

No. 676,224.

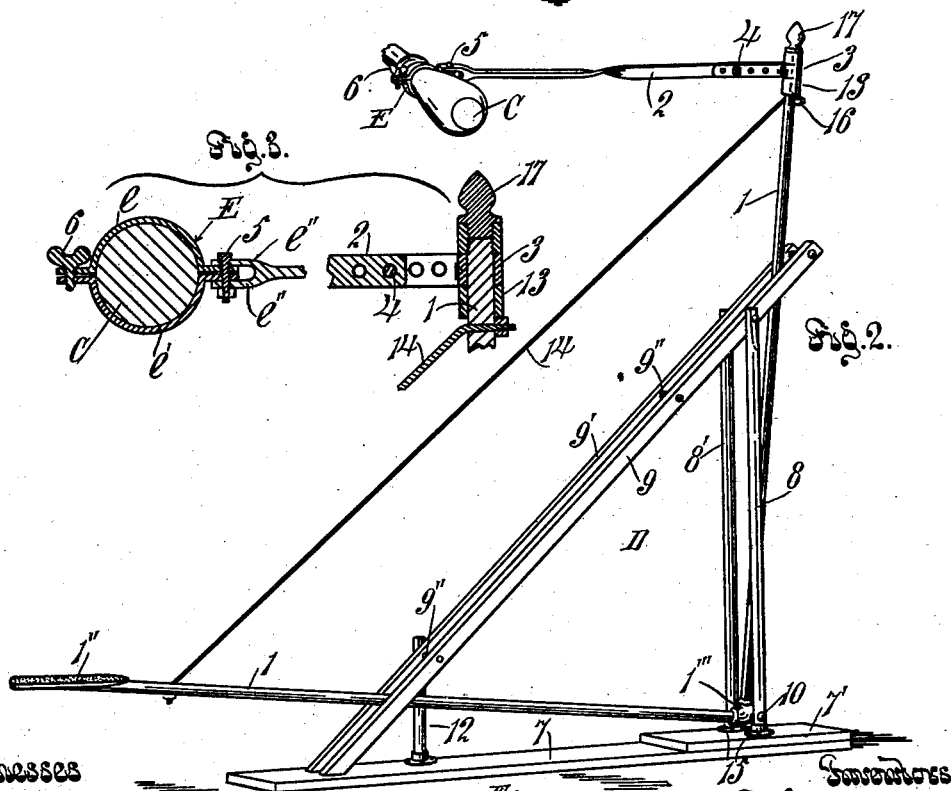
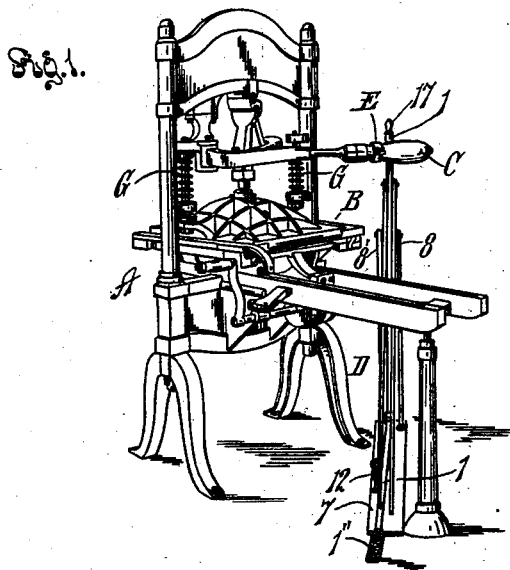
Patented June 11, 1901.

A. & C. H. EBERLE.

PLATEN PRESS.

(Application filed Mar. 5, 1900.)

(No Model.)



Witnesses
Scripps & Ingman.
J. Townsend.

Atherton Eberle
Charles H Eberle
by Townsend Bros.
attorneys

UNITED STATES PATENT OFFICE.

ATHERTON EBERLE AND CHARLES H. EBERLE, OF DOWNEY, CALIFORNIA.

PLATEN-PRESS.

SPECIFICATION forming part of Letters Patent No. 676,224, dated June 11, 1901.

Application filed March 5, 1900. Serial No. 7,438. (No model.)

To all whom it may concern:

Be it known that we, ATHERTON EBERLE and CHARLES H. EBERLE, residing at Downey, in the county of Los Angeles and State of California, have invented a new and useful Improvement in Platen-Presses, of which the following is a specification.

Our invention relates to means for operating platen-presses by foot-power.

10 An object of our invention is to provide a light and simply-constructed foot appliance for operating platen-presses.

15 A further object is to provide an attachment for a platen-press which can be attached to any of the hand-presses now in use, and thereby transform the same into a foot-power press.

The accompanying drawings illustrate our invention.

20 Figure 1 is a perspective view of a platen-press embodying our invention. This view is taken from the side on which the pressman stands. Fig. 2 is a perspective view of the attachment by which we transform a hand-press into a foot-power press. A portion of the handle of the press is shown and the lever is in the position which it occupies when the press is at rest. Fig. 3 is a fragmental sectional detail of the push-arm and the clamp for pivotally attaching the same to the handle of the press.

35 A indicates the frame of the press, B the platen, and C the handle or lever by which the press has heretofore been operated by hand. All these are the same as ordinarily in use on platen-presses and are not claimed as new.

D indicates in a general way our newly-invented foot attachment, which comprises a foot-lever 1 with upright arm 1' and a connecting-rod or push-arm 2, which is pivotally connected at one end with the upright arm of the lever and is pivotally connected at the other end with the handle of the press. Preferably the rod is connected with the upright arm of the lever by means of a collar 3, swiveled on the upright arm to turn in a plane at right angles to the upright arm. E indicates a clamp for the handle of the press, and the push-rod is pivoted to the collar 3 by a pivot 4 at right angles to the upright arm and is pivoted to the clamp by a

pivot 5, which is at right angles to the collar-pivot 4.

The clamp E comprises two members *e e'*, 55 having straight portions *e''* at their rear ends, respectively, and bent in front thereof to fit the handle of the press, and both are pivoted to the free end of the connecting-rod by a common pivot 5, which passes through the 60 straight members *e''*.

6 indicates a screw for drawing the free ends of the clamp members toward each other.

The lever is mounted on a base 7. The uprights 8 8' are fastened to the base and 65 two slanting guide-rails 9 9' are fastened one to each of the uprights and pivoted at their lower ends to the base.

10 indicates the fulcrum-pivot for the lever, which extends across between the up- 70 rights to pivot the lever. The bent foot-lever 1 1' is arranged between the guide-rails and is pivoted at its bend by the pivot 10, which is parallel with pivot 4.

1" indicates the foot-plate, which is fas- 75 tened to the horizontal member 1 of the foot-lever and lies at a slight angle to the main body of the foot-lever, so that when the connecting-rod is attached to the handle of the press and the press is at rest with the foot- 80 plate raised the foot-plate will be horizontal, the object of this being to allow the greatest comfort to the operator, it being preferable that the sole of the foot be horizontal when the press is at rest because the great- 85 est effort must be put forth when the foot is in this position.

12 indicates a strengthening-standard for the lower ends of the slanting guide-rails.

13 indicates a washer fastened to the up- 90 right arm 1' for the collar 3 to rest upon.

14 indicates a brace extending from near the foot-plate to the upper end of the upright arm 1'. The collar 13 rests upon this brace.

In practical construction the base 7 is a flat 95 board reinforced by a piece 7', upon which the uprights 8 8' are mounted, thus bringing the base of the uprights farther above the floor F than would otherwise be the case, and thereby allowing the fulcrum 10 of the lever 100 to be brought close to the bases of the uprights 8 8'.

By preference our attachment is constructed largely of ordinary gas-pipe and fittings.

The uprights 8 8' and 12 and the arms 1 and 1' of the lever are preferably formed of gas-pipe, the lever-arms 1 1' being united by an elbow 1"', through which the fulcrum-pivot 5 10 passes. The uprights 8 8' are fastened to the base-block 7' by floor-flanges 15, into which the uprights are screwed. The guide-rails 9 9' are held together by braces 9'', and they give greater strength and stability to the uprights 8 8'. The upper end of the 10 brace-rod 14 of the lever extends through the upright arm of the lever and is fastened with a nut 16.

17 indicates a nut screwed onto the top of the upright arm to prevent the collar from being accidentally displaced.

In practice the lever, push-arm, and base form a detachable attachment which can be made and sold separate from the press, so as 20 to be applied to presses now in use.

To apply the attachment to a press which is set up, the attachment will be placed with its base 7 on the floor diagonally across beneath the frame of the press and will be 25 brought into position to allow the clamp E to be clamped to the handle C of the press. The attachment is adjusted to bring the push-rod 2 practically at right angles to the handle. Then the base is fastened to the floor and 30 the apparatus is ready for use.

To operate the press, the printer will operate the foot-lever in the ordinary way of operating foot-levers. When the foot-plate is pressed down, the push-rod pushes forward 35 on the handle and throws the platen down to make the impression. When the pressure upon the foot-plate is removed, the springs G return the platen to its position of rest, and thereby carry the lever back to its initial 40 starting-point ready to be operated to make another impression.

By preference the foot plate and lever are weighted sufficiently to practically balance the recoil of the springs, so that the labor of 45 working the press is reduced to a minimum, the force required being simply that which is necessary to disturb the balance and force the platen down to strike the blow to make the impression.

50 In applying the attachment to a press the base 7 will be set at such an angle with the frame of the press as to cause the pitman to reciprocate longitudinally as nearly as possible in the operation of the press. This brings 55 the footpiece 1" into a convenient position for the right foot of the pressman while in attendance on the press, and the pressman in operating the press does not have to move from his position. When he has operated 60 the crank of the press to run the form under the platen, he is in exact position to operate the attachment with his right foot to make

the impression. When the form has been placed on the platen, the downward movement of the footpiece 1" and the consequent 65 production of the impression is instantaneously made by the action of the pressman's foot. By a little practice the movements of the pressman will become practically automatic, so that no time is lost; but at the 70 moment the form is in position the impression will be made and the platen raised ready for the withdrawal of the form.

Now, having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination with the handle of a platen-press; of a foot-lever furnished with an upright arm extending into the plane of said handle; and a connecting-rod pivotally 80 connected at one end with the upright arm to operate in a plane which is at right angles to said arm, and provided at the other end with a pivotal attachment for said handle.

2. An attachment for a platen-press comprising a foot-lever with upright arm; a collar swiveled on the upright arm to turn in a plane at right angles to the upright arm; a clamp for the handle of the press; and a connecting-rod pivoted to the collar by a pivot 90 and to the clamp by a pivot at right angles to the collar-pivot.

3. The combination with a platen-press, of a foot-lever having an upright arm; a collar swiveled on the upright arm to turn in 95 a horizontal plane; and a connecting-rod pivoted to the collar by a horizontal pivot and pivotally connected with the handle of the press by a vertical pivot.

4. An attachment for a platen-press comprising a foot-lever with upright arm; a connecting-rod pivoted at one end to the upright arm; and a clamp comprising two members bent to fit the handle of the press and both pivoted to the other end of the connecting-rod; and means for drawing the free ends 105 of the clamp members toward each other.

5. In a platen-press, the combination of the base; two uprights fastened to the base; two slanting guide-rails, one fastened to each 110 of the uprights and both fastened at their lower ends to the base; a fulcrum-pivot extending across between the uprights; a bent foot-lever between the guide-rails and pivoted at its bend to the fulcrum; and a connecting-rod pivoted to the upright arm of the lever and provided with means for pivotal attachment to the handle of the press. 115

ATHERTON EBERLE.
CHAS. H. EBERLE.

Witnesses:

JAMES R. TOWNSEND,
F. M. TOWNSEND.