(No Model.)

J. H. HAMILTON.

SEAL PRESS.

No. 344,829. Patented July 6, 1886.

Fig. 1.

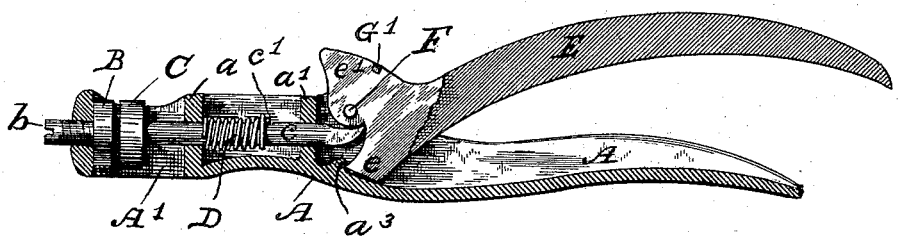


Fig. 2.

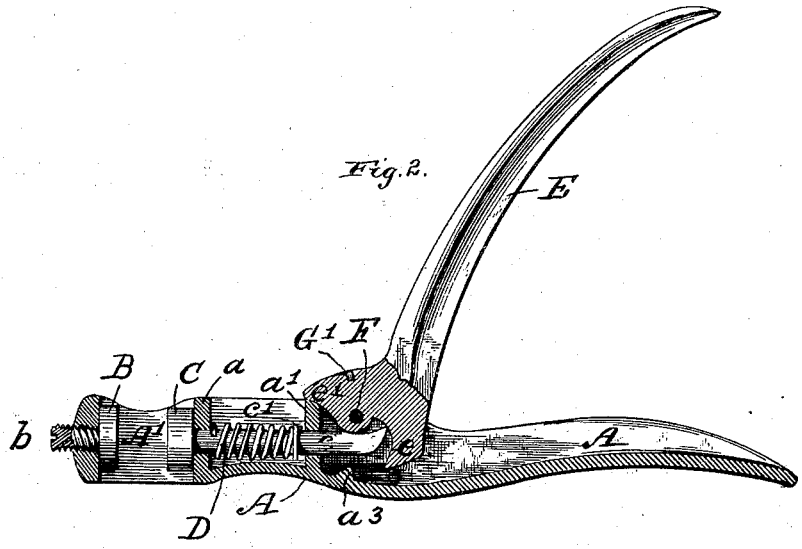


Fig. 3.

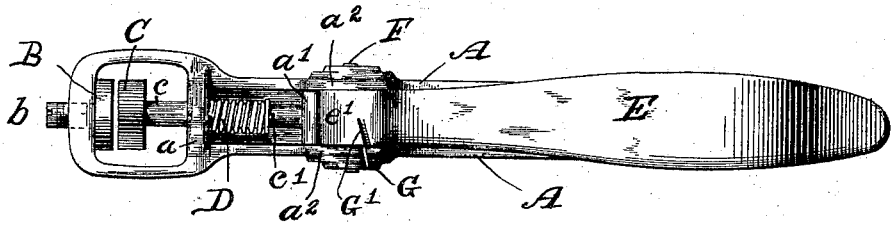
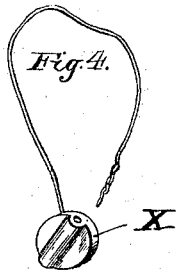


Fig. 4.



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JOHN HENRY HAMILTON, OF CONCORD, NEW HAMPSHIRE.

SEAL-PRESS.

SPECIFICATION forming part of Letters Patent No. 344,829, dated July 6, 1886.

Application filed January 21, 1886. Serial No. 189,301. (No model.)

To all whom it may concern:

Be it known that I, JOHN HENRY HAMILTON, a citizen of the United States, residing at Concord, in the county of Merrimac and State of New Hampshire, have invented certain new and useful Improvements in Seal-Presses, of which the following is a specification.

My invention consists of several novel devices, combined and arranged to form a compact seal-press and wire-clip adapted for compressing leaden or other soft-metal seals used for sealing freight-cars, the chief object I have in view being to construct a seal-press which will be both cheap and durable, and at the same time of the proper size to be easily carried in the pocket when not in use.

In the accompanying drawings, forming part of this specification, Figure 1 is a sectional side elevation of my improved seal-press, showing the movable parts as when in the act of compressing a seal. Fig. 2 shows said parts in their normal position. Fig. 3 is a general plan, and Fig. 4 is a view of one of the metal seals and its connecting-wire.

Similar reference-letters indicate corresponding parts in the various views.

The stock A may be made in any appropriate form, so long as one end be adapted to contain the bed-die and reciprocating die-plates and the other adapted to be covered by the fingers of one hand while compressing a seal. A convenient form for this piece would be substantially the design shown in the drawings, in which an opening, A′, made clear through from the upper to the lower side, is formed in one end for inserting a seal. In the end metal next to this opening is provided a hole, to which is threaded the bed-die or die-seat B, or this seat B may be provided with a stud, *b*, and said stud be threaded to the end metal of the stock A, as shown in the drawings. By either of these constructions the seat B is rendered adjustable, which may often be of advantage. The reciprocal die C is formed upon or secured to a spindle, *c*, which has its bearings in the partitions *a a′*, between which and upon the spindle *c* is placed a spiral spring, D, one end of which bears against the partition *a*, while the other acts against a pin, *c′*, inserted in a hole made in the spindle *c* for this purpose. A lever, E, is fulcrumed at F to suitable ears, a^2, formed upon the side walls of the stock A, between which it is fitted, as shown. The prong *e* of the said lever is adapted to bear against the end of the spindle *c*, which is properly curved to correspond with the contacting surface of said prong, and by applying a gentle pressure to said lever E it may be brought down to the position shown in Fig. 1 of the drawings, by which the die C is made to move toward the bed-die B, between which a seal, X, may be inserted, for compression and stamping with the desired number or mark, which is first engraved upon the flat surfaces of either the reciprocating die or bed-die, or both. By the action of the spring D against the pin *c′* the lever E will be instantly sprung to the position shown in Fig. 2 immediately upon relaxing the pressure of the hand upon said lever, and again be in readiness to compress and stamp a seal. A slot, G, is formed in one of the ears a^2 at a suitable point, and a corresponding slot, G′, is also formed in and across the prong *e′* of the lever E, the latter being so located as to be slightly above or rearward of the former when the said lever is in the position shown in Fig. 3. These slots, after being bushed with steel, afford a convenient wire clip or cutter, by means of which the seals may be readily broken without recourse to a separate tool for the purpose.

In order that the reciprocating die C may not come in contact with the bed-die or seat B, the part *e* of the lever E is permitted to come against a boss, a^3, formed at the proper point upon the stock A, as in Figs. 1 and 2, the length of the spindle *c* being governed accordingly. Thus the motion of the lever E is necessarily limited by the contact of the prongs *e′ e* with the partition *a′* and boss a^3, respectively.

By the peculiar formation of the contacting surfaces of the spindle *c* and the prong E of the lever E the leverage is gradually shortened toward the finish of the downward stroke of said lever E—*i. e.*, when the dies are taking their first grip upon a seal, X. The required pressure is but slight, while, as the compression continues, the amount of pressure required increases, and were the leverage equal during the entire movement of the lever E said lever

would be much harder to operate at the finish of its stroke than at its commencement; but this difficulty is entirely avoided by concaving the surface of the prong *e*, which comes in contact with the spindle *c* eccentrically with the fulcrum-point F of the lever E, and convexing the corresponding end of the spindle *c*, as shown in the drawings. As a result, when the least work is required of the lever E, its point of contact with the spindle *c* is farther away from its point of fulcrum than when it is required to apply its greatest pressure, which obviously lessens the required power to operate the same.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the stock, of the die-bed, the reciprocating die, the spindle having the end opposite the die curved, substantially as shown, and the operating-lever, concaved to form a bearing with the spindle eccentrical to the fulcrum-point of said lever, as set forth.

2. In a seal-press to form a wire-clip, the combination, with the lever, provided with slot G′, of the stock having slot G, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN HENRY HAMILTON.

Witnesses:
J. B. THURSTON,
NATHANIEL E. MARTIN.