

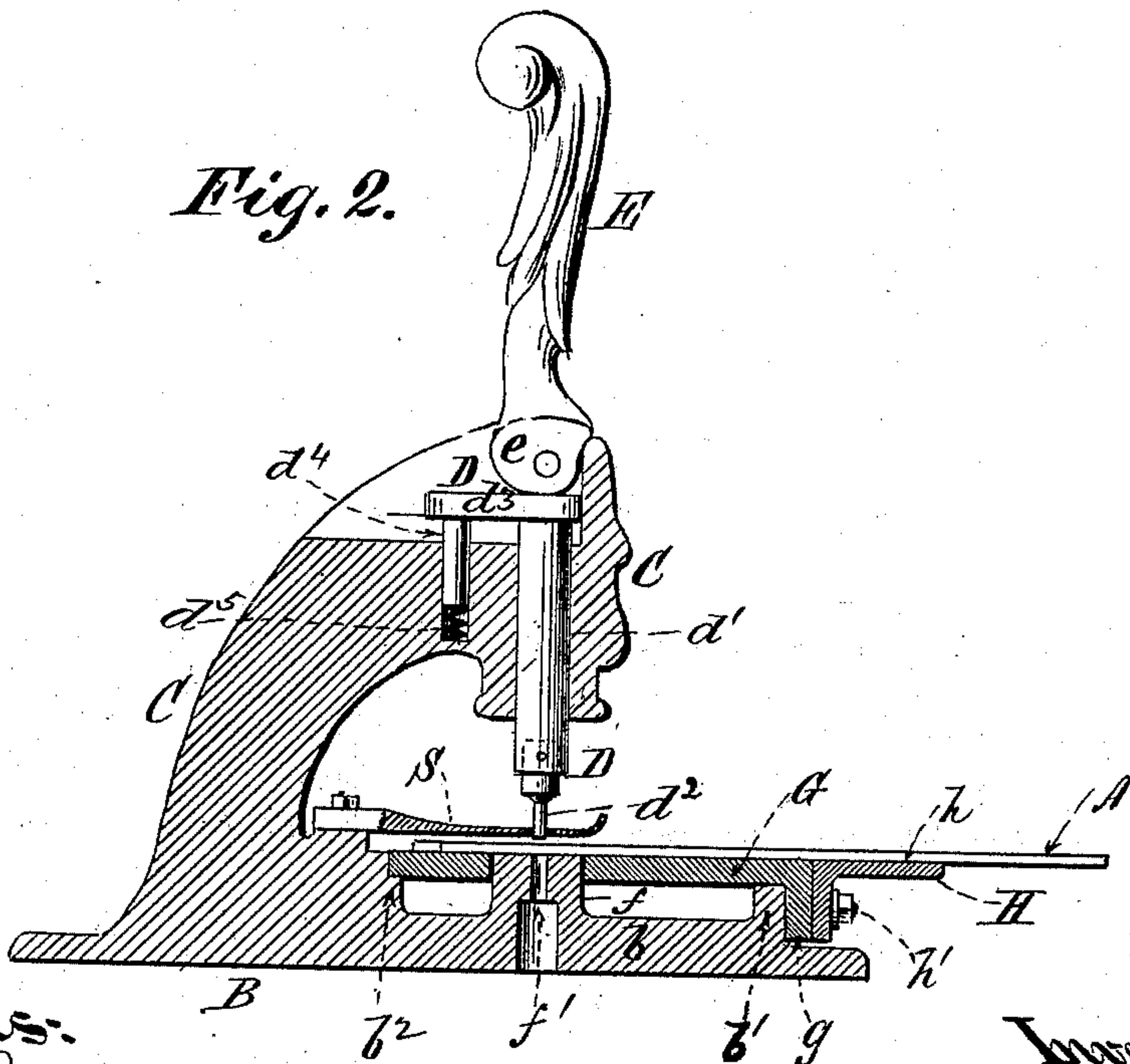
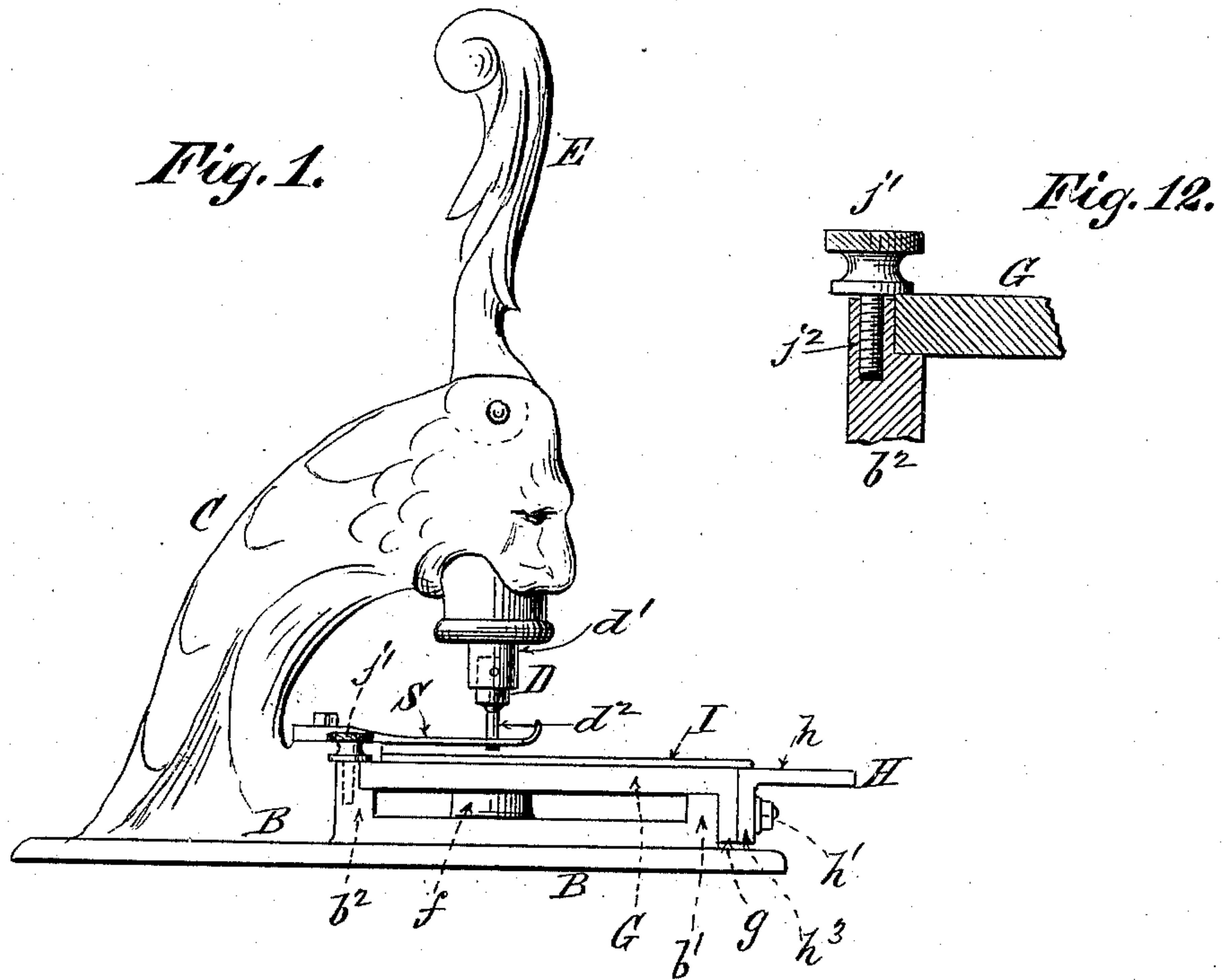
(No Model.)

3 Sheets—Sheet 1.

A. A. LOW.
CARD CANCELING MACHINE.

No. 505,627.

Patented Sept. 26, 1893.



Witnesses:
O. W. Gardner.
J. Kennedy

9 **Inventor:**
Abbot Augustus Low
By his Attorney
George William Mott

(No Model.)

3 Sheets—Sheet 2.

A. A. LOW.
CARD CANCELING MACHINE.

No. 505,627.

Patented Sept. 26, 1893.

Fig. 3.

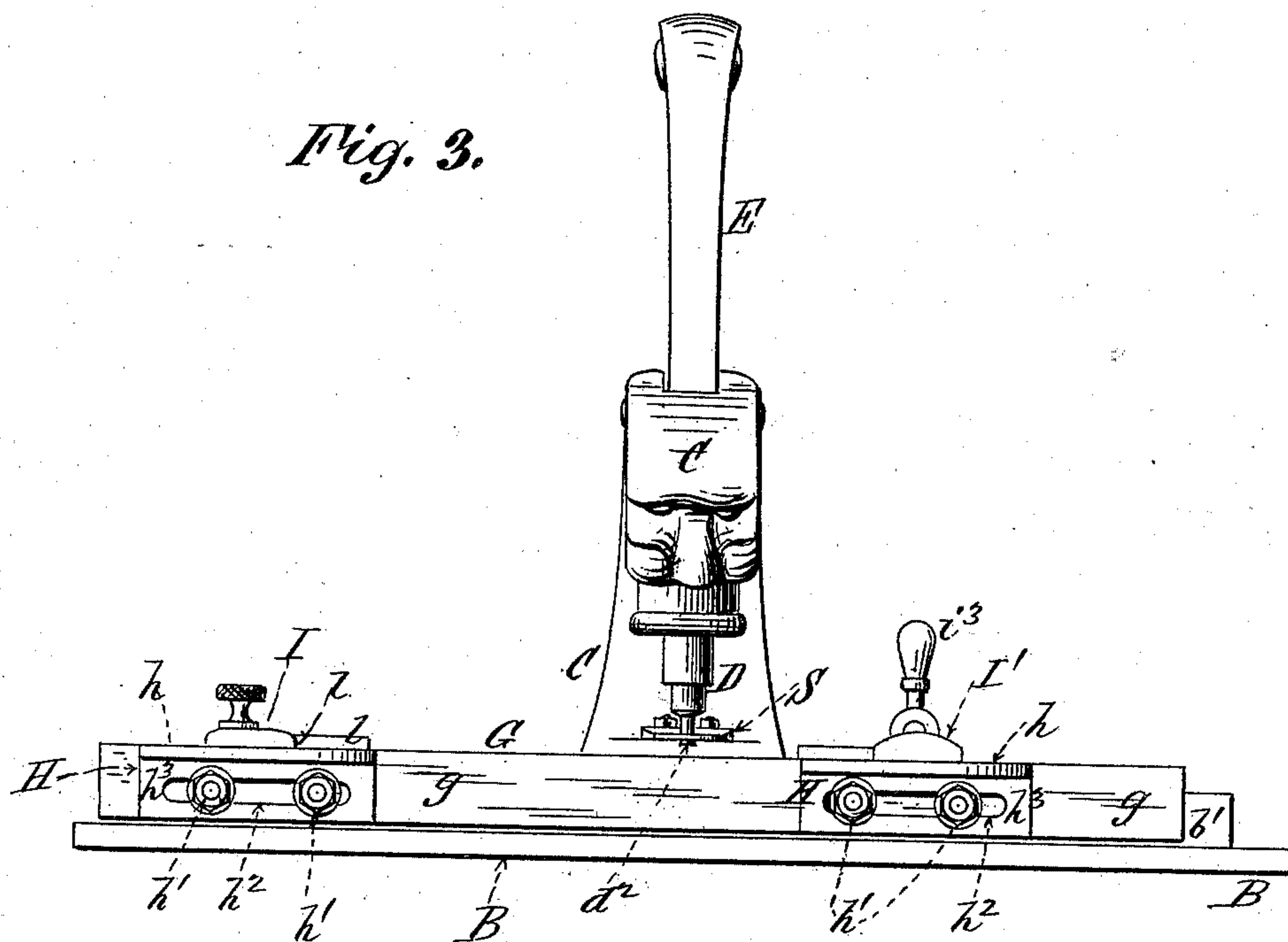
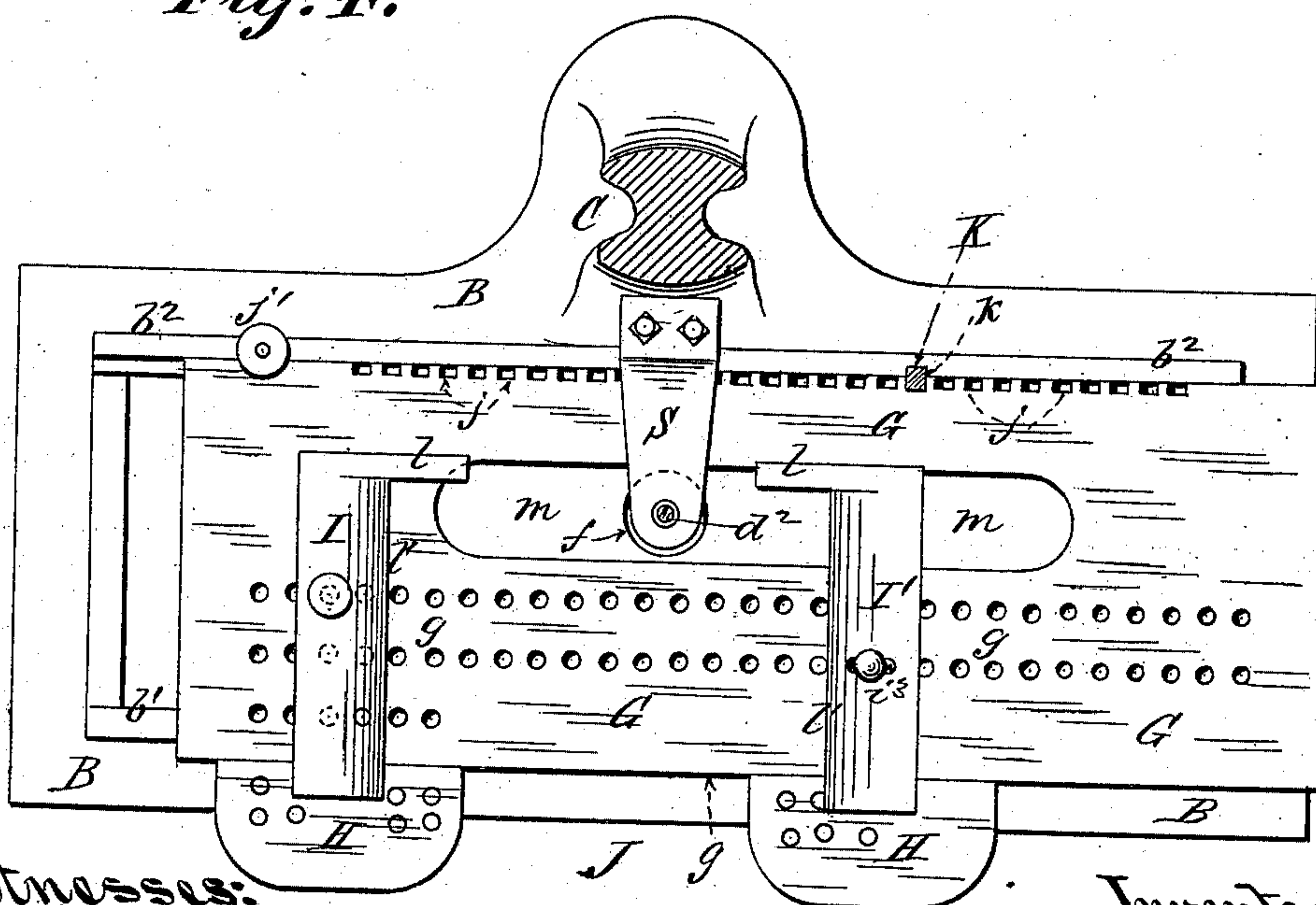


Fig. 4.



Witnesses:

D. W. Gardner.

J. Kennedy

Inventor:

Abbot Augustus Low

By his Attorney

George William Smith

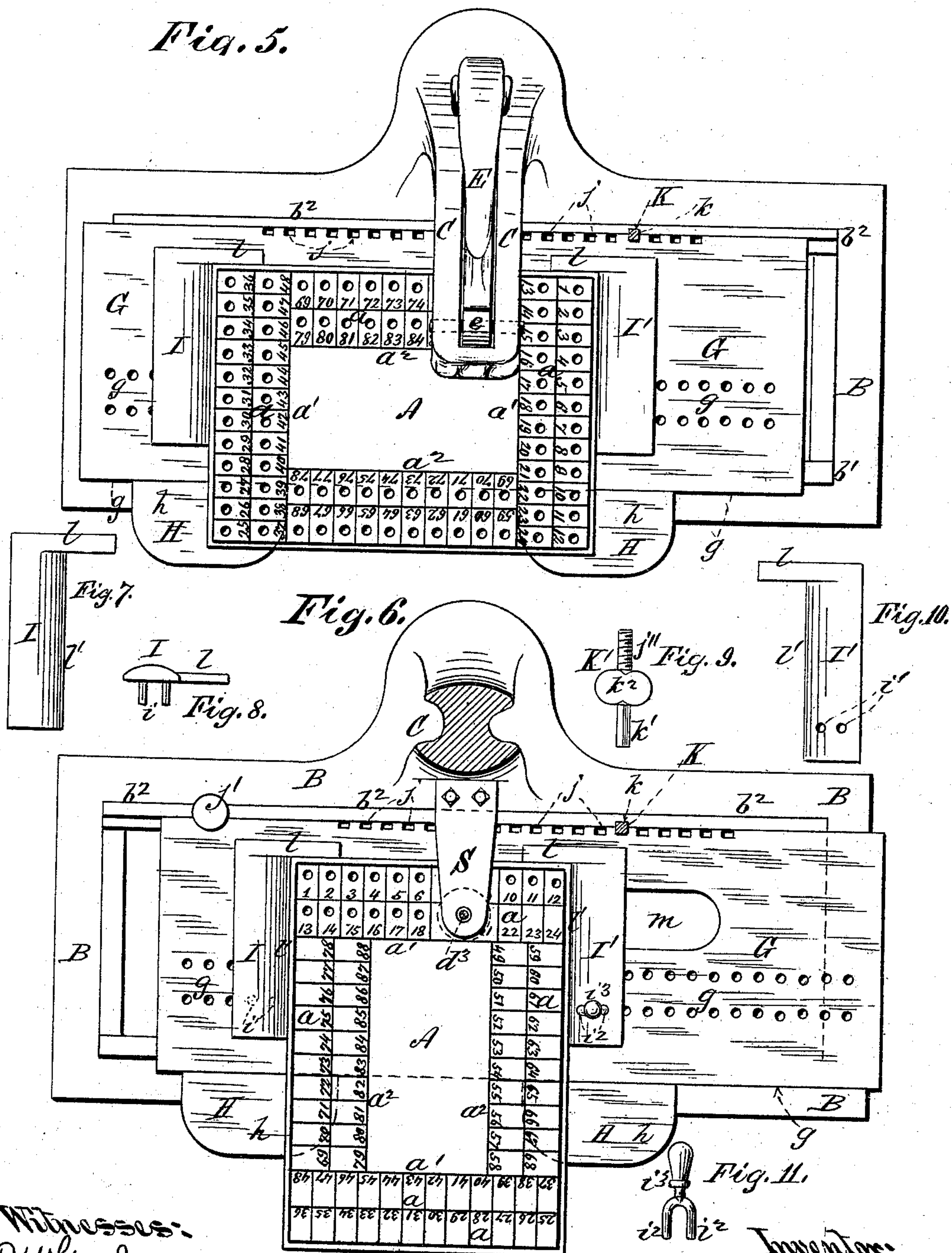
(No Model.)

3 Sheets—Sheet 3.

A. A. LOW.
CARD CANCELING MACHINE.

No. 505,627.

Patented Sept. 26, 1893.



Witnesses:
D. W. Gardner.
J. Kennedy

Inventor:
Abbot Augustus Low
By his Attorney
George William Mott

UNITED STATES PATENT OFFICE.

ABBOT AUGUSTUS LOW, OF BROOKLYN, NEW YORK.

CARD-CANCELING MACHINE.

SPECIFICATION forming part of Letters Patent No. 505,627, dated September 26, 1893.

Application filed December 12, 1892. Serial No. 454,830. (No model.)

To all whom it may concern:

Be it known that I, ABBOT AUGUSTUS LOW, a citizen of the United States, residing in Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Card-Canceling Machines, of which the following is a description sufficient to enable others skilled in the art to which the invention appertains to make and use the same.

My invention relates to the punching or canceling of a series of cards or tickets which are subdivided superficially by lines or marks which indicate where the cards are to be canceled or marked for a given time, place or date or for any other prescribed purpose, as in the case of school attendance tickets, &c.

The object is to afford cheap, simple and effective means for quickly and conveniently canceling or punching any one of a series of cards or tickets presented upon a given day, or at a given place; and the invention consists essentially in combining with the cancelling device, an adjustable card rest or table formed with adjustable stops so that the rest or table may be set to receive the cards and present them to the punch or canceling device in prescribed manner, without any special care on the part of the operator, as hereinafter more fully set forth. By this means a number of school attendance-cards, or similar tickets, may be rapidly and accurately punched or marked as presented successively at a prescribed time or place, all mistakes being guarded against, and the cards being left neat and symmetrical in appearance.

My invention includes certain minor features of construction hereinafter described and claimed.

In the accompanying drawings I illustrate the practical embodiment of my improvements as arranged for the marking or cancellation of any of a series of cards marked with marginal divisions which are to be used to represent certain times or acts, although I do not confine myself to any particular style of card or ticket, neither do I confine myself to the identical construction of parts shown, since many variations may be made in both without departing from the spirit and intent

of my invention. It is also to be understood that the perforating punch may be replaced by any other form of stamping, canceling or marking device with like effect, the perforating punch being herein shown and described as representing the means ordinarily employed for such purposes.

Figure 1, is an end elevation of my improved canceling apparatus. Fig. 2, is a central vertical section of the same. Fig. 3, is a front elevation; Fig. 4, a horizontal section through the standard which supports the punch, showing a plan of the table, without the card or ticket. Fig. 5, is a plan of the apparatus set to receive the card longitudinally, the card being shown in place. Fig. 6, is a view similar to Fig. 4, with the card in place. Figs. 7 and 8, are detail views of the left hand gage plate. Fig. 9, is a detail of a modified form of key for securing the table in a prescribed position upon its supporting bed. Fig. 10, is a detail of the right hand gage-plate. Fig. 11, is a detail of a key for securing the right hand gage plate; Fig. 12, an enlarged detail of means for binding the table to the supporting bed.

In the drawings A, represents a card or ticket marked off with a series of marginal spaces a , which are numbered consecutively to represent any desired time, event, or act. Following a common custom, the spaces a , are arranged in two end groups a' , a' , and two side groups a^2 , a^2 , although the subdivision of the card is of secondary importance, since the device is designed to afford sufficient scope and adjustment to permit of the cancellation or marking of any portion of the card or ticket.

B, is the supporting bed or frame, formed with the overhanging standard C, within the upper end of which the punch D, is mounted. The punch D, may be of any ordinary construction and arrangement of parts or may be replaced by a stamping or marking device, as hereinbefore stated. As shown in the drawings it consists of a cylindrical plunger d' , carrying the perforator d^2 , in its lower end, and being connected by the cross head d^3 , at the top to the rod d^4 , underneath which is situated the spring d^5 , for raising the punch and holding it against the cam e , of the hand

lever E. Instead of the hand lever E, any other means for actuating the punch D, may be resorted to.

An anvil f , projects upward from a web b , of the bed A, its upper surface being upon the same horizontal plane as that of the surface of the table G, which is formed with the longitudinal slot m , for its accommodation. The anvil f , is formed with the perforation f' , to receive the punch and to allow of the escape of the material punched from the card A.

The table G, rests upon ways b' , b^2 , projecting upward from the base B. It is formed with a flange g , which overlaps the front rail or way b' , for the purpose of affording convenient means for the attachment of the extension pieces H, H, which are secured adjustably to the flange g , in such manner that their upper surfaces h , coincide with the upper surface of the table G. The adjustment of the extension pieces H, H, along the table G, may be effected in various ways. As shown in the drawings they are attached to the flange g , by set screws h' , h' , which pass through longitudinal slots h^2 , formed in the upright flanges h^3 , h^3 , of the extension pieces H, H.

The adjustment of the extension pieces H, H, is to make them conform to the positions of the gage-plates I, I', upon the table G, and at the same time to extend the supporting surface for the edges of the card being operated upon, while leaving a free space J (shown clearly in Fig. 4) for the fingers while inserting or withdrawing the card between or from the gage-plates I, I'.

The adjustment of the table G may be effected by any desired means, that shown in the drawings consisting simply of a series of notches j , j , in the rear edge of the table G, any one of which may be brought into coincidence with the notch k , formed in the upper portion of the way b^2 . When the notch k , coincides with any of the notches j , j , it forms a square hole for the reception of the square key K, by which the table is locked in position upon the ways b' , b^2 . In lieu of this a simple set screw j' , may be employed engaging with a female screw thread j^2 in the way b^2 , (shown more clearly in Fig. 12) thus admitting of the adjustment of the table for distances less than that between the recesses j , j' .

A double key K', is shown in Fig. 9, having the square key k' , on one side of the thumb piece k^2 , and the set screw j'' , upon the other. This is a convenient arrangement since only one key or the other need be used at a time.

The adjustment of the gage-plates I, I', upon the table G, may also be effected in various ways. As shown in the drawings it is effected by a series of perforations g , g , in the top of the table G. Into these fit studs i , i , projecting from the under side of the plates, as shown in the case of the left hand gage plate I, in Fig. 8; or the gage plate itself may be perforated with two holes i' , i' , Fig. 10, for the insertion through them and into the holes

g , of the prongs i^2 , i^2 , of the key i^3 , shown in Fig. 11. If preferred the gage plates may be formed with a series of perforations for engagement with the key i^3 , or its equivalent, a less number of holes in the table then being sufficient.

The operation of the device will be readily understood. The gage plates are adjusted upon the bed with relation to each other so as to just inclose and fit the edges of the card when placed either lengthwise or crosswise of the table G,—the rectangular arms l , l , of the gage plates forming the rear gage, while the edges l' , l' , form the side gages. The table is now moved along on the ways b' , b^2 , until the perforator d^2 , is directly over the center of the space a , on the card A, to be punched, when the table is secured in position as hereinbefore stated, and any number of cards or tickets may be successively punched in exactly the same space a , without changing the adjustment.

When the device is designed especially for a particular form of card or ticket the notches j , j , are made a distance apart equal to the distance between the centers of the space a , so that in making successive adjustments for spaces a , in the same row upon the same card, it is only necessary to remove the key K, and slide the table so as to bring the next notch j , into coincidence with the notch k , and then replace the key K.

A stripper S, is arranged above the table G, to prevent the perforator d^2 , from carrying up the card with it as it recedes from its work.

The gage plates I, I', are preferably curved or beveled in cross section to facilitate the placing of the cards between their opposed edges.

It is obvious that a single adjustable gage plate may be used upon the table for gaging the position of the card with relation to the canceling device and I do not confine myself to the use of two gage plates.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a device for canceling cards, &c., of the character designated, the combination with the canceling implement and stationary anvil, of an adjustable card supporting table formed with a longitudinal slot into which the anvil projects, substantially in the manner and for the purpose described.

2. In a device for canceling cards, &c., of the character designated, the combination of the canceling implement and stationary anvil, the adjustable card-supporting table formed with the longitudinal slot into which the anvil projects, and means for securing the table in a prescribed position substantially in the manner and for the purpose described.

3. In a device for canceling cards, &c., of the character designated, the combination of the canceling implement and stationary anvil, the adjustable card table formed with the

longitudinal slot into which the anvil projects, and an adjustable gage plate upon the said table for the purpose and substantially in the manner as described.

5 4. In a device for canceling cards, &c., of the character designated, the combination of the canceling implement and stationary anvil, the adjustable card-supporting table formed with the longitudinal slot into which
10 the anvil projects, two gage-plates upon the said table, and means for adjusting and securing the said gage-plates with relation to each other substantially in the manner and for the purpose described.

15 5. In a device for canceling cards, &c., of the character designated, the combination of the canceling implement and stationary

anvil, the adjustable card-supporting table formed with the longitudinal slot into which the anvil projects, two gage plates upon the
20 said table, means for adjusting and securing the said gage plates with relation to each other, two extension pieces mounted upon the front of the table and extending the surface thereof, and means for adjusting the said ex-
25 tension pieces with relation to each other and to the positions of the gage plates substantially in the manner and for the purpose described.

ABBOT AUGUSTUS LOW.

Witnesses:

GEORGE WILLIAM MIATT,
D. W. GARDNER.