

(No Model.)

J. E. QUINN.
PUNCH.

No. 407,242.

Patented July 16, 1889.

Fig. 1.

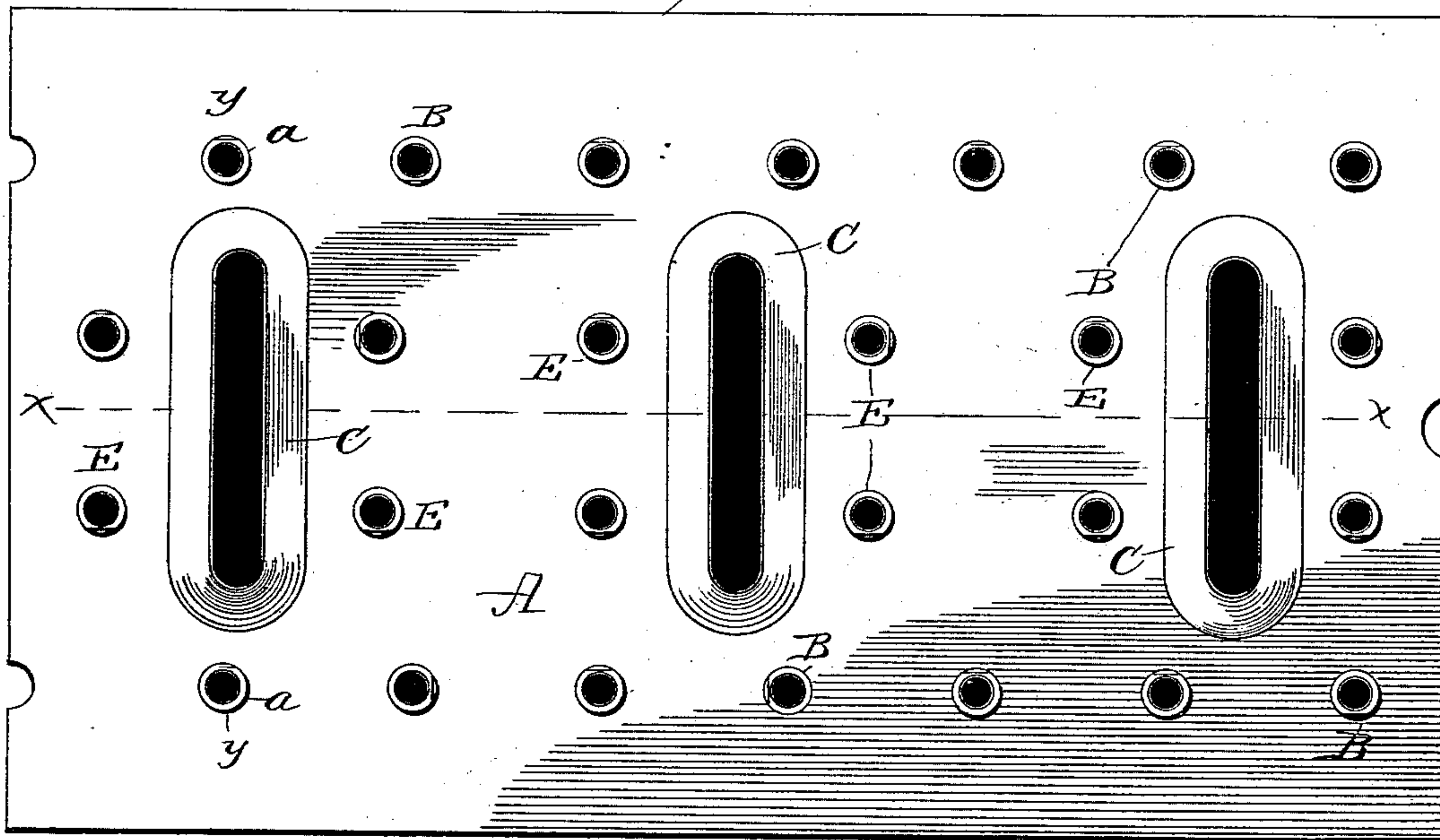


Fig. 2.

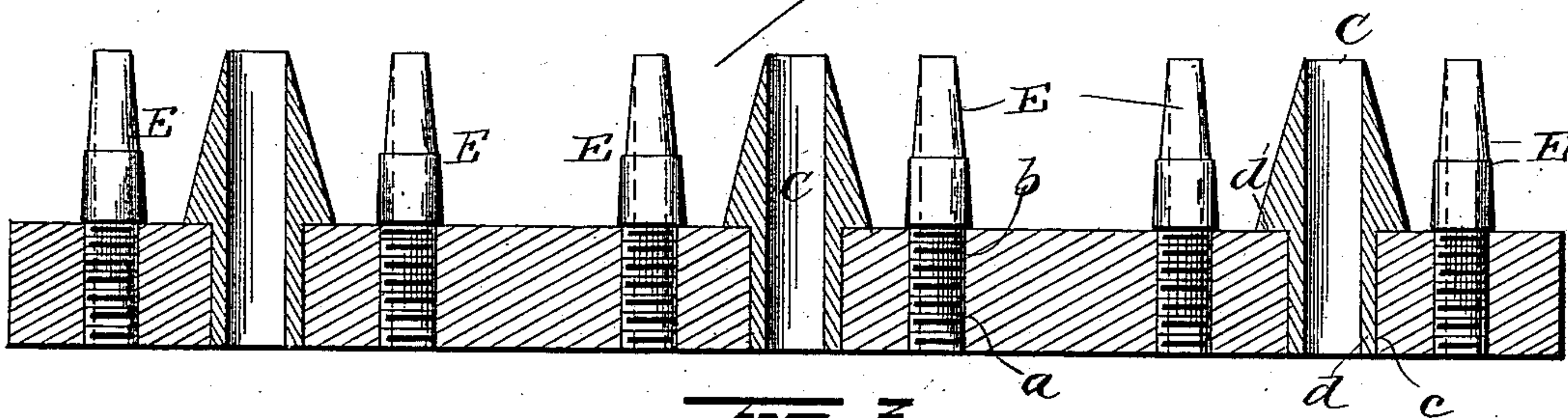
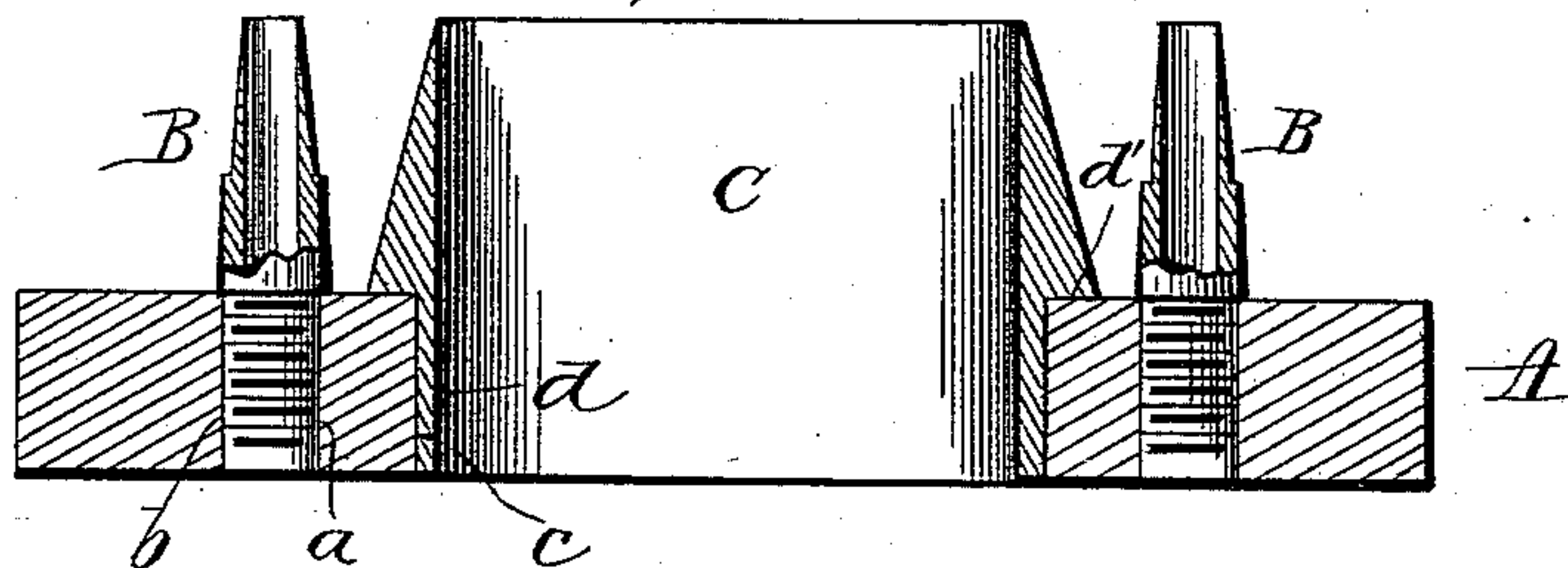


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN E. QUINN, OF TOLEDO, OHIO.

PUNCH.

SPECIFICATION forming part of Letters Patent No. 407,242, dated July 16, 1889.

Application filed January 9, 1889. Serial No. 295,854. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. QUINN, of Toledo, in the State of Ohio, have invented certain new and useful Improvements in Punches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in punches, and more particularly to such as are employed for punching perforations through the flaps forming the mouth of a mail-bag.

Heretofore in the construction of mail-bags the flaps forming the mouths thereof have been punched with numerous holes for the reception of rivets which secure the overturned edges of such flaps, said perforations being in most cases made with a single tool or punch, thus necessitating a multiplicity of operations to make the required number of perforations. It has also been necessary to employ separate tools for forming the elongated slots in the flaps for the reception of fastening straps, staples, or other devices. It has been customary to provide facing-plates of metal having elongated slots to coincide with the slots of the flaps, and to produce perforations for the rivets for securing said plates the rivet-punches were again brought into use.

It is the object of my present invention to obviate the numerous objections arising from the use of separate tools for producing the several perforations in the flaps at the mouth of a mail-bag, and to produce a tool by means of which all the perforations necessary in said flap, of whatever shape, may be made at a single operation.

A further object is to provide a punching-tool by means of which all the rivet-holes and elongated slots for the reception of straps or other devices may be made in the flaps forming the mouth of a mail-bag at a single operation.

With these objects in view my invention consists in a base or foundation plate having a series of punches projecting therefrom for producing rivet-holes, and a second series of punches also projecting from said foundation-plate for producing elongated slots.

The invention further consists in certain novel features of construction and peculiar

combinations and arrangements of parts, as hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of my improved punching-tool. Fig. 2 is a longitudinal sectional view of the same on the line *xx* of Fig. 1. Fig. 3 is a horizontal sectional view on the line *yy* of Fig. 1.

A represents a plate of steel or other suitable material adapted to be held in any suitable device or mechanism.

The plate A is provided from end to end and near each of its longitudinal edges with a series of aligned perforations *a*, preferably having their walls partially or entirely screw-threaded for the reception of the screw-threaded shanks *b* of a series of hollow punches B. Instead of screw-threaded perforations *a*, screw-threaded sockets may be provided; or, if preferred, the punches B may be secured to the plate A in any other preferred manner.

The punches B are preferably made tapering on their exterior and with straight interior walls, being adapted to cut a circular perforation of suitable size for the reception of ordinary rivets.

The plate A is further provided at spaced intervals with nine (more or less) elongated slots *c*, located centrally between the longitudinal edges of the plate and at right angles to the longitudinal axis thereof. Secured within each of these slots *c* is the shank *d* of a hollow elongated punching device C. The interior walls of the punching devices are preferably straight, while the exterior walls incline outwardly from the top, producing at the base a flange *d'*, which rests against the plate A and prevents the punch from going too far through the elongated slots *c*. The interior and exterior walls of these elongated punches meet in a sharp cutting-edge at their outer ends. These elongated punches are intended to cut perforations of suitable shape for the reception of a fastening-strap such as employed for securing the mouth of a mail-bag, or staples, also sometimes used for this purpose.

Plates of metal having elongated slots to coincide with similarly-shaped slots in the flaps at the mouth of a mail-bag are usually secured to said flaps to prevent tearing of such

slots. It is therefore necessary that holes be provided for the reception of rivets for securing said plates in position. For this purpose punches E, similar in all respects to the punches B, are secured to the plate A at opposite sides of each elongated punch C.

Now it will be seen that by means of my improved punch all the perforations both for the reception of rivets and straps or staples may be made in the flaps at the mouth of a mail-bag at a single operation.

Slight changes might be made in the constructive details of my invention without departing from the spirit thereof or limiting its scope; hence I do not wish to limit myself to the precise details of construction herein described; but,

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

1. A plate having a series of circular punches projecting from one face thereof near each longitudinal edge, and a series of elongated punches also projecting from said plate intermediate of the two series of circular punches, substantially as set forth.

2. A plate having a series of circular punches projecting from one face thereof near each longitudinal edge, a series of elongated punches located within the space between the two rows of punches, and series of circular punches located between and outside of the elongated punches, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN E. QUINN.

Witnesses:

W. A. O'MEARA,
JAMES F. MCGEE.