic means independent of the former means for shifting the connector into engagement with the driving member against the action of the spring, and means operable to hold the motion transmitting member in the position to which it is shifted by the driving member when the press is closed, substantially as and for the purpose specified.

3. The combination with a pressing machine comprising upper and lower pressing elements having relative movement one toward and from the other, and mechanism for actuating the movable element comprising a lever, of a constantly rotating driving member having a cam arranged adjacent the lever and means for actuating the driving member, a connector carried by the lever and shiftable into and out of the path of the cam, a spring for shifting it out of the path of the cam, and releasable means for holding the lever in the position to which it is moved by the cam when the press is closed, and operator-controlled electro-magnetic means independent of the actuating means for the driving member for releasing the holding means, substantially as and for the purpose set forth.

4. In combination with a pressing machine comprising upper and lower pressing elements, the upper element being movable toward and from the lower, and having a handle associated therewith for initially moving it toward closed position, and actu-

ating mechanism including a movable member connected to the upper pressing element, of a constantly rotating driving member, a connector carried by the motion transmitting member and shiftable into and out of connection with the driving member, electro-magnetic means for shifting the connector, and a switch mounted on said handle for controlling the electro-magnetic means, substantially as and for the purpose described.

5. In combination with a pressing machine comprising upper and lower pressing elements, the upper element being movable toward and from the lower, and having a handle associated therewith for initially moving it toward closed position, and actuating mechanism including a movable member connected to the upper pressing element, of a constantly rotating driving member, a connector carried by the motion transmitting member and shiftable into and out of connection with the driving member, electro-magnetic means for shifting the connector, a switch mounted on said handle for controlling said means, means for holding the motion transmitting member in the position it is shifted by the driving member through the connector when the press is closed, electro-magnetic means for releasing the holding means and a switch also mounted on said handle, for controlling the last mentioned electro-magnetic means, substantially as and for the purpose specified.

In testimony whereof, I have hereunto signed my name, at Syracuse, in the county of Onondaga, and State of New York, this 11th day of November, 1922.

PHILIP N. BRAUN.