

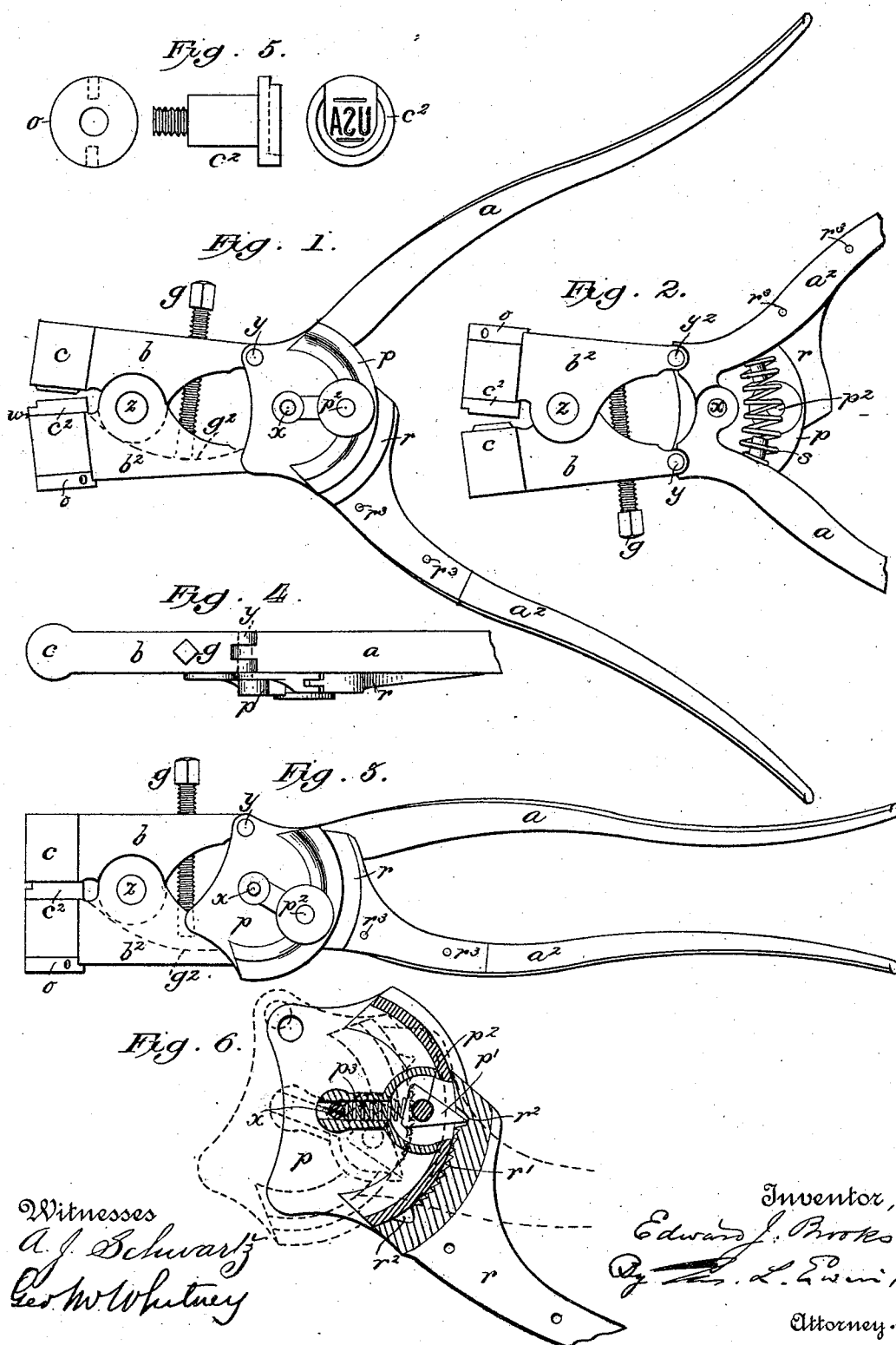
(No Model.)

2 Sheets—Sheet 1.

E. J. BROOKS.
SEAL PRESS.

No. 485,370.

Patented Nov. 1, 1892.



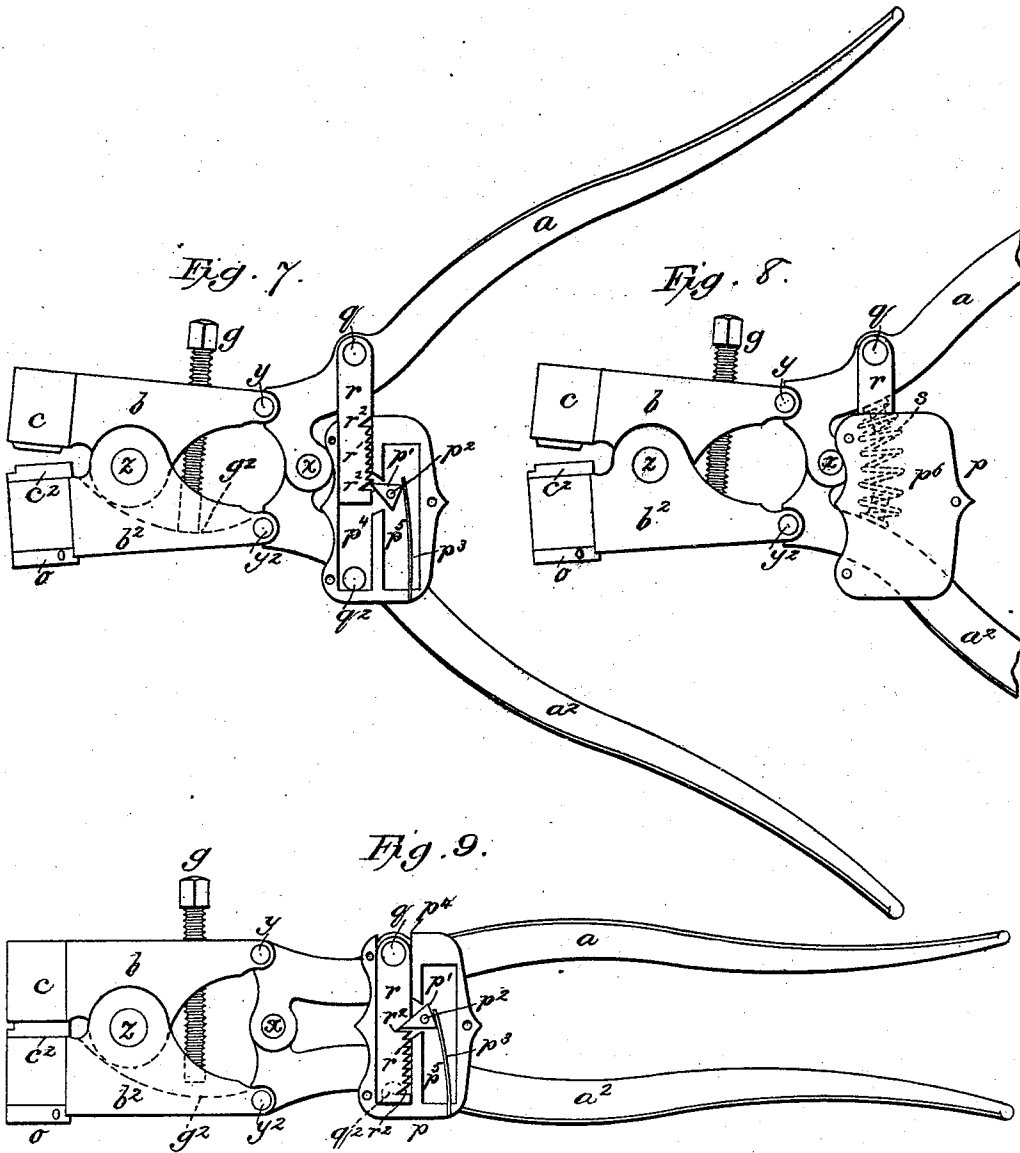
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2 Sheets—Sheet 2.

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UNITED STATES PATENT OFFICE.

EDWARD J. BROOKS, OF EAST ORANGE, NEW JERSEY, ASSIGNOR TO THE
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SEAL-PRESS.

SPECIFICATION forming part of Letters Patent No. 485,370, dated November 1, 1892.

Application filed August 1, 1892. Serial No. 441,784. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. BROOKS, a citizen of the United States, and a resident of East Orange, in the State of New Jersey, have
5 invented a new and useful Improvement in Seal-Presses, of which the following is a specification.

This invention relates to lever-presses for fastening and stamping "lead seals" and
10 other like seals or sealing-shackles, and is additional to the improvements in seal-presses patented by me May 6, 1884, September 22, 1885, October 13, 1885, and October 14, 1890, (Letters Patent Nos. 298,284, 326,897, 328,106,
15 and 438,140.)

In common with these previous improvements the primary object of the invention is to insure securely fastening and distinctly stamping each seal, and the means chiefly relied on is a "ratchet attachment," which prevents reopening the lever-handles of the press after the seal-pressing operation is begun until the press has been closed to the predetermined extent necessary to thoroughly compress the seal.
25 press the seal.

The present invention consists in certain novel combinations of parts, hereinafter described and claimed, all of which may be and preferably are embodied in a simple toggle-press of great power in proportion to its weight and size.
30 press of great power in proportion to its weight and size.

Two sheets of drawings accompany this specification as part thereof.

Figures 1 and 2, Sheet 1, are "top" and "bottom" views, so to speak, of the improved press "open." Fig. 3 is a top view of the same "closed." Fig. 4 is an edge view projected from Fig. 3. Fig. 5 is a detail view of the nut of the adjustable die and the side and
40 face of this die on a larger scale. Fig. 6 is a sectional top view of the ratchet attachment on the same scale as Fig. 5, showing the parts in different positions by full and dotted lines. Figs. 7 and 8, Sheet 2, are top views of a modified press open, the former showing the cap of the ratchet attachment removed; and Fig. 9 is another top view of the same closed with cap removed.
45 cap removed.

Like reference-letters in the following description refer to like parts in all the figures.

In each press a pair of L-shaped lever-han-

dles a^2 , having short toggle-arms at their pivot ends, are connected with each other by a toggle composed of said arms and a central pintle x , and are in turn connected by pivots
55 $y y^2$ with a pair of short die-levers $b b^2$, which are pivoted together at or about mid-length by a rivet z , and at their outer ends carry or are provided with the pair of dies $c c^2$, between which the seal is pressed. One die c is preferably formed on the lever which carries it, and the other is removable, as in Fig. 5, being held in place in the press by a screw-nut o , so as to be adjusted by introducing one or more thicknesses of paper at w , Fig. 1, to
65 compensate for wear. A spiral spring s , Figs. 2 and 8, reopens the press, and a gage-screw g , working in a tapped hole in the lever b and coacting with a gage-surface g^2 within the lever b^2 , regulates or limits the separation of the dies by said spring. To insure fully closing the dies upon the seal by means of said lever-handles at each pressing operation, so that the seal shall be securely fastened and distinctly stamped, as aforesaid, the said ratchet
70 attachment of each of these presses comprises a pawl-carrier p and a ratchet part r , attached to the respective lever-handles and sliding one upon the other. The pawl proper p' is in each case reversible, working freely on a central pivot p^2 and acted on by a spring p^3 . The rack proper r' has a reversing-recess r^2 at each end thereof, and the pawl and ratchet, together with their appurtenances, are fully inclosed, so as to guard them against dust
85 and against being tampered with by the body of the pawl-carrier. Fully opening the press after each pressing operation for the escape of the pressed seal is thus insured, as well as fully closing it on the seal, and the necessarily-delicate working parts of a ratchet attachment as small and as light as is desirable are adequately protected. In each arrangement, furthermore, by turning back the gage-screw g sufficiently the pawl p' and rack
95 r' may be exposed, so as to lubricate them with facility. In the specific ratchet attachment represented on Sheet 1 of the drawings the pawl-carrier p is attached by said pintle x and pivot y , so as to move with the pivot end of the lever-handle a . Said pintle x forms an abutment for the spring p^3 , Fig. 6, which
100

is a spiral spring in this arrangement. The rubbing-surface of the pawl-carrier is peripheral and concentric with said pintle x , and is deeply grooved to admit a rib of a like curve provided with the rack r' and reversing-recesses r^2 of the rack part r , and the latter is rigidly attached by rivets r^3 to the lever-handle a^2 , so as to move with this lever-handle when the press is worked.

10 In the modification represented on Sheet 2 the ratchet part r is attached to the handle a and the pawl-carrier p to the handle a^2 . Both are so attached independently of the pivots x , y , and y^2 by means of pivotal studs q q^2 , formed on the respective handles for this purpose. The ratchet part r is a simple straight slide fitted to its pivot q and to a recess p^4 in the pawl-carrier p , within which it works. A parallel recess p^5 and an opening 15 connecting the two accommodate the pawl p' and its spring p^3 , and a face-plate or cap p^6 , Fig. 8, riveted fast, completes the pawl-carrier and conceals the pawl, pawl-spring, rack, and reversing-notches. In this general form 20 pawl carriers for different railroads may have distinctive shapes, and the cap p^6 may be conveniently provided with any desired inscription. Otherwise the external shape of the parts is wholly immaterial.

30 The dies represented at c and c^2 are adapted to press leaden seal-disks. Dies suitable for other kinds of seals may be substituted, and other like modifications will suggest themselves to those skilled in the art.

35 Having thus described the said improvement, I claim as my invention and desire to patent under this specification—

1. The combination, in a seal-press, of a pair of lever-handles connected by a toggle, a

40 pair of short levers connected with said handles and with each other by pivots, a pair of dies carried by the free ends of said levers, a reopening-spring acting on said handles and levers, a gage-screw, which limits the separation of the dies, and a pawl-carrier and ratchet 45 part attached to the respective handles, substantially as hereinbefore specified.

2. The combination, in a seal-press, of a pair of lever-handles, a pair of seal fastening and stamping dies, means for transmitting 50 the movements of said handles to said dies, a rack part attached to one handle and having a ratchet-rack and a reversing-notch at each end of said rack, and a pawl-carrier attached to the other handle and inclosing a reversing- 55 pawl and its spring, substantially as hereinbefore specified.

3. In a seal-press, the combination, with a pair of lever-handles connected with each other by a toggle, including a pintle x , a pair 60 of short levers connected with said handles and with each other by pivots y , y^2 , and z , and a pair of dies carried by said levers, of a pawl-carrier attached to one of said handles by said pintle x and one of said pivots y y^2 , 65 and having as parts thereof a reversing-pawl, its spring, and a periphery concentric with said pintle, and a rack part rigidly attached to the other handle and provided with a rack conformed to said periphery of the pawl-carrier coacting with said pawl and having reversing-notches at its respective ends, sub- 70 stantially as hereinbefore specified.

EDWARD J. BROOKS.

Witnesses:

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