

(No Model.)

L. A. MERK.
BILL FILE.

No. 436,533.

Patented Sept. 16, 1890.

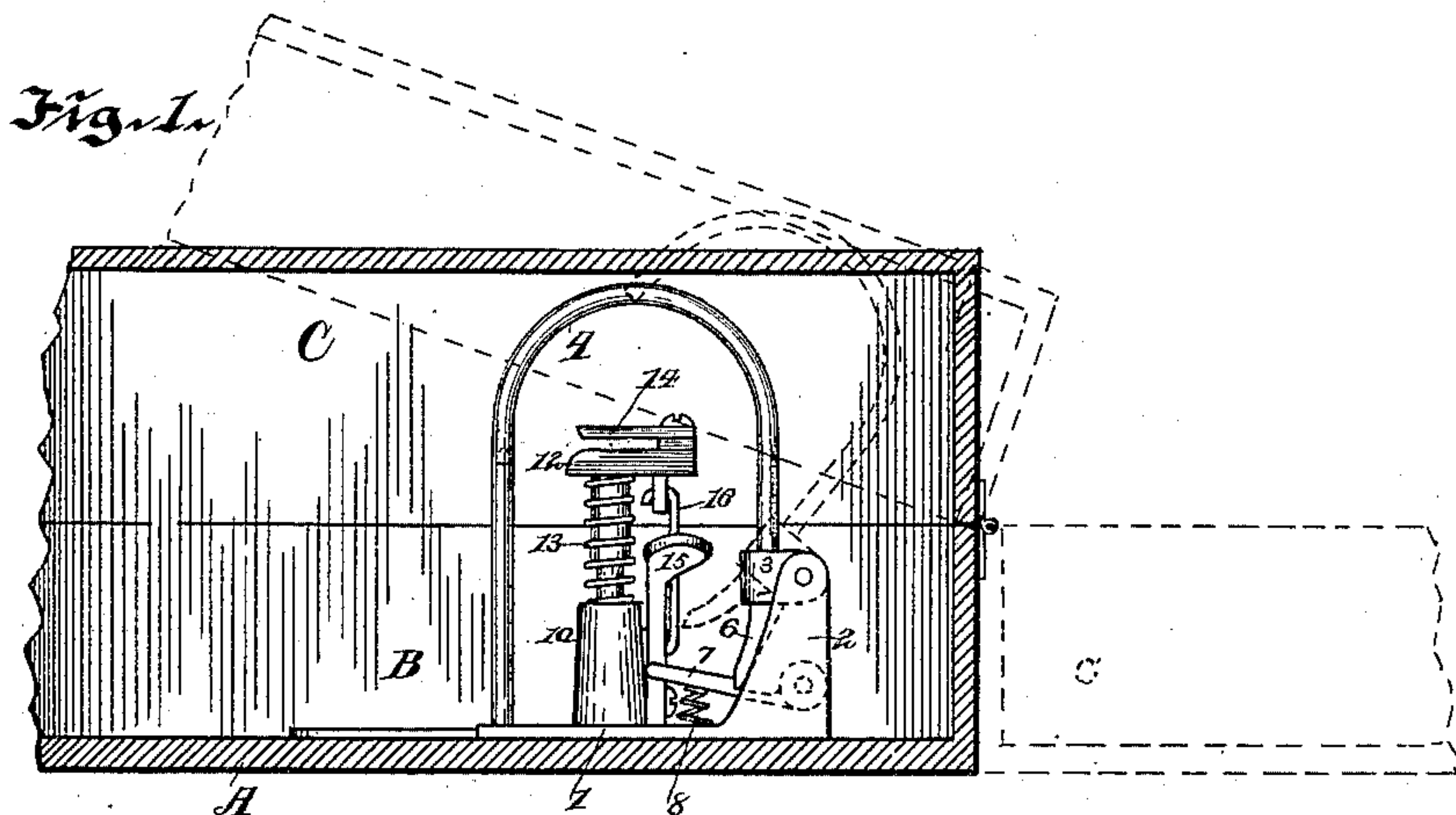


Fig. 2.

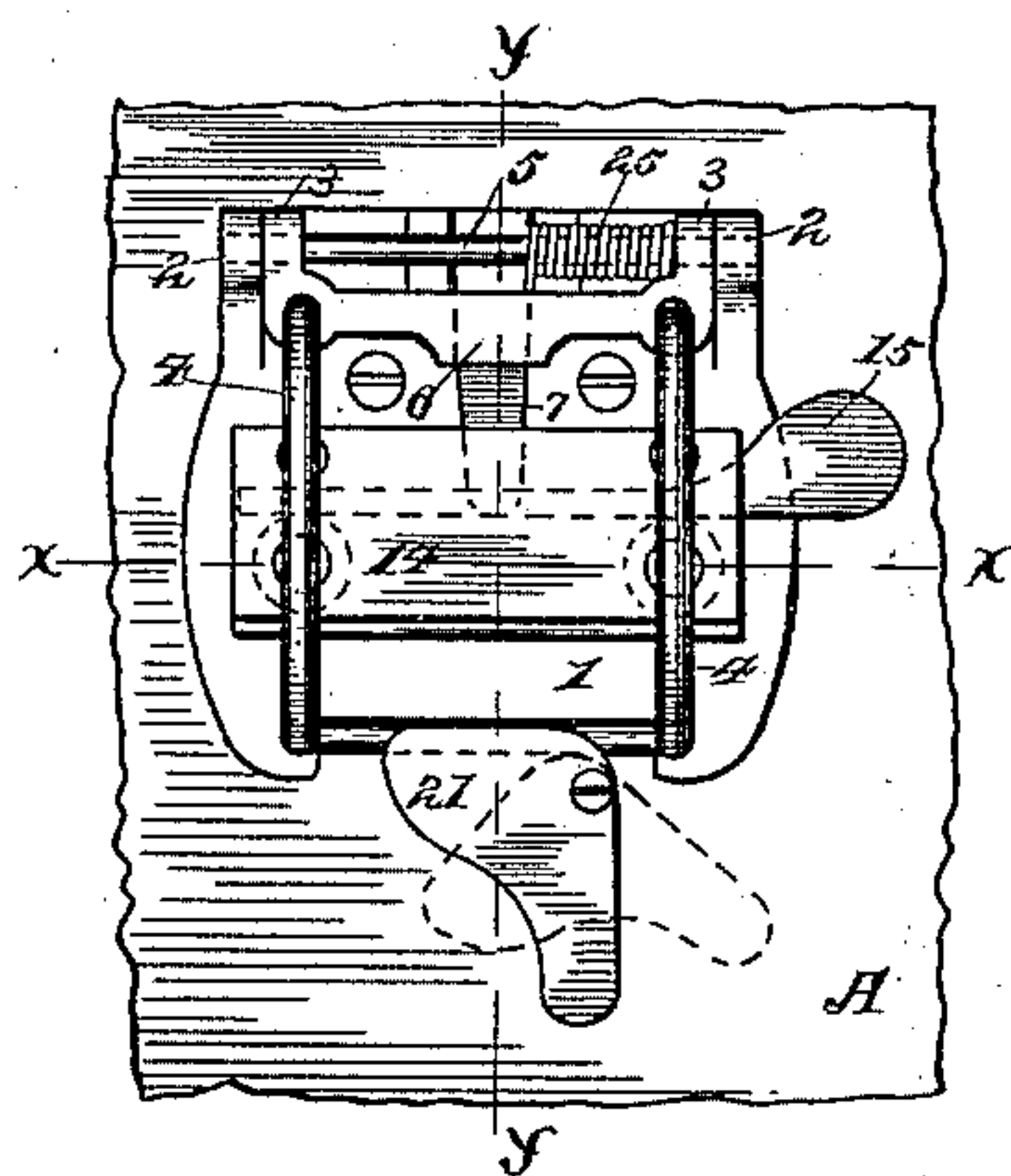


Fig. 3.

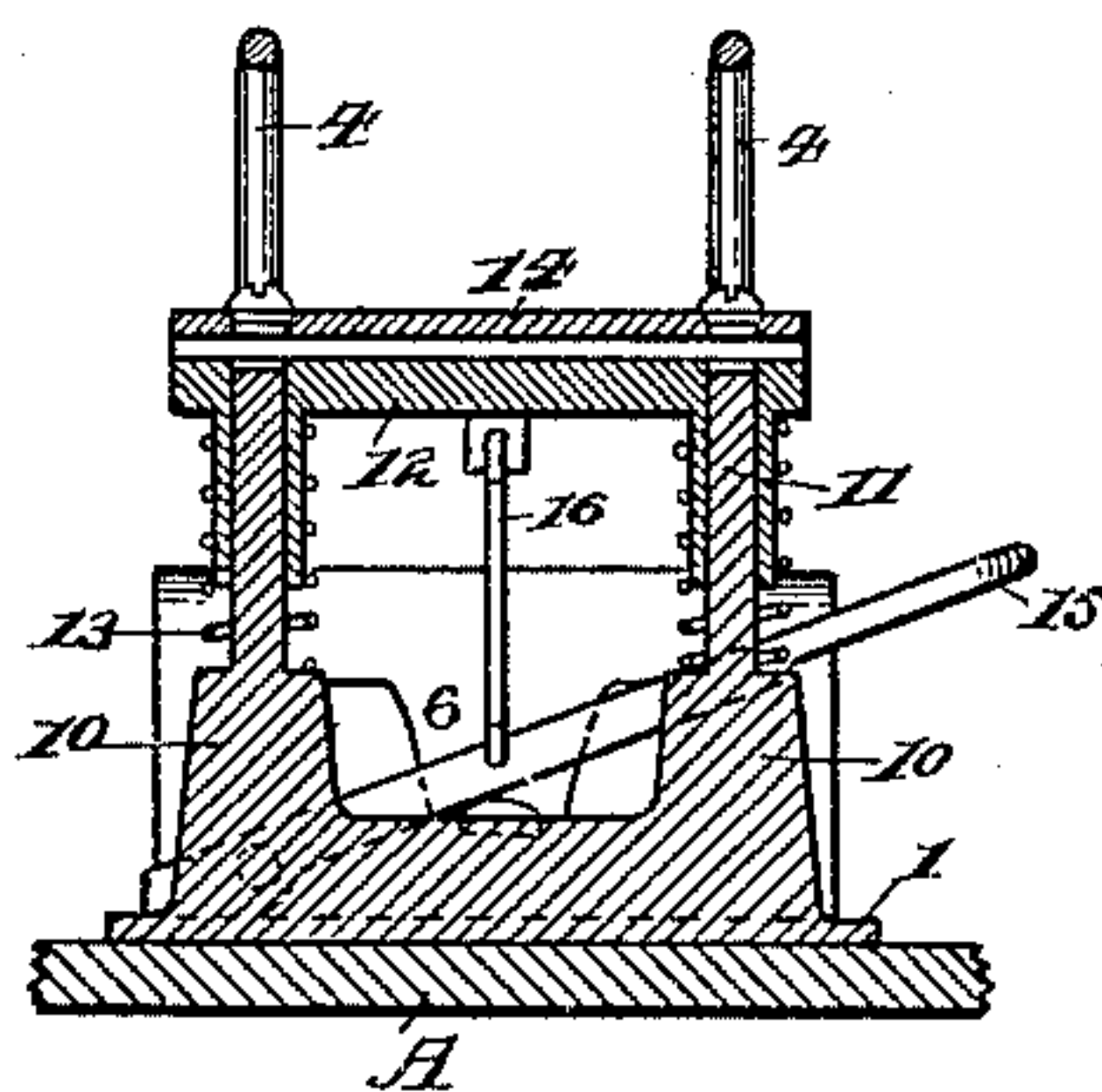


Fig. 4.

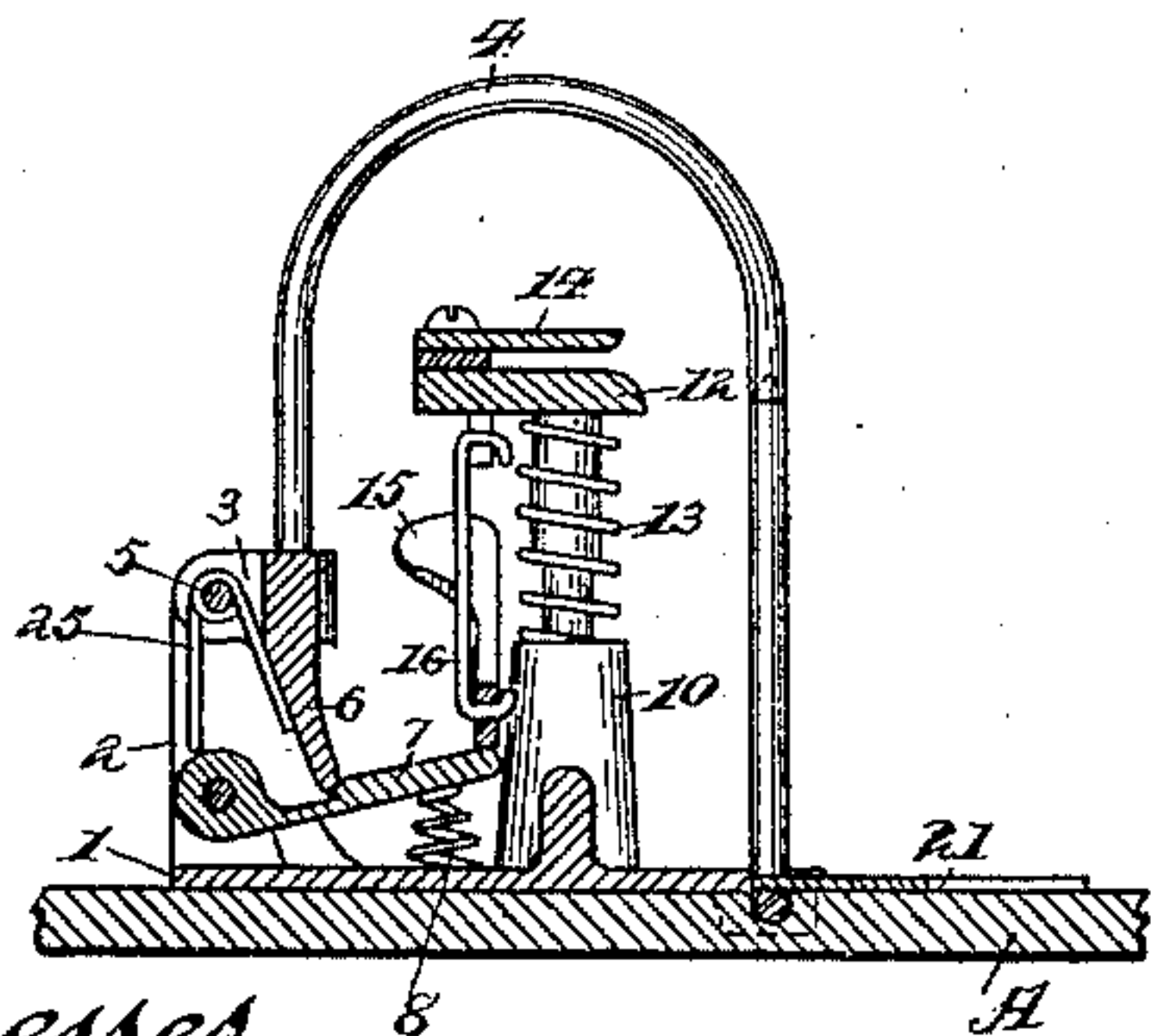
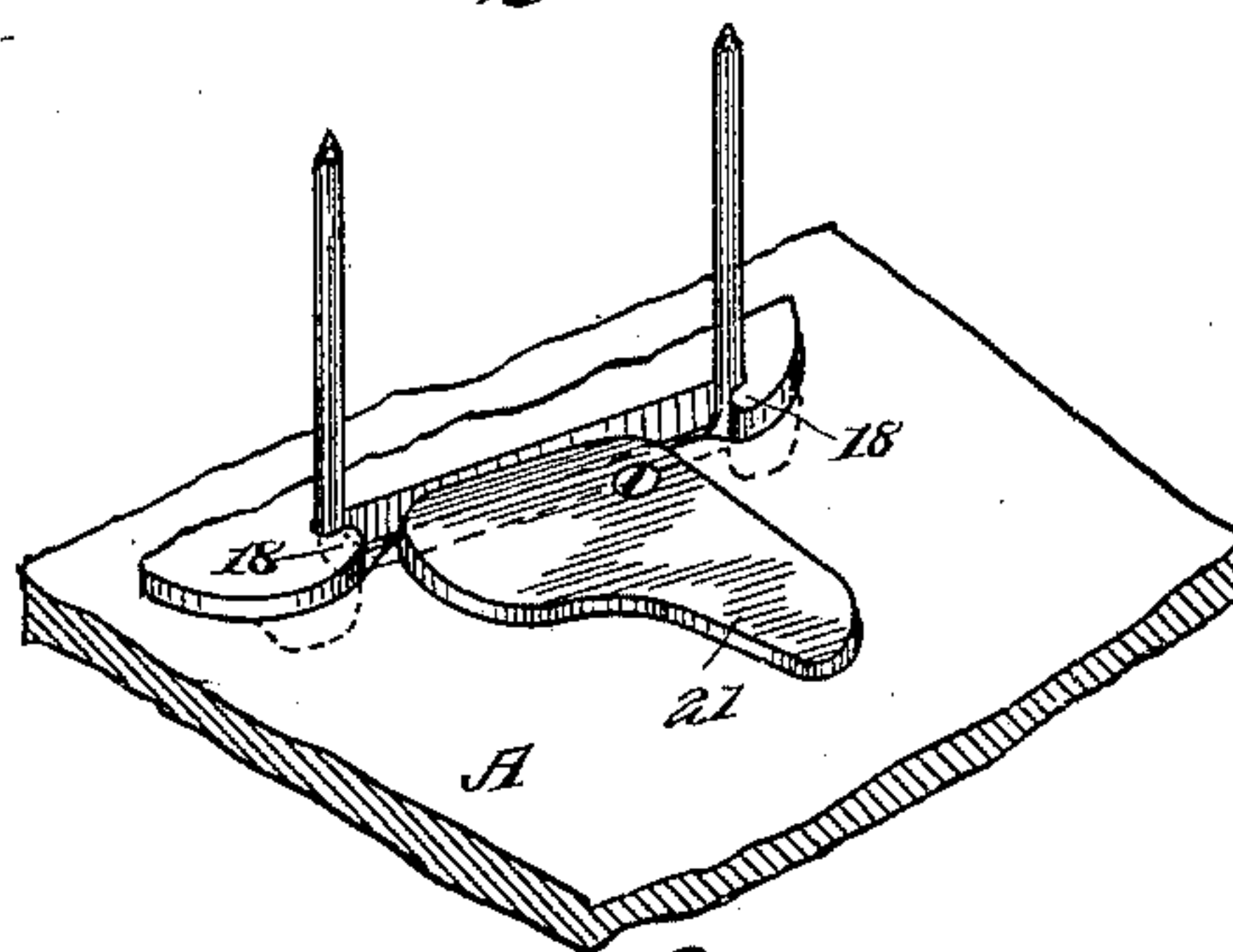


Fig. 5.



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UNITED STATES PATENT OFFICE.

LAWRENCE A. MERK, OF ROCHESTER, NEW YORK.

BILL-FILE.

SPECIFICATION forming part of Letters Patent No. 436,533, dated September 16, 1890.

Application filed February 21, 1890. Serial No. 341,306. (No model.)

To all whom it may concern:

Be it known that I, LAWRENCE A. MERK, of the city of Rochester, county of Monroe and State of New York, have invented certain
5 new and useful Improvements in Bill-Files; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying
10 drawings, forming a part of this specification, and to the figures and letters of reference marked thereon.

My present invention relates to that class of files in which letters, invoices, bills, or similar papers are normally held upon vertical
15 receiving-wires, and correspondingly-placed arched transfer-wires co-operate with said receiving-wires, upon which the papers may be slid or transferred to permit the inspection or removal of papers below the top
20 ones without removing the latter; and it consists in certain improvements in the construction of the various parts whereby the operations of removing the transfer from the receiving-wire, preparing or punching the aper-
25 tures in the papers, and the subsequent removal of the whole file of papers for binding or filing them away will be facilitated, and whereby also a simple, cheap, and efficient article will be produced.

30 The invention further consists in certain novelties of construction and combinations of parts, all as will be hereinafter described, and the novel features particularly pointed out in the claims at the end of this specification.
35

In the drawings, Figure 1 is a side view of a letter-file constructed in accordance with my invention, located within a suitable casing shown in section; Fig. 2, a top plan view
40 of the operating parts; Fig. 3, a sectional view on the line *xx* of Fig. 2; Fig. 4, a sectional view on the line *yy* of Fig. 2; Fig. 5, a perspective view of a means for holding the removable receiving-wires in position.

45 Similar letters of reference in the several figures denote similar parts.

The operative parts of the file proper is mounted upon or connected to a base-board A, in the present instance forming part of a closed
50 casing B, having a cover C hinged above the level of the base and serving to protect the papers, &c., from dust. The top of the cas-

ing is so hinged to the base that it may be turned back parallel with the bottom A, thereby permitting the papers to be moved
55 over on the transfer-wires, as usual.

Secured to the base A is a base-casting 1, having near its rear upwardly-extending arms or ears 2, upon which is pivoted a connecting-
60 piece 3, having corresponding ears or lugs and carrying the arched transfer-wires 4, preferably two in number, as usual. This pivotal point is above the level of the base, so that a cover can be employed pivoted on
65 about the same level, thereby permitting the case to be fully opened, as in dotted lines at the right in Fig. 1, and the papers to be turned completely over. The rod 5, upon which this
70 piece 3 is mounted, is encircled by a spiral spring 25, one end bearing against an extension 6 of the connecting-piece, and the other connected to one of the arms 2, the tendency being to throw the transfer-wires back to the position in dotted lines, Fig. 1; but this is pre-
75 vented by a pivoted catch 7, with which the extension 6 engages, said catch being normally held in engagement by a spring 8, located between it and the base.

Between the receiving-wires 20, presently described, and the transfer-wires is located the
80 punch or device for forming the necessary perforations in the papers before placing them upon the receiving-wires, consisting of standards 10, on base having reduced upper portions 11 constituting the punch. The upper
85 or die plate 12 is provided with depending sleeves or extensions encircling the portions 11, and surrounding these sleeves are springs 13, resting on the standards and pressing the plate 12 upwardly. Upon the upper side of
90 plate 12 is a perforated confining-plate 14, between which and the former the papers are placed, the back of this opening serving as a guide or gage for determining the distance of the perforations from the edge. Pivoted to
95 one of the standards 10 or the web connecting them is a lever 15, having the broadened outer end and connected by a link 16 with the under side of plate 12, and the inner end of this lever is so disposed relative to the base-
100 casting 1 (or another stop) as that its upward movement, and consequently that of the plate 12, will be limited, bringing the top of the punches just below the top of plate 12. The

end of catch 6 projects beneath the lever 15, as in Fig. 4, so that a depression of the lever will not only bring down plate 12 but will also depress the catch, causing it to release the transfer-wires and permit them to swing back.

The receiving-wires in the present form of device are preferably pointed at their upper ends for the more ready application of the papers and also to fit in the recesses in the ends of the transfer-wires, as usual, and are connected at their lower ends, being preferably formed of a single piece of heavy wire in staple shape. In the base A is formed a recess for accommodating the connecting-piece of the wires, and the casting is also provided with hooks 18 at its forward portion for maintaining the wires in vertical position, said recess in the board and base (or it might be formed in either one) constituting a socket for the reception and support of the receiving-wires. A cam plate or catch 21, pivoted on the base A, is adapted to be turned to the position shown in full lines, Figs. 2 and 5, to hold the receiving-wires in the base, but capable of being turned, as shown in dotted lines, Fig. 2, to permit their removal, when desired. By the employment of these removable connected receiving-wires I am enabled, when the file is full of papers to release and remove the wires 20 with the papers, thereon and secure them in any suitable filing-case already bound and secured. These receiving-wires, when made, as described, of a single piece of material, are so cheap that each filing-case can be provided with them, the one on the file herein described being transferred with the letters while the wires in the case can be readily substituted, thus doing away entirely with the necessity heretofore existing of transferring the papers to permanent files by transferring needles and the like.

The operation of the device will now be apparent. The operator presses on the end of the lever, permitting the transfer-wires to move back, as described, then places the paper to be filed between the plates of the perforating device, moves the lever again, operating the punch, and draws the paper over the receiving-wires, filing it, and then closes down the transfer-wires. Now the papers can be turned over on the transfer-wires, and any below the top ones inspected or removed in the usual manner. By locating the perforating device beneath the wires it not only is out of the way, but is in convenient position for the operator to perform all the necessary operations by a simple manipulation of the lever, opening the file and perforating the paper.

It will be understood that a single receiving and transferring wire could be employed, if desired, and the essential features of my invention retained; but, for obvious reasons, I prefer the form of device shown.

I claim as my invention—

1. The combination, with the base or support and the arched transfer-wire, of the removable receiving-wire upon which the papers are

directly impaled, having the laterally-extending lower portion and a detachable catch on the base for securing the lower portion of said wire to the base, whereby the receiving-wire and contained papers may be bodily removed from the base, substantially as described.

2. The combination, with the base or support and the arched transfer-wires, of the two wires upon which the papers are received and held, connected by a laterally-extending portion, and a detachable catch on the base co-operating with said connecting portion and securing the wires to the base, whereby the receiving-wires and contained papers can be bodily removed from the base, substantially as described.

3. The combination, with the base and transferring-wires, of the receiving-wire formed of a single piece of material, having the two upwardly-extending arms on which the papers are impaled, and the connecting portion, and the detachable catch co-operating with the connecting portion of said wire and holding it in position on the base, substantially as described.

4. The combination, with the base, the pivoted transfer-wires mounted thereon, the spring for opening them, and the receiving-wires, of a perforating device located between the receiving and transferring wires, a catch for holding the transfer-wires closed, a lever for causing the operation of the perforating device and connections between said lever and the catch for causing its operation permitting the opening of the transfer-wires, substantially as described.

5. The combination, with the base having the standards constituting punches, the perforated plates co-operating therewith, and the springs, of the pivoted transfer-wires, the spring for opening them and the spring-catch for locking the wires closed, and the lever operating the punch co-operating with the latch to release it, substantially as described.

6. The combination, with the base 1, having the upwardly-extending lugs or arms, the connected arched transferring-wires pivoted thereto, and the receiving-wires, of the casing having a cover pivoted near the level of the pivotal point of the transferring-wires, whereby the contents of the file may be turned over when the casing is opened, substantially as described.

7. The combination, with the receiving-wire upon which the papers are directly impaled, having a lower portion projecting at an angle therefrom, a base having a socket to receive said lower portion, and a catch or clamp for connecting said receiving-wire in the socket, of a transfer-wire with which the receiving wire co-operates, substantially as described.

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Witnesses:

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