

C. W. JEAN.
PRESS FOR COPYING CLOTHS AND THE LIKE.
APPLICATION FILED OCT. 9, 1911.

1,057,839.

Patented Apr. 1, 1913.

2 SHEETS—SHEET 1.

Fig. 1.

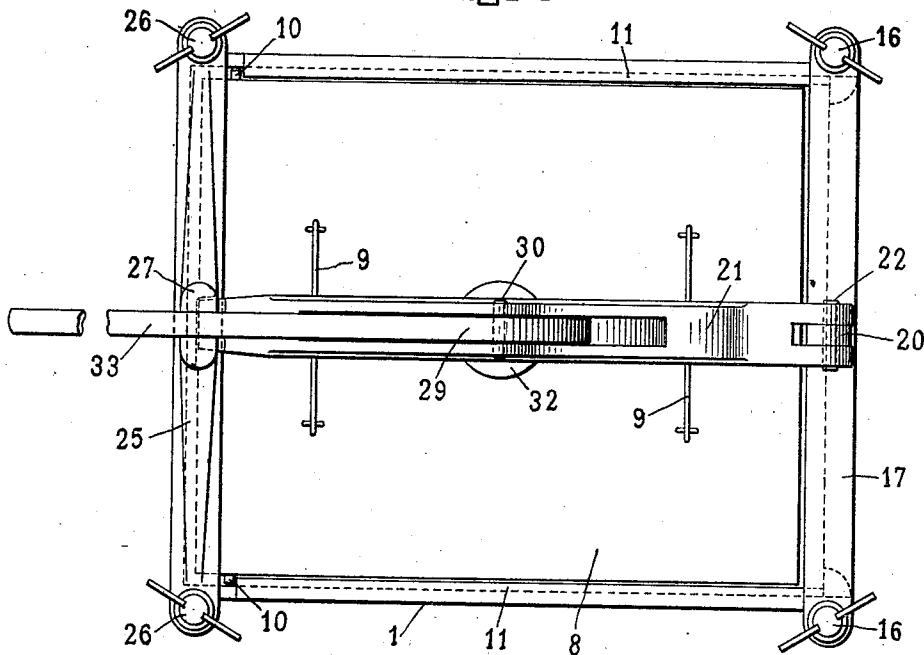
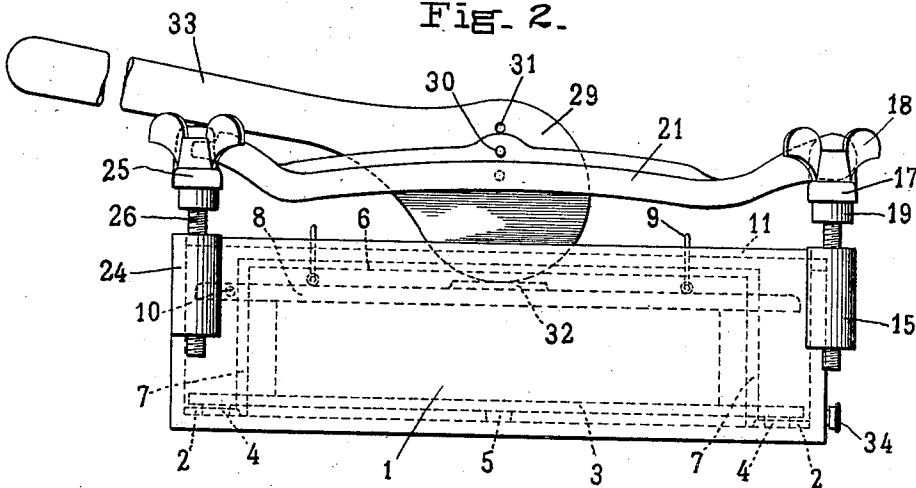


Fig. 2.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 3.

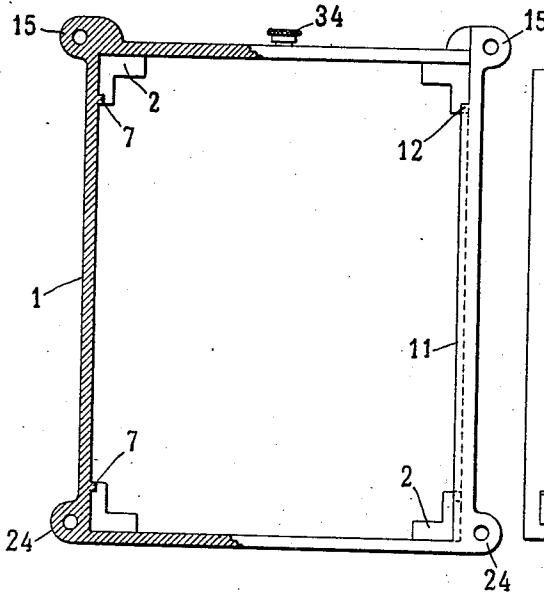


Fig. 4.

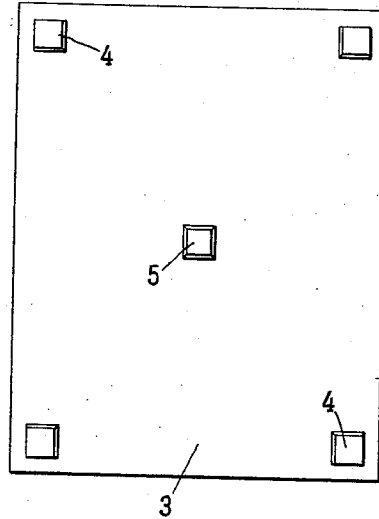
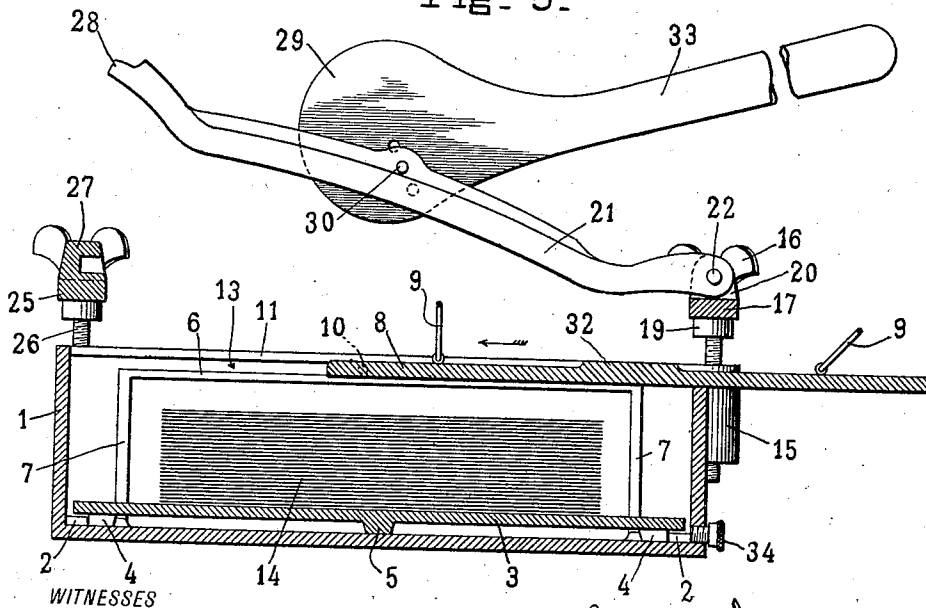


Fig. 5.



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CHARLES W. JEAN, OF NEW YORK, N. Y.

PRESS FOR COPYING-CLOTHS AND THE LIKE.

1,057,839.

Specification of Letters Patent.

Patented Apr. 1, 1913.

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To all whom it may concern:

Be it known that I, CHARLES W. JEAN, a resident of the city of New York, in the county and State of New York, have invented certain new and useful Improvements in Presses for Copying-Cloths and the Like, of which the following is a specification.

This invention relates to a press particularly adapted for use in preparing the pads or cloths which are used in making letter press copies, though obviously the device may be used for other purposes.

One of the objects of the invention is to provide an apparatus of the class described in which a pile of copying cloths may be instantly and uniformly moistened, and ink and other undesirable matter expressed therefrom.

Another object of the invention is to provide a device of the kind described in which there is a considerable range of adjustability to accommodate the device for effective treatment of a larger or smaller bulk of copying cloths.

Still another object of the invention is to provide a device of the kind described including a simple and powerful means for applying the necessary pressure to the cloths.

A further object is to provide a device of the kind described comprising a bath or receptacle for the cloths, a removable pressure plate which is adapted to be placed upon the top of the pile of cloths within the bath only when it occupies a certain vertical position relatively to the bath, and a pressure device adjustably secured to the bath and engaging said pressure plate.

Other objects and aims of the invention, more or less broad than those stated above, together with the advantages inherent, will be in part obvious and in part specifically referred to in the course of the following description of the elements, combinations, arrangements of parts, and applications of principles constituting the invention; and the scope of protection contemplated will appear from the claims.

In the accompanying drawings, which are to be taken as a part of this specification, and in which I have shown a merely illustrative embodiment of the invention: Figure 1 is a top plan view of an apparatus including my invention, certain of the parts being shown in dotted lines; Fig. 2 is a side elevation of the subject-matter of Fig. 1 showing certain of the parts in dotted lines; Fig. 3 is a plan view partly broken away to show certain portions in section illustrating the bath or tank proper; Fig. 4 is a bottom plan view of the false bottom which is adapted to be placed within the tank of Fig. 3; and Fig. 5 is a central sectional view, with parts in elevation of the assembled device.

Referring to the numerals on the drawings, 1 indicates a receptacle, which may be rectangular as shown, having a bottom wall, side walls and end walls. At the bottom of each corner of the receptacle is an L-shaped spacing block 2, which may be made integrally with the receptacle if desired.

3 indicates a false bottom having on its under surface adjacent the corners thereof, preferably rectangular lugs 4, each of which is adapted when the false bottom is in place as shown in Fig. 5, to engage one of the L-shaped spacing members 2. The under surface of the false bottom is also provided centrally with a lug 5. The opposite side walls of the receptacle are provided with alined ribs 6, projecting inwardly, said ribs running parallel with the bottom of the receptacle. From the ends of these ribs 6, ribs 7 on the respective side walls extend downwardly toward the bottom of the receptacle at right angles to the ribs 6, or perpendicularly to the bottom wall of the receptacle. The ribs 7 at the respective ends of the opposed ribs 6 are alined, it being understood of course that the false bottom 3 is of a width to permit its passage between the opposed ribs. A pressure plate 8 is provided, having bails 9 whereby it may be manipulated. This pressure plate throughout the greater portion of its length is of a width to permit it to pass between

opposed ribs 6 and 7, but at one end is provided with outwardly projecting lugs 10, so that the width of the plate 8 through these lugs is greater than the space between
 5 opposed ribs on the side walls of the receptacle. The opposed side walls that carry the ribs 6 are provided at their tops with inwardly turned flanges 11 parallel with the ribs 6 and extending from a point near
 10 one end of the receptacle, indicated by the numeral 12 in Fig. 3, to the opposite end of the receptacle. The rear end wall of the receptacle is lower than the opposite end wall, and the pressure plate 8 is brought to
 15 position by inserting the lugs 10 into the grooves 13 defined by the ribs 6 and flanges 11 on the opposed side walls respectively, the plate being moved along in the direction of the arrow in Fig. 5 until the lugs 10
 20 clear the ends of the ribs 6, when the pressure plate may drop down into the receptacle and upon the pile of copying cloths 14 resting upon the false bottom 3. It will be evident that the pressure plate can only be
 25 introduced from the rear of the receptacle, and that it cannot make any contact with the contents of the receptacle until it reaches a position where substantially no further endwise movement of the pressure plate is
 30 possible. This will prevent disarrangement of the pile of cloths, so that they will remain evenly piled, ready to receive, each of them, a uniform pressure as hereinafter described.

35 At the rear end of the bath, preferably at the opposed corners, are interiorly threaded sleeved lugs 15, in which respectively engage thumb screws 16. These thumb screws pass through the opposite ends of a bar 17, which
 40 is held in a fixed relation to the thumb screws between the finger portions 18 of the latter and collars 19 which are pinned to the screws. Consequently, if the thumb screws are manipulated into or out of sleeves
 45 15, the bar 17 will be raised or lowered accordingly. Midway of the bar 17 is an apertured lug 20, which is engaged by the bifurcated end of the member 21, said bifurcated end being held in its relation to the
 50 lug 20 by means of a pin 22 extending through the corresponding apertures in the lug 20 and member 21. The bearing thus constituted is preferably loose, so that the member 21 may have some relative lateral
 55 movement, for reasons hereinafter explained. The member 21, pivoted as described, extends toward the front end of the apparatus, and its forward end is adapted to be held in a determined relation to the
 60 bath. For this purpose I provide, at the forward end of the bath or receptacle, preferably at the corners, interiorly threaded sleeved lugs 24, similar to the lugs 15. These lugs support a bar 25 in the same
 65 manner as the bar 17 is supported, so that

the bar may be raised and lowered with respect to the receptacle upon manipulation of the thumb screws 26. Said bar 25 is provided centrally thereof with a socket member 27, the socket being open toward the rear end of the apparatus, and also at one side of the member 27. Because of the fact that member 21 has some lateral play upon its pivot 22, the forward end 28 of member 21 may readily be sprung into and out of
 70 engagement with the socket member 27 as will be apparent. The member 21 is slotted intermediate its ends, and a cam member 29 is adjustably positioned between the walls of the slot, as by means of a pin 30 that passes through apertures in the slotted walls and one of a plurality of apertures 31 in the cam member 29, these apertures 31 being
 75 disposed so that as one or the other of them is chosen, the projection of the cam member through the slot will be regulated accordingly. I prefer that the central lug 5 of the false bottom 3 shall be in vertical alinement with the apertures 31 of the cam member and with the boss 32 on the surface of the apertured plate 8, said boss taking the pressure of the cam 29. The cam member is provided with a portion constituting a handle as 33.

In practice, the false bottom 3 being in place as shown in Fig. 5, and the pressure plate 8 slid out, a pile of copying cloths or pads 14 is positioned centrally upon the false bottom 3, and sufficient water poured over the top of the same for the desired
 80 moistening thereof. The pressure plate 8 is now slid back into place until the lugs 10 reach the forward ends of the ribs 6, when it drops down, exactly into position upon the top of the cloths 14, with the lug 5 and boss 32 in vertical alinement. In sliding the plate 8 back and forth in the use of the device, the bails 9 are laid flat on the top of the plate so that the plate may pass beneath the cross bar 17. Of course it is not necessary to remove the plate 8 entirely from the receptacle, but it must be slid backwardly far enough to enable the operator to place the cloths in position as described. The member 21 supporting the cam member 29
 85 has preferably been entirely moved from its engagement with member 27 and swung backward on its pivot away from the receptacle, so as to give access to the latter. When the cloths are in place, with the moisture applied, and the pressure plate 8 in position, the member 21 is locked into position with respect to the member 27, whereupon by moving the handle 33 from the position of Fig. 5 to the position of Fig.
 90 2 a great pressure will be exerted upon the center of the plate 8, and the cloths 14 compressed between said plate and the false bottom 3, the moisture which was applied to the top of the pile of cloths being uni- 130

formly distributed throughout the pile because of the pressure exerted. The cloths are thus not only moistened but the ink therein contained, etc., is expressed and finds its way with the excess moisture into the space between the true bottom and the false bottom of the receptacle, whence it may be discharged through an opening controlled by a valve 34. By the proper adjustment of the thumb screws 16 and 26 the pressure of the cam 29 may be regulated in accordance with the thickness of the pile of cloths to be treated; and where the range of adjustment thus obtained is not sufficient, further adjustment of the pressure of the cam and of the point at which such pressure becomes effective may be had by adjusting the pivotal relation between the cam and the member 21 as already described.

It will be apparent that I have provided a device which consists of but few parts, which is very simple in its construction and mode of operation, and which is capable of preparing copying cloths with the greatest possible expedition, with the minimum of manipulation, and without any lost motions.

As many changes could be made in the above construction and many apparently widely different embodiments of this invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense. It is also to be understood that the language used in the following claims is intended to cover all of the generic and specific features of the invention herein described and all statements of the scope of the invention, which as a matter of language, might be said to fall therebetween.

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

1. In apparatus of the kind described, a receptacle having parallel side walls and a bottom wall, alined ribs on the opposed side walls parallel to the bottom wall and extending inwardly, said ribs extending short of one end of the receptacle, alined ribs or flanges on the opposed side walls parallel to the before-mentioned ribs respectively and defining with said first mentioned ribs alined grooves on the respective side walls, a pressure plate of less width throughout the greater part of its length than the distance between opposed ribs, said pressure plate having adjacent one end outwardly projecting lugs, so that the width of the plate between these lugs is greater than the space between opposed ribs on the side walls of the receptacle, said lugs being adapted to travel in said grooves, and a pressure member adapted to engage said plate.

2. In an apparatus of the kind described;

a receptacle having parallel side walls and a rear end wall and having alined substantially horizontal grooves formed in said side walls respectively, said grooves extending short of the forward end of the side walls respectively, and being extended vertically downwardly at their forward ends, said end wall having its upper edge lower than the adjacent ends of said grooves; a pressure plate of less width throughout the greater portion of its length than the distance between said grooves being provided with outwardly extending lugs at its forward end extending into said grooves respectively, said plate being adapted to be slid over the upper edge of said end wall with said outwardly extending lugs traveling in said grooves, and the rear end of said plate being arranged to reach the inner edge of said end wall at substantially the same time as said lugs reach the vertical portions of said grooves, in which position said plate will be free to fall bodily vertically into said receptacle; and a pressure member supported by said receptacle adapted to engage said plate to force said plate downwardly.

3. In apparatus of the kind described, a receptacle having a bottom wall, end walls and side walls, a false bottom spaced from the bottom wall, a pressure plate slidable with relation to the receptacle but immovable vertically with respect to the receptacle until it reaches a predetermined position in its sliding movement, and a pressure member engaging said plate.

4. In apparatus of the kind described, a receptacle having end walls and side walls, an interiorly threaded sleeved lug at each end of the receptacle, a thumb screw threaded into each of said lugs, means carried by said thumb screws and extending over the receptacle for supporting a pressure member, a pressure member adjustably supported by said supporting means, a pressure plate slidably connected to the receptacle and adapted to assume a position beneath the pressure member, said plate being vertically movable when it is in such position.

5. In an apparatus of the kind described, a receptacle having confining vertical walls; a pressure member; a support for said pressure member; and bars carried above opposite walls of said receptacle, extending longitudinally of the respective underlying walls, being adjustably connected adjacent their opposite ends to said walls, and being formed with means comprising mountings for said support.

6. In an apparatus of the kind described; a base; a pressure member; a support for said pressure member spanning said base; and mountings for said support at opposite sides of said base; one of said mountings having pivotal engagement with the adja-

cent end of said support and the other of
said mountings being formed with a retain-
ing socket having a lateral opening through
which the adjacent end of the support is
5 adapted to pass into said socket for detach-
ably connecting that end of said support to
said mounting.

In testimony whereof I affix my signature
in the presence of two witnesses.

CHARLES W. JEAN.

Witnesses:

A. S. HONIGSBERG,
HELEN HENRY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."