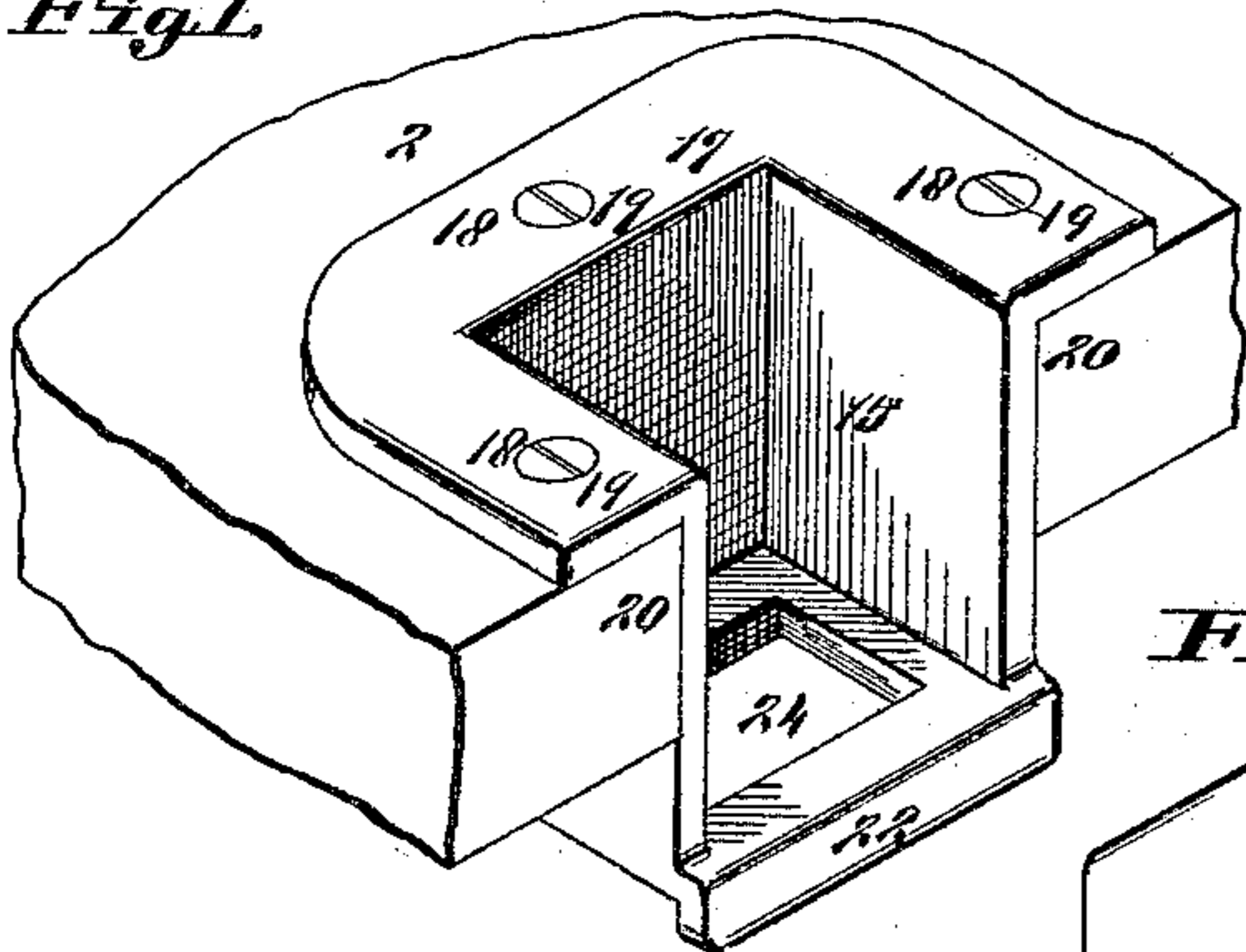


(No Model.)

R. W. GILLESPIE.
SEAL LOCK.

No. 435,821.
Fig. I.



Patented Sept. 2, 1890.
Fig. II.

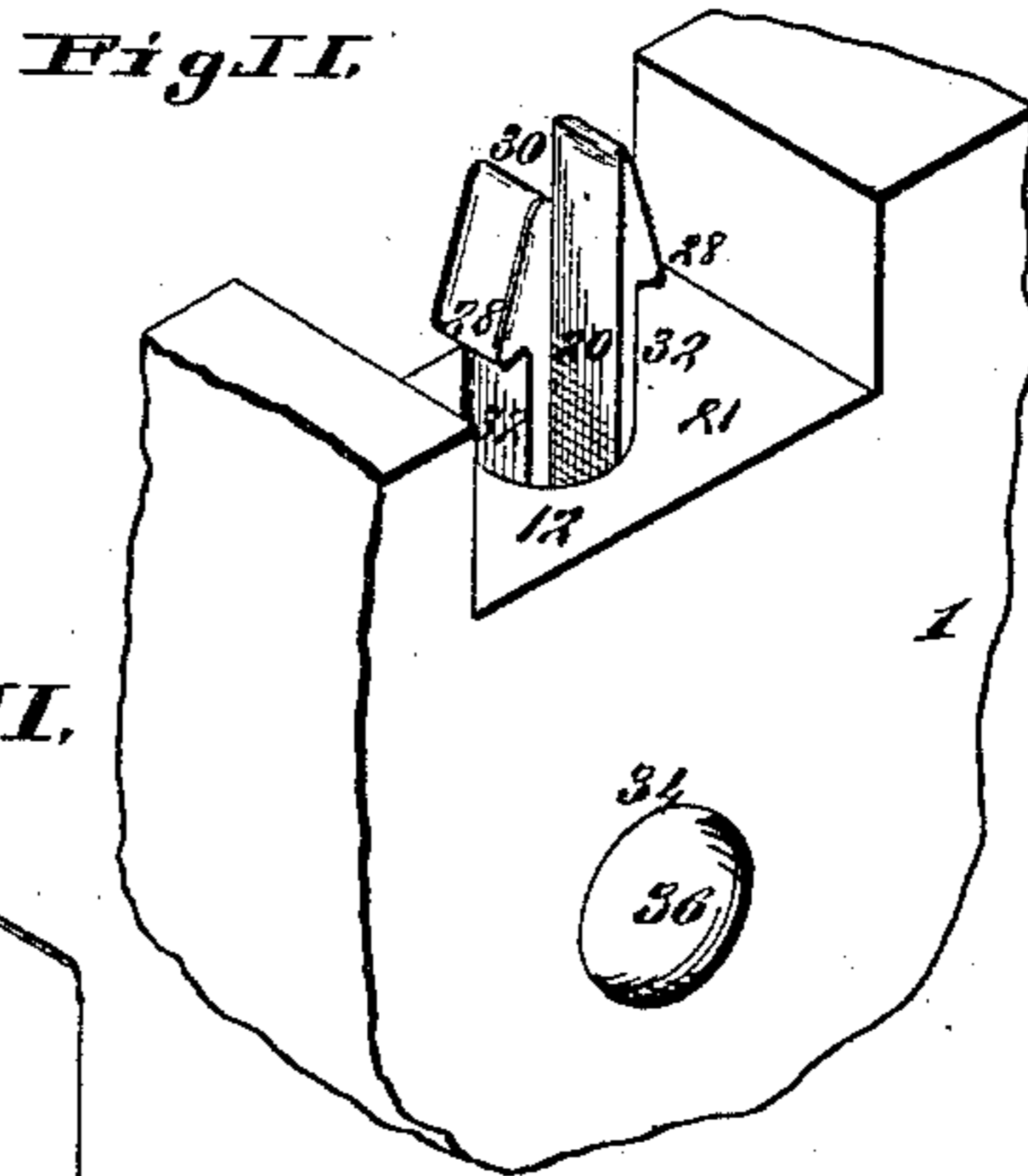


Fig. III.

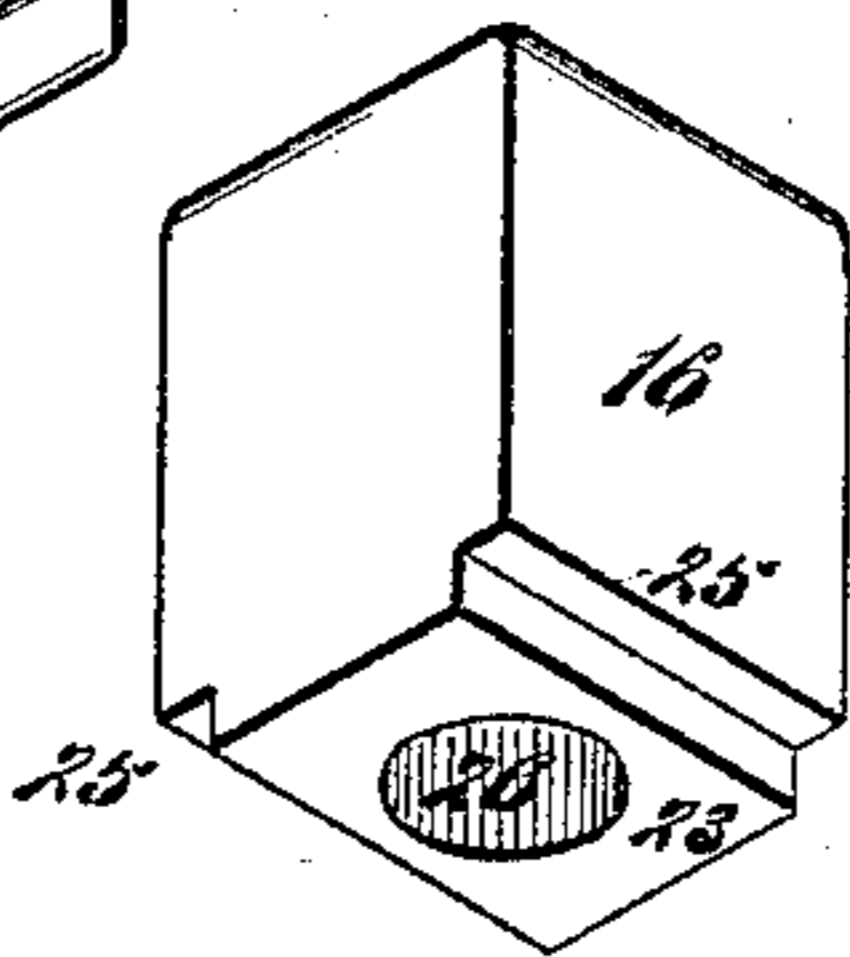


Fig. IV.

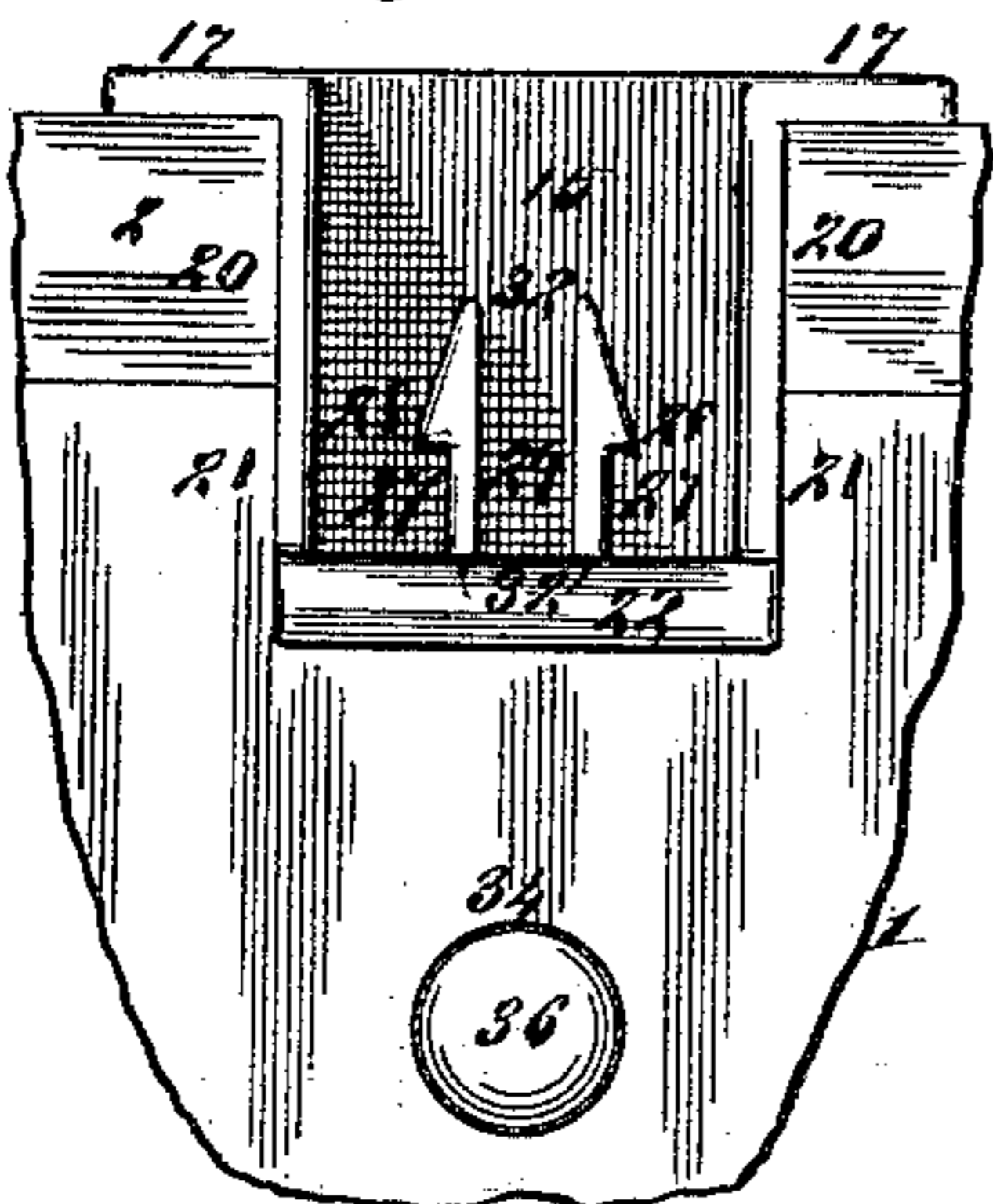


Fig. V.

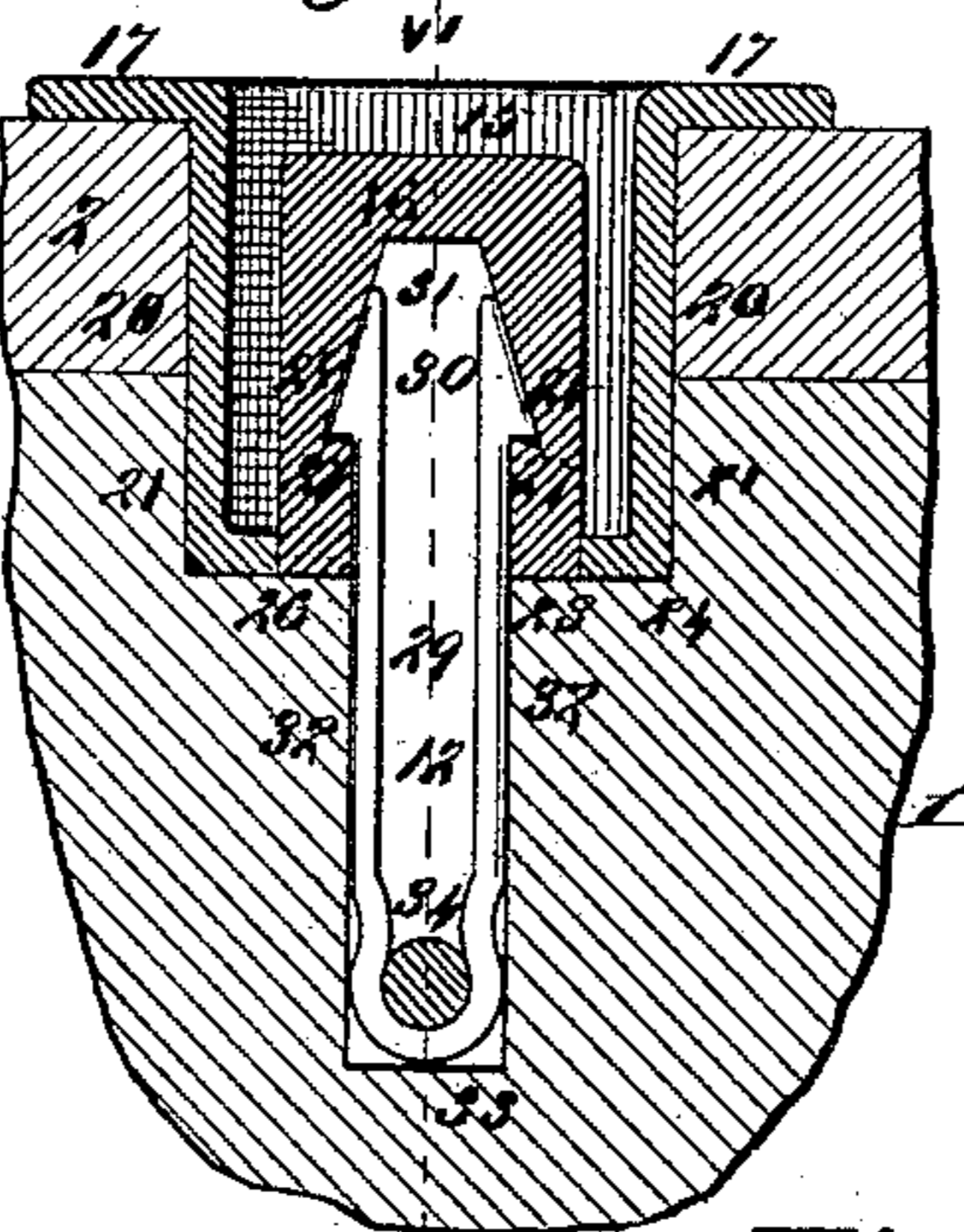


Fig. VI.

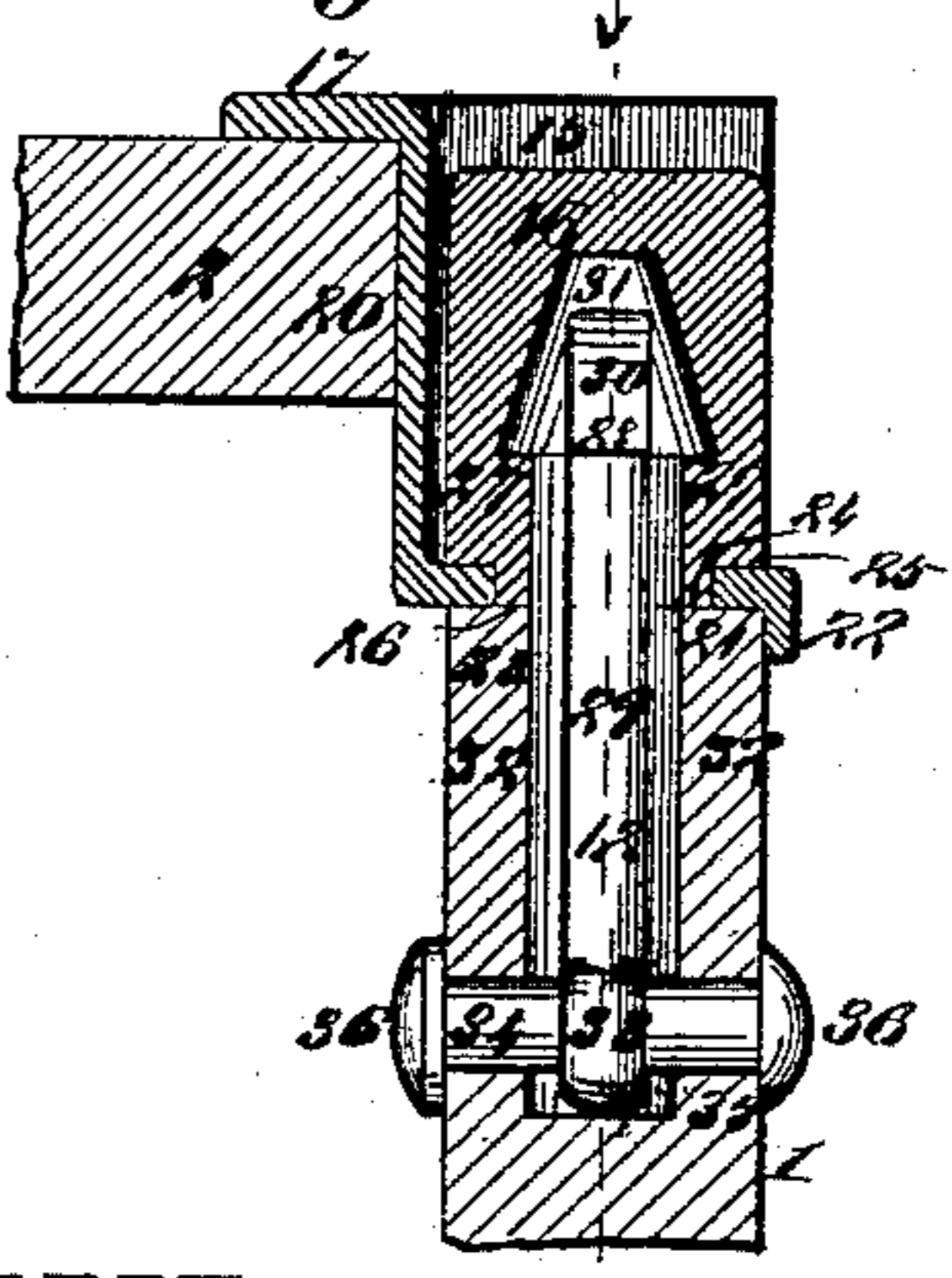


Fig. VII.

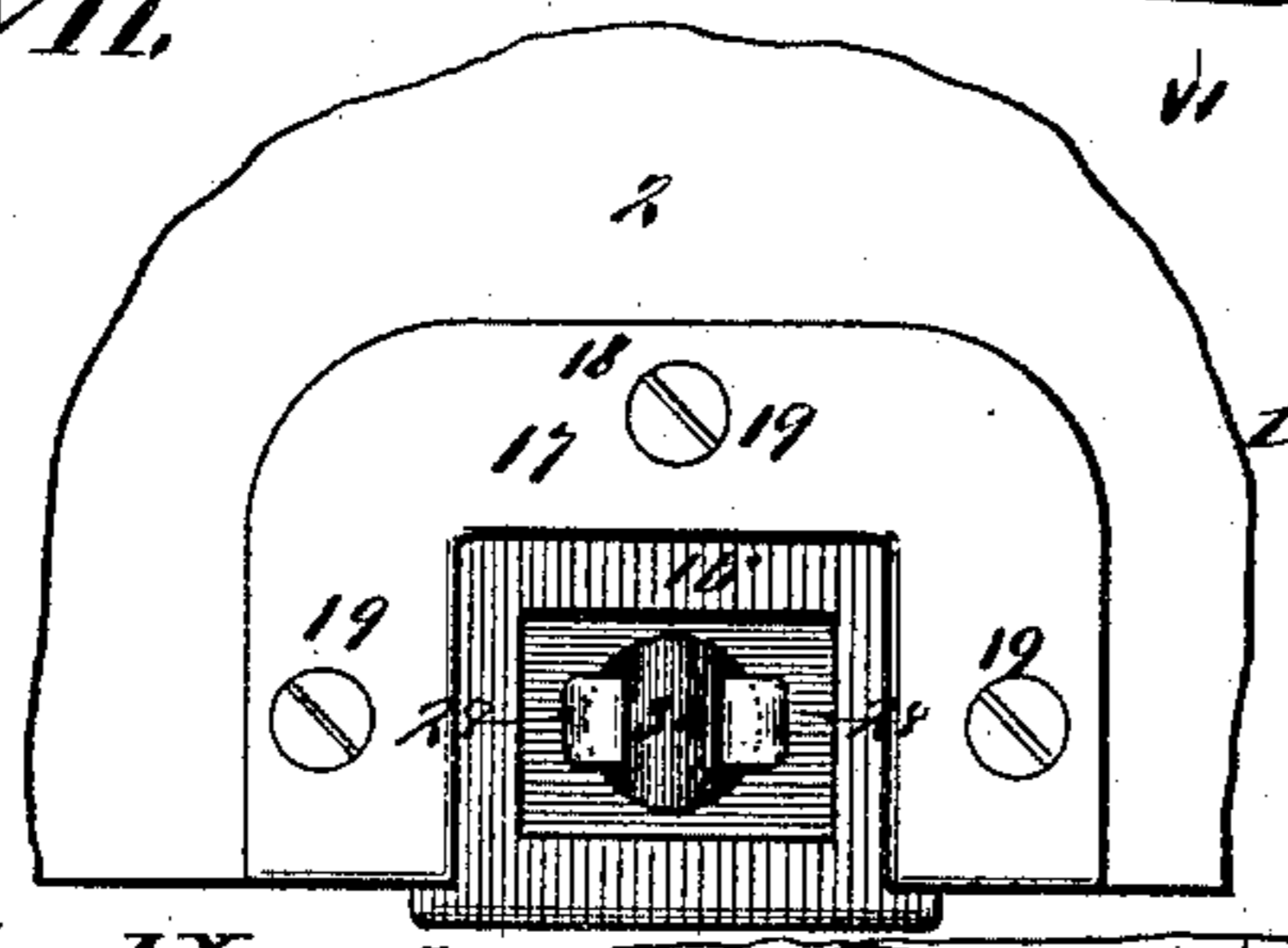


Fig. VIII.

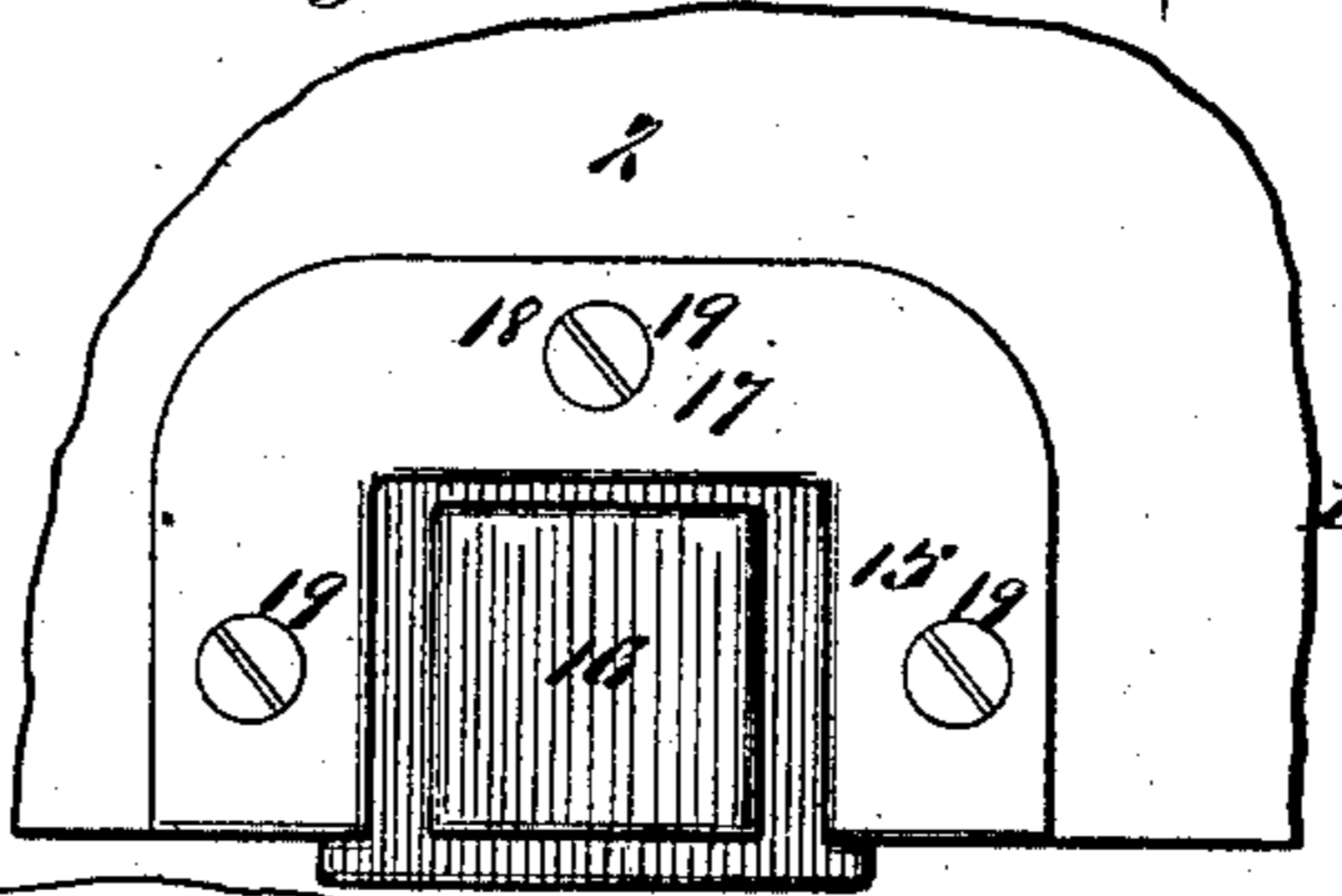
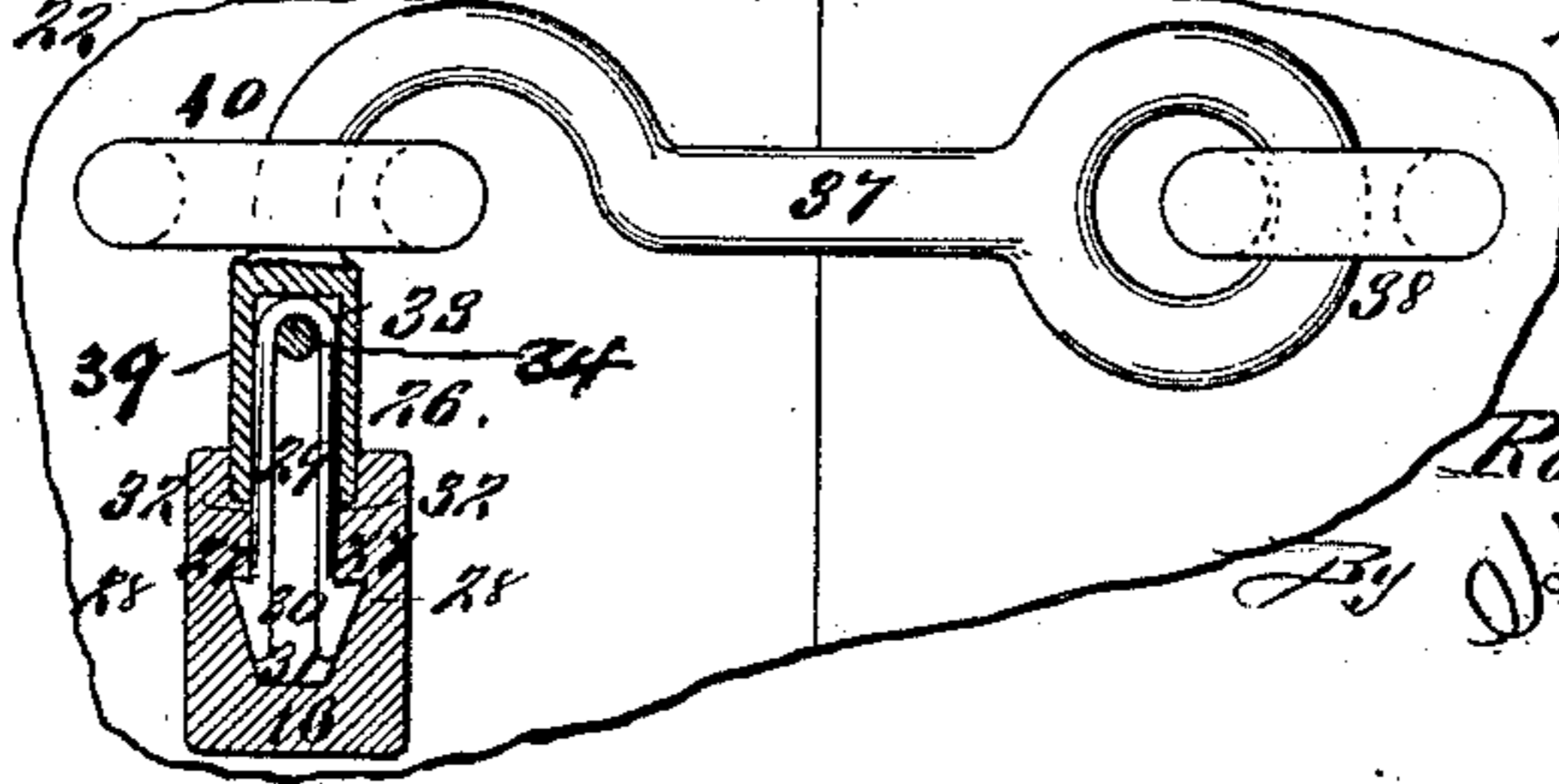


Fig. IX.



Attest,
Charles Pickles,
C. Arthur.

Inventor,
Robert W. Gillespie.
By Knight Bros.
Attys.

UNITED STATES PATENT OFFICE.

ROBERT W. GILLESPIE, OF ST. LOUIS, MISSOURI.

SEAL-LOCK.

SPECIFICATION forming part of Letters Patent No. 435,821, dated September 2, 1890.

Application filed October 29, 1889. Serial No. 328,597. (No model.)

To all whom it may concern:

Be it known that I, ROBERT W. GILLESPIE, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Seal-Locks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to attachment devices for lock-fastenings of bottled beer, wine, and other shipping-boxes; and the invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a detail perspective and shows the pendent bracket-boxing that incloses the seal-lock. Fig. II is a detail perspective of the front side piece of the box and shows the double-spring-barbed snap-catch. Fig. III is a perspective view of the frangible seal in which the spring-barbed catch engages to effect the locking of the box. Fig. IV is a detail view of the front side piece of the box and front edge of the closed lid, and shows the spring-barbs in position within the bracket-boxing, from which the seal is vacant. Fig. V is a vertical detail section taken on line V V, Fig. VI, and shows a front view of the box and lid, with the lock that fastens the same, and the double spring-catch, in engagement in the frangible seal, which is seated in its pendent bracket-boxing. Fig. VI is a vertical section taken on line VI VI, Fig. V, and shows a side view of the parts of which Fig. V shows a front view. Fig. VII is a top detail view of the lid, and shows the pendent bracket-boxing and the spring-barbed catches entered therein, but the seal absent therefrom. Fig. VIII is a like view with the seal inserted. Fig. IX is a detail view of a modification, part in section, and shows the double spring-catch secured within a box-point of a fastening-hook, with the spring-catches engaged in a pendent seal.

Referring to the drawings, 1 represents the body of a box, and 2 the lid to which my fastenings are attached.

15 represents the pendent bracket-box that provides a close seat for the frangible seal 16, that seal-locks the box. The top of said bracket-box has an angle-flange 17 around its three closed sides, through perforations

18 in which and in the lid screws 19 are seated so as to firmly secure said bracket-box in its cut-away seat 20 in said lid. The lower end of said bracket-box extends beneath the lid and when said lid is closed is seated in the cut-away 21 in the front piece of the box, and a pendent flanged ledge 22 on the front edge of said extension of the bracket-box clamps tight against the front of the box, so as to enforce a true registry of the lid to the box.

The frangible seal, which is preferably made of wood, but may be of any other suitable material, has an extension-seat 23 at its base integral therewith, of a reduced diameter to the surmounting body of the seal, which extension of the seal, when the box is locked, is seated within the rectangular slotted aperture 24 in the base of the bracket-boxing. The increased diameter of the body of the seal over that of said extension provides shoulders 25, that rest on the bottom of the bracket-box on each side the slotted aperture 24. The interior of the seal has a perforate key-hole 26 in its center, which keeps its size for preferably about one-third the length of the seal and then suddenly enlarges in diameter, (see Figs. V, VI, and IX,) an acute-angle key-seat 27 being there formed, on which are seated and tightly held the acute-angle barbs 28 of the double loop-spring latch-key 29 when the latch is sealed. The conical heads or points 30 of said barb-latches are housed in the conical enlarged locking-chamber 31, and they slip up slightly farther in said chamber than their ultimate position of rest to allow the points of the acute-angle hooked barb to spring over the acutely-projecting locking-barrier presented by the acute-angle key-seat 27, and then as said barbs spring outward the said barbed heads, with the double spring-stem 32, with which they are integral, drop slightly, so that the acute points of the barbs fall back into their acutely-recessed seats, thereby providing a re-enforced lock that no jarring to the box can by any means accidentally unlock.

The loop or bow 33 of the double spring-stem of the locking-key seats the double-headed rivet 34, which passes through the perforation 35 in the front side piece of the box, and is there secured by the rivet-heads

36, the said double spring-stem of the key being housed in the socket-boxing 12 in the front side piece of the box.

In Fig. IX is shown a modification of the fastener in which the device is attached to a hook 37, which at its fast end is secured by the staple 38 to one part to be fastened, should it be the lid of the box, a car-door, or any other suitable object to be thus locked, and the loose end of the hook is provided with a box end 39, integral therewith, in which the loop end of the double spring-locking key is secured by the rivet 34, as heretofore described, in the attachment of said key when secured within the front side piece of the box, in which the double spring-stem of the barb-key has in that case its housing, except that in the modification the box-housing is secured to and integral with the point of the hook 37, and when the fastening is effected is with said point inserted within the staple 40, which staple is secured to the body of the box, or the car, or other object to which this modification of my device may be applied to fasten the same. It will also be seen that in this modification the double spring barb-headed locking-key is an exact duplicate of that already described, and, as shown in Fig. IX, the said key locks into an exact duplicate of the seal already described; but in the modification the spring-key and its locking-seal hang vertically pendent, instead of, as in the other case, being vertically erect.

The spring seal-lock is especially adapted for use as an attachment device for shipping-boxes in which heavy articles are packed—such as bottled beer and wine—and which boxes are subject to rough handling in transit, and when breakage of the attachments of the boxes occurs the breakage of more or less of the contents of said boxes is very apt to follow.

The socket-boxing 12, that houses the double spring-stem 32 of the locking-key, is easily made by boring with a brace and bit in the front piece or board of the box, and said bow-loop and double stem of the key is then slipped down into its housing. A transverse smaller bore that passes through near the bottom of the socket provides the seat for

the rivet that secures the spring-key from withdrawal.

When boxes are made of thin boards, a batten may be attached to the front piece of said box at the rear of the housing of the double spring-latch lock, so as to provide a larger scope for the socket-boxing 12 without weakening the front board.

I claim as my invention.

1. In a seal-lock, the combination of the double spring-stem-barbed locking-key, the pendent bracket-box, and the frangible seal seated in said bracket-box, in which seal the said barbed locking-key engages, substantially as and for the purpose set forth.

2. In a seal-lock, the combination of the body of the box, the lid, the double spring-stem locking-key, with its acute-angle barbs, the bracket-pendent boxing 15, secured to said lid, and the frangible seal that is seated in said pendent boxing and which seals the barbed locking-key, the said seal provided with the tubular key-hole 26, the conical locking-chamber 31, and the acute-angled shoulder key-seat at the junction of said key-hole with said conical locking-chamber, substantially as and for the purpose set forth.

3. In a seal-lock, the combination of the body of the box 1, the lid 2, the double spring-stem-barbed locking-key provided with acute-angle barbs, the front board of said box provided with the socket-boxing 12, in which the double spring-loop of said locking-key is housed, the bracket-boxing 15, that is secured to and hangs pendent from said lid and is provided with the slotway 24, through which said barb locking-key passes as the lid descends, the frangible seal 16, provided with the perforate key-hole 26 and conical locking-chamber 31, and the said seal at the junction of the perforate key-hole with the conical locking-chamber being provided with an acute-angle expansive shoulder on and within which said acute-angle locking-barbs engage to lock the box, substantially as and for the purpose set forth.

ROBERT W. GILLESPIE.

In presence of—

BENJN. A. KNIGHT,
SAML. KNIGHT.