April 10, 1928. 1,665,654

P. N. BRAUN ET AL

PAD FOR PRESSING MACHINES

Filed Aug. 5, 1924

Fig. 3



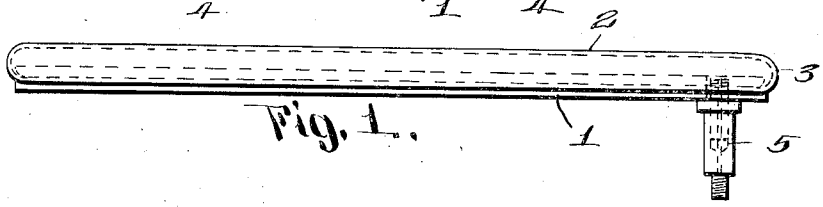


Fig. 1.

Fig. 2.

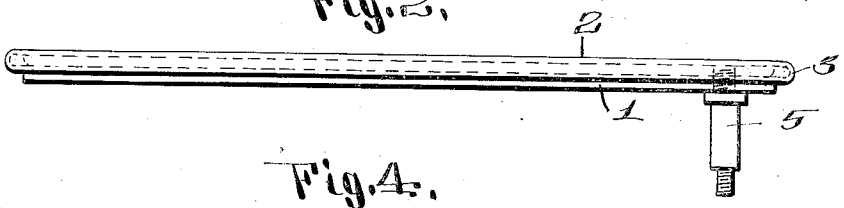
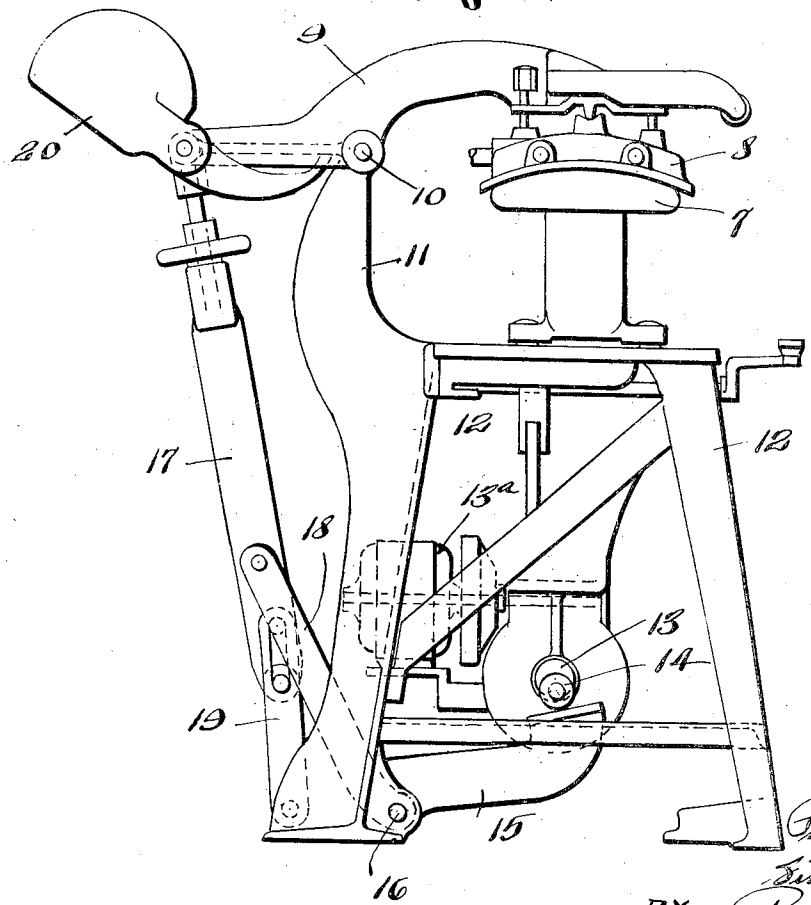


Fig. 4.



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UNITED STATES PATENT OFFICE.

PHILIP N. BRAUN AND SIMEON T. HART, OF SYRACUSE, NEW YORK, ASSIGNORS, BY MESNE ASSIGNMENTS, TO THE PROSPERITY COMPANY, INC., OF SYRACUSE, NEW YORK, A CORPORATION OF NEW YORK.

PAD FOR PRESSING MACHINES.

Application filed August 5, 1924. Serial No. 730,311.

This invention relates to pads, such as are used on garment and laundry platen pressing machines, and has for its object a pad having a sheet metal flexible plate forming the top wall of a chamber confining a compressible fluid as air.

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 an elevation of this pad.

Figure 2 is an elevation similar to Fig. 1, showing the pad compressed.

Figure 3 is a cross sectional view of Fig. 1.

Figure 4 is an elevation of one form of pressing machine with which this pad is used.

This invention comprises a pad which crushes or expands outwardly under pressure and the pad, comprises generally, a base plate which is substantially rigid, a flexible top plate preferably of sheet metal spaced apart from the base plate and secured at its margins to the base plate in such a manner as to permit the plate to expand laterally in all directions, the plates confining a sealed chamber for receiving a compressible fluid as air.

1 designates the rigid base plate which is preferably of metal.

2 designates the top plate which is spaced apart from the base plate and normally bulges outwardly, this top plate being secured to the base plate so as to expand or crush outwardly under pressure. As here shown, the entire or circumferential margin of the top plate is folded in a rounded curve outwardly as at 3, beyond the edge of the base plate and then inwardly at 4 and secured to the plate 1, the margin 4 thereof being preferably arranged in a circumferential groove, opening through the edge of the plate 1. The margin 4 is suitably sealed in the groove of the base plate and the plates 1 and 2 confine a sealed chamber preferably.

The plate 2 is of sheet brass. The pad is provided with an inlet valve at 5 for a compressible medium as air, this valve extending through the base plate 1. If desired an air bag 6 may be placed in the chamber confined by the plates.

In operation, when pressure is applied to the pad, owing to its flexibility, it can conform to the different thicknesses of portions of the work being operated upon and in so doing expands laterally under pressure.

This pad is placed on the lower buck 7 of a pressing machine which also includes a head 8 movable toward and from the pad on the buck 7, this head 8 being carried by a suitable yoke or lever 9 pivoted between its ends at 10 to a standard 11 rising from the frame 12 of the machine and the pressure is applied to the head 8 through the yoke 9 from a suitable power shaft 13 actuated intermittently from an electric motor 13^a, the power of the shaft being transferred from the shaft 12 through a cam 14 on the shaft, a power lever 15 pivoted at 16 to the frame, a toggle including links 17 and 18, which toggle is actuated from the lever 15 through a thrust link 19.

The head is opened, when relieved of the power by a suitable counter weight 20.

The buck 7 and head 8 are usually oblong in general form with tapering sides and rounding ends, and the pad conforms to the outline of the buck and head. Also the buck and head may have flat faces or convex and concave faces respectively.

The construction of the machine forms no part of this invention. It will be borne in mind, however, that a pad in a pressing machine is called upon to operate differently from other cushioning and padding devices, as pressure is applied throughout the area of the pad, and this pressure, owing to the different thicknesses of portions of the work varies on different parts of the pad. Owing to the fact that the pad crushes or expands outwardly in all directions the pressure is equalized or distributed through the pad, and this pad is particularly operable in the machine shown in Fig. 4.

What we claim is:

A pad for pressing machines, comprising

a base plate, and a flexible metal top plate spaced apart from the base plate, and secured at its margin to the base plate, the plates confining a sealed chamber, the top plate normally bulging upwardly and the margins bulging outwardly to expand laterally as the pad is compressed.

In testimony whereof, we have hereunto signed our names, at Syracuse, in the county of Onondaga, and in the State of New York, this 1st day of August, 1924.

PHILIP N. BRAUN.
SIMEON T. HART.