(No Model.)

F. F. WESTPHAL.

PRESS.

No. 396,906. Patented Jan. 29, 1889.

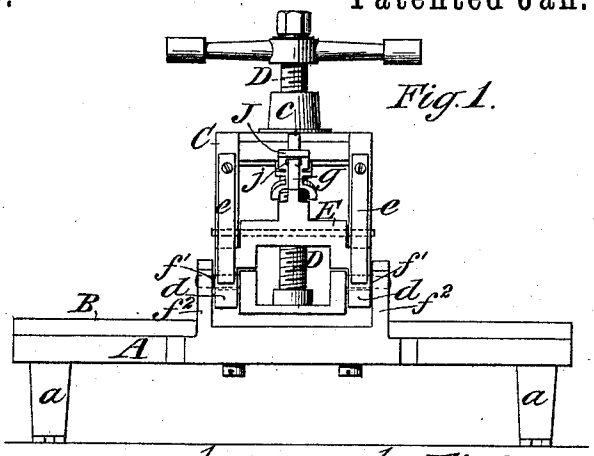


Fig. 1.

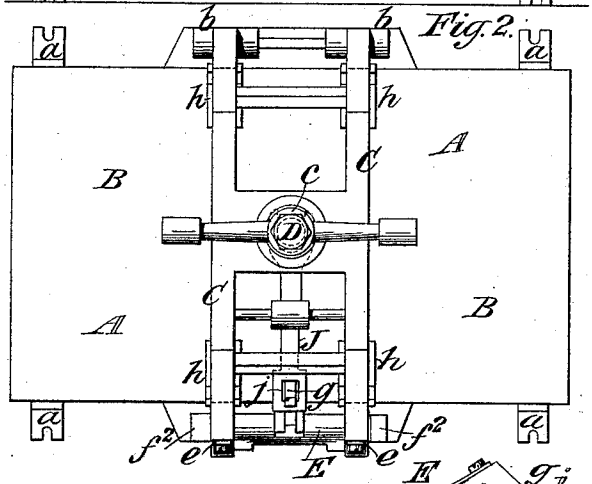


Fig. 2.

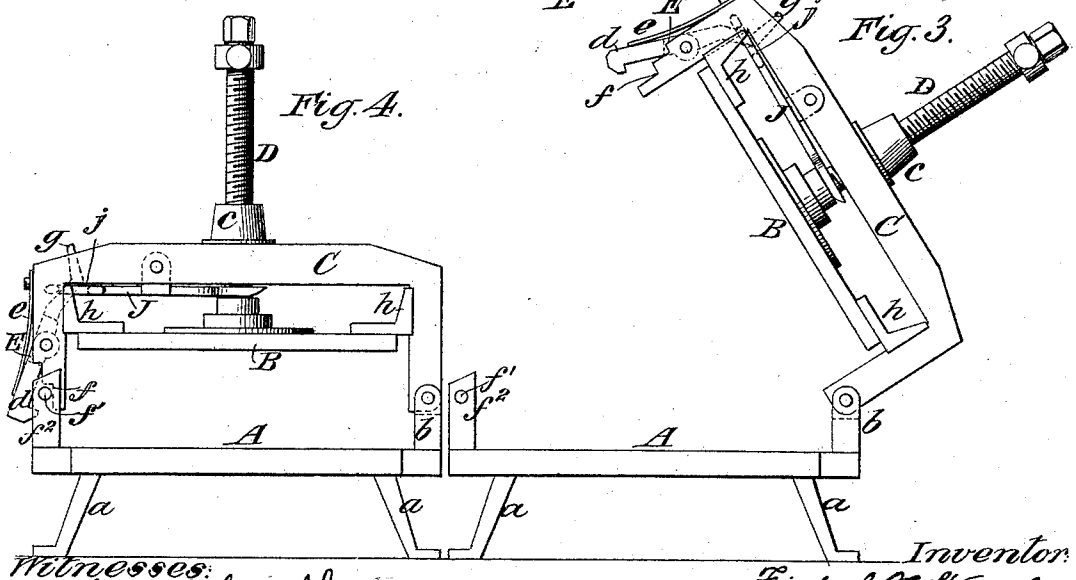


Fig. 4.

Fig. 3.

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UNITED STATES PATENT OFFICE.

FRIEDRICH F. WESTPHAL, OF JERSEY CITY, NEW JERSEY, ASSIGNOR OF ONE-HALF TO JOHN J. OLINGER, OF SAME PLACE.

PRESS.

SPECIFICATION forming part of Letters Patent No. 396,906, dated January 29, 1889.

Application filed August 31, 1888. Serial No. 284,243. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH F. WESTPHAL, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Presses, of which the following is a specification.

I will describe in detail a press embodying my invention, and then point out the novel features in claims.

In the accompanying drawings, Figure 1 is an end view of a press embodying my improvement. Fig. 2 is a plan or top view of the same. Fig. 3 is a side elevation showing the press open, and Fig. 4 is a similar view showing the press closed.

Similar letters of reference designate corresponding parts in all the figures.

A designates the base or bed of the press, and B the platen thereof. The base A may be supported, as shown, upon legs or supports *a*. The platen B is supported from a swinging frame, C. This swinging frame is shown approximately U-shaped, and is pivoted at the end of one of its downwardly-extending arms to a lug or upright, *b*, extending upwardly from the bed A.

D designates a screw. This screw is adapted to work through a screw-threaded aperture in the frame C, and, as illustrated, through a nut, *c*, mounted upon and secured to the upper part of the frame C. The screw D is connected to the platen B with a loose connection, so that the screw may be readily rotated without effecting a lateral movement of the platen. When the screw is rotated in one direction, the platen is elevated, and when rotated in the other direction it is moved downwardly.

The frame C may be swung upon the pivot *b'* up from over the bed A, this being for the purpose of admitting of the introduction of any article upon the bed A which it is desired to press. When the article to be pressed has been placed upon the bed A, the frame is swung downwardly to the position shown most clearly in Fig. 4. When in such position, it is automatically locked, so that it cannot be accidentally disengaged. The automatic locking is occasioned by means of a dog or dogs, *d*. These dogs, where two are employed, as in the example of my improvement shown, form part of a frame, E. The frame E is pivoted within the frame C, so that it may be swung to and fro.

I have shown springs *e* secured near one of their ends to portions of the frame C, and bearing near their other ends against the dogs *d*. These springs tend to cause the dogs *d* to hold the frame C in a locked condition with the bed A. I have shown a convenient means for accomplishing the locking, consisting in providing the free ends of the frame C with notches *f* and providing catches upon the bed A. The catches in this instance consist of pins or projections *f'*, extending from upwardly-extending lugs f^2 upon the bed A. The springs *e*, when the frame C is in a position to be locked, force the dogs inwardly, so that the teeth thereof will engage the catches *f'*. I desire to automatically release the dogs *d* when the screw of the press is rotated in such direction as to elevate the platen B. To accomplish this releasing, I have shown means consisting of a lever, J, which lever is fulcrumed in the frame C. The lever is provided at one end with a bifurcated portion extending about the screw D. Near its other end it is provided with a longitudinally-extending slot, *j*, through which extends a projection or extension, *g*, upon the frame E. When the screw D is elevated, the bifurcated portion of the lever J comes into contact with the platen B, or an appurtenance thereof, and is so rocked upon its fulcrum as to cause the movement of the dogs *d* out of engagement with the catches *f'*. The projection *g* has an angular extension in an upward direction.

When the lever J is rocked, the side edges of the slot *j* come into contact with the angular extension of the projection *g* to cause the rocking movement above referred to. It will be readily seen that when the screw D is rotated in the other direction, or in a direction to cause the descent of the platen B, the lever J will be rocked in such manner as to break contact with the projection *g*, whereby the springs *e* will operate to again cause the engagement of the dogs *d*.

The platen B is guided in its upward and downward movements by means of guides *h* thereon, which guides embrace the frame C.

It will be seen that by my improvement I

provide a press which, while combining all the requirements of a press, can be at the same time opened out so as to receive the article to be pressed, and one which will be automatically locked and released by the operation of raising and lowering the screw of the press.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a press, the combination, with a bed-piece, of a frame pivotally connected thereto, a platen, a screw for raising and lowering the platen, a spring-actuated dog for securing the frame and bed-piece, and a lever fulcrumed on the frame and engaging said screw and dog for operating the dog to release the frame upon the raising of the screw, substantially as specified.

2. In a press, the combination, with a bed-piece, of a frame pivotally connected thereto, a platen, a screw for raising and lowering the platen, a spring-actuated locking device for locking the frame to the bed-piece, a lever pivoted on said frame and having a loose connection with said screw, and also a loose connection with said locking device, whereby, as the said screw is rotated, the lever will be rocked to operate said locking device, and a stop for preventing a too extended upward movement of the platen, substantially as specified.

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