(No Model.)

W. J. BAYRER.

FOOT PRESS.

No. 346,141. Patented July 27, 1886.

Fig. 1.

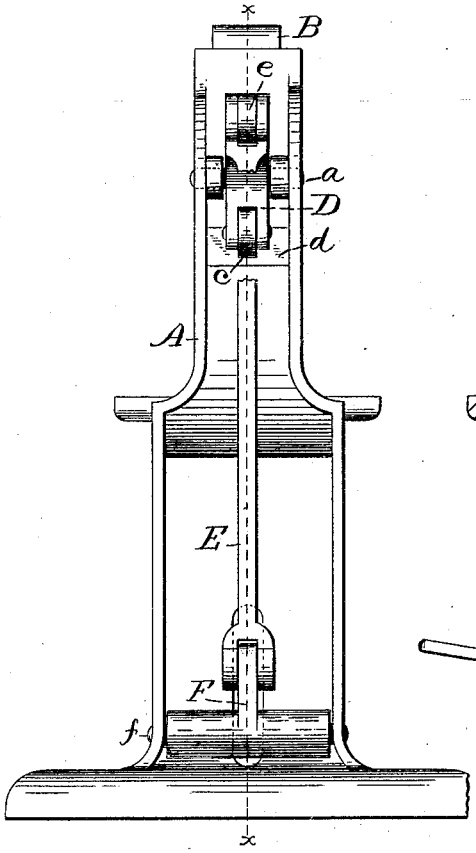
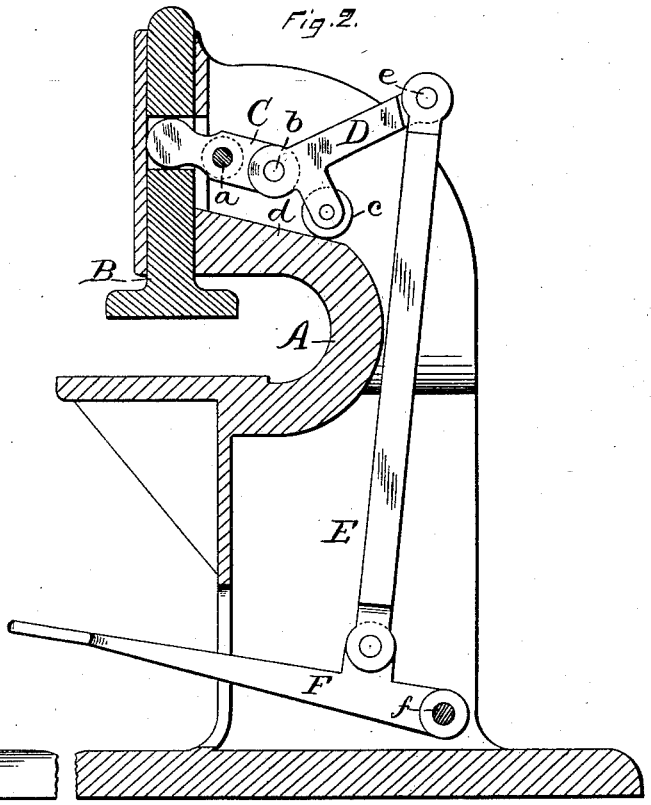


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

WILLIAM J. BAYRER, OF SOUTHINGTON, CONNECTICUT, ASSIGNOR TO THE PECK, STOW & WILCOX COMPANY, OF SAME PLACE.

FOOT-PRESS.

SPECIFICATION forming part of Letters Patent No. 346,141, dated July 27, 1886.

Application filed February 15, 1886. Serial No. 191,926. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. BAYRER, a citizen of the United States, residing at Southington, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Foot-Presses, of which the following is a specification.

My invention relates to improvements in foot-presses and analogous machines; and the object of my invention is to provide simple and powerful means for moving the press-slide.

In the accompanying drawings, Figure 1 is a rear elevation of my press, and Fig. 2 is a vertical section of the same partly in elevation, on line *x x* of Fig. 1.

My invention is applicable to presses, squaring-shears, and analogous machines having a reciprocating slide, and a foot-treadle or lever for operating said slide.

In the drawings I have illustrated my improvement as applied to a foot-press.

The frame A and slide B of the press may be of any ordinary form and construction. The slide B is operated by the lever C, Fig. 2, pivoted to the frame at *a*, and having one end rest within a mortise in the slide B in the ordinary manner. To the opposite end of the lever C, I secure an angle-lever, D, the same being connected to said lever C by means of a pintle-joint, *b*, Fig. 2. The short arm of the angle-lever is provided with a friction-roller, *c*, which roller bears upon a stationary inclined table or track, *d*, formed on or made a part of the frame. The rear end of the long arm of the angle-lever D is connected by a joint, *e*, to the upper end of a rod or pitman, E, while the lower end of said pitman is connected with the foot-treadle F. Said treadle is pivoted to the frame by the pin or shaft *f*. The treadle F and pitman E constitute the mechanism for operating the angle-lever D. A spring may be arranged to throw the treadle up and hold it in position as in prior foot-presses. By pressing the treadle F downward the rear end of the long arm of the angle-lever D is also pulled downward. This action forces the short arm of said lever forward and moves the roller in the same direction up the inclined table or track *d*, thereby elevating the pintle *b* and connected ends of the levers C D, and forcing the forward end of the lever C and the press-slide B downward for action. The first part of the downward stroke or movement of the slide will be faster, relatively to the movement of the treadle than the latter part of its stroke. At first the swinging of the angle-lever D on its fulcrum (the axle of roller *c*) acts to move the press-slide in connection with the upward movement of said fulcrum as the roller rides up the inclined table, but the nearer the short arm of the angle-lever D approaches a vertical position the less will be the movement of the slide. After said angle-lever passes a given point the further downward movement of the slide is dependent upon the angle-lever riding up the inclined table.

A prior patent to myself shows hand-shears with an angle-arm formed on one of the handles and provided with a roller in the short arm thereof, which roller is adapted to ride upon one side of the opposite handle, and the same is hereby disclaimed.

I claim as my invention—

The combination of the frame having the stationary inclined table or track *d*, the slide B, the lever C, pivoted to the frame for operating said slide, the angle-arm D, connected to one end of the lever C, and having the roller *c* at the end of the short arm of said angle-lever in position to ride over said stationary track, and mechanism for operating said angle-lever, substantially as described, and for the purpose specified.

WILLIAM J. BAYRER.

Witnesses:
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