

H. ANTOINE.
PRESS.

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995,516.

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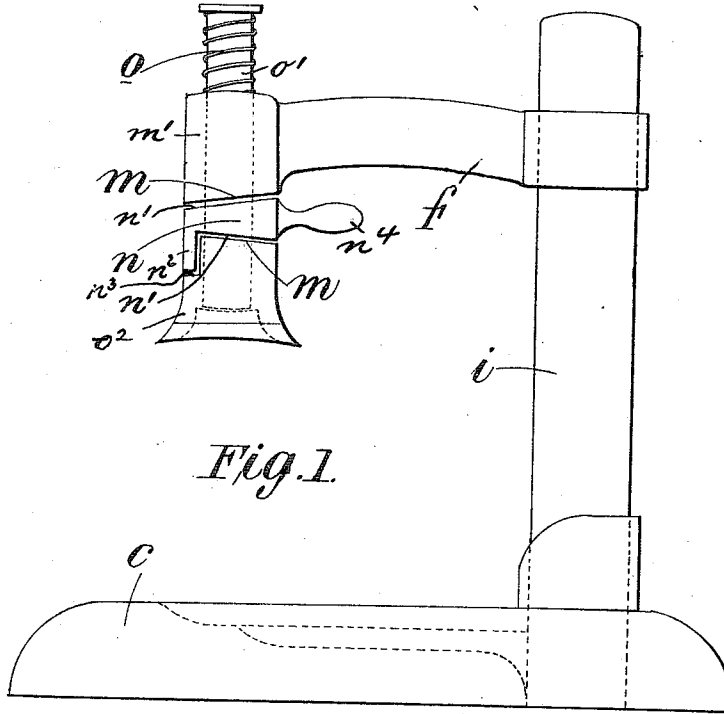


Fig. 1

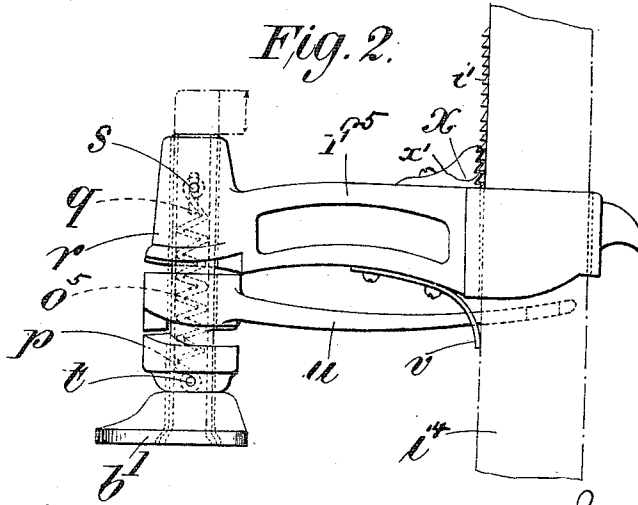


Fig. 2

Witnesses
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UNITED STATES PATENT OFFICE.

HENRI ANTOINE, OF PARIS, FRANCE.

PRESS.

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To all whom it may concern:

Be it known that I, HENRI ANTOINE, a citizen of the French Republic, residing at Paris, Seine, France, have invented a certain new and useful Improved Press, of which the following is a specification.

This invention relates to presses in which the adjustable pressure-producing means comprise oppositely-inclined helicoidal cam surfaces between which a collar provided with similar surfaces is adapted to turn.

The invention consists in the novel construction, arrangement and combination of parts as hereinafter fully described, illustrated in the accompanying drawing and pointed out in the appended claims.

In the drawing: Figures 1 and 2 show by elevations two constructions of the device.

Referring particularly to Fig. 1, to the base *c* is secured an upright *i*, a sliding arm *f* being adapted to move thereon, the pressure-producing means being arranged at the end of said arm which is farthest from the upright. Instead of using a screw, which in any case requires a considerable time for producing the maximum pressure, two oppositely-inclined planes *m* are used, between which is adapted to turn a collar *n*, provided with oppositely-inclined planes *n'* adapted to bear against the inclined planes *m*. One of the planes *m* is provided on the lower side of the outer end or collar *m'* of the arm *f*, while the other plane *m* is provided on the upper side of a pressure-head *o*² carried by the lower end of a rod *o'* which passes freely through the outer end of arm *f* and collar *n*. The collar *n* has a lug *n*² fitting in a recess *n*³ in the pressure-head and also has a handle *n*⁴ to adapt said collar to be turned. The return of the parts to initial position can be obtained by means of a coiled spring *o* encircling the rod *o'*.

Another construction of the device is shown in Fig. 2. The device in this construction insures in any position the proper holding of the parts upon the upright *i*⁴. In this construction, *p* is the tube supporting one of the pressure jaws *b'* and is riveted in the latter. This tube is provided with

two opposite notches *g* at its upper portion so as to enable it to be moved in the collar *r* during the raising or lowering and to prevent it from rotating around its own axis. The pins or rivets *s*, *t*, keep the said tube in the parts, the rivet *t* moving together with the jaw *b'*. Between the said two pins is secured the spring *o*⁵ which brings the jaw *b'* to its original position when the lever *u* is operated for loosening. A spring blade *v* secured to the sliding arm, presses with its free end against the upright *i*⁴ and prevents the sliding arm *f*⁵ from falling down prematurely after the loosening. Another means, which can be used alone or in combination with the spring blade, consists in cutting teeth *i'* on the edge of the arm *i*⁴ and in providing the sliding arm with a heel *x* also provided with teeth *x'* corresponding to those of the arm and engaging with each other. This heel can be cast integral with the arm, or be separately cast and attached to the arm, as shown.

What I claim is:—

1. A press comprising a base, an upright secured thereto, a sliding arm adapted to move upon said upright, a rod surrounded by the opposite end of said sliding arm and inclined planes upon said rod adapted to move said rod longitudinally when rotated.

2. A press comprising a base, an upright secured thereto, a sliding arm adapted to move upon said upright, a rod passing through the extremity of said sliding arm a spring surrounding said rod, an inclined plane at the underside of said upright, a collar with two oppositely inclined planes, a pressure head encircling the extremity of said rod, an inclined plane upon said pressure head and means for rotating said collar whereby said pressure head may be moved longitudinally to produce pressure.

3. A press comprising base, an upright secured thereto, a sliding arm adapted to move upon said upright, a spring attached to said arm and engaging said upright, a hollow rod passing through the end of said arm, a pressure head on said rod, a cam surface adjacent the upper face of said pres-

sure head, a cam surface upon the lower side of said arm, a collar with oppositely inclined planes surrounding said hollow rod and between said cam surfaces, a spring attached to said pressure head and means for
5 rotating said collar, as set forth.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

HENRI ANTOINE.

Witnesses:

GEORGE FAUGER,

EUGENE RAFFET.

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