

No. 617,515.

Patented Jan. 10, 1899.

M. T. SHINE.  
PACKING TWINE CUTTER FOR COUNTERS, &c.

(Application filed Oct. 27, 1897.)

(No Model.)

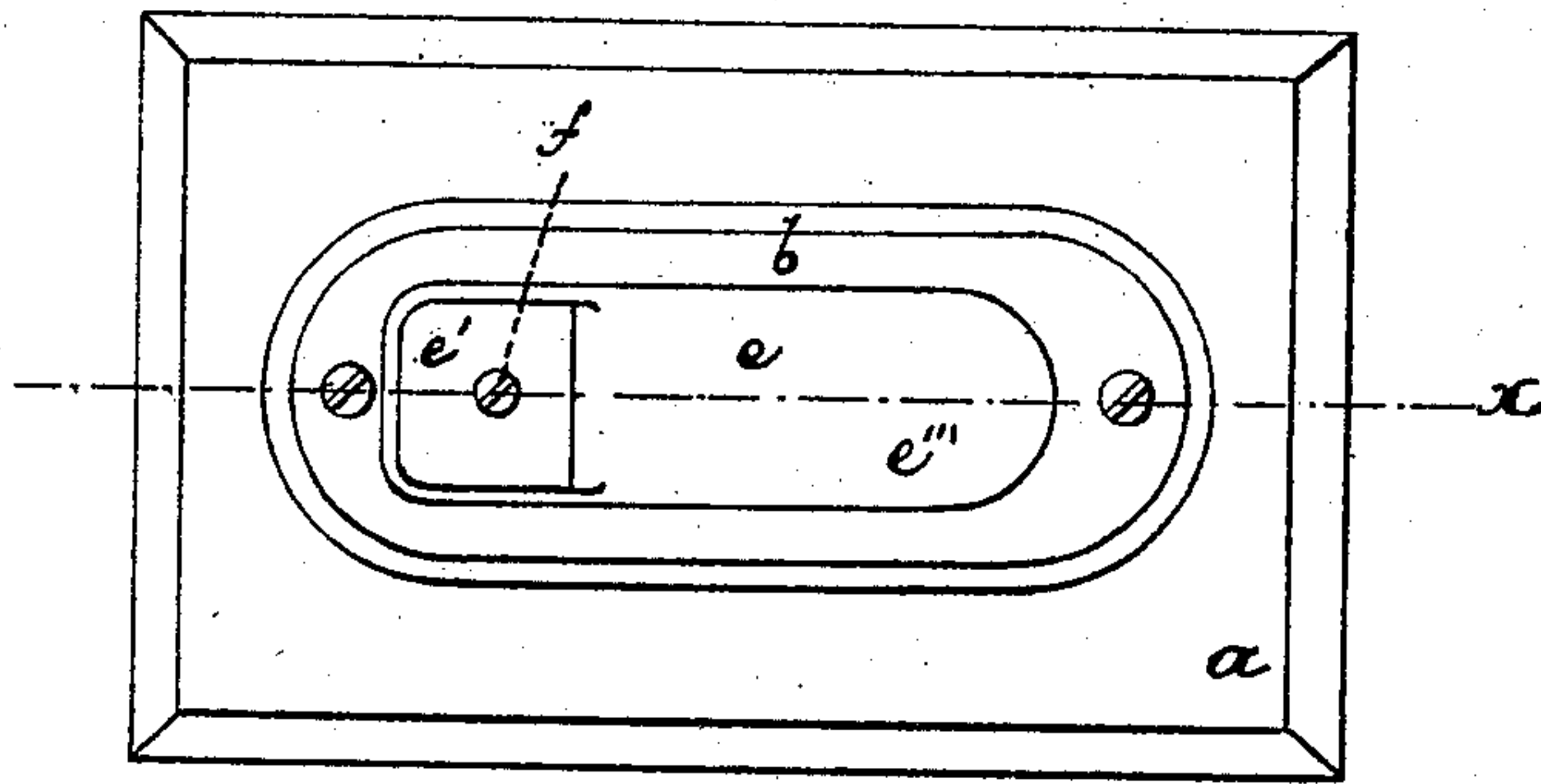


Fig. 1.

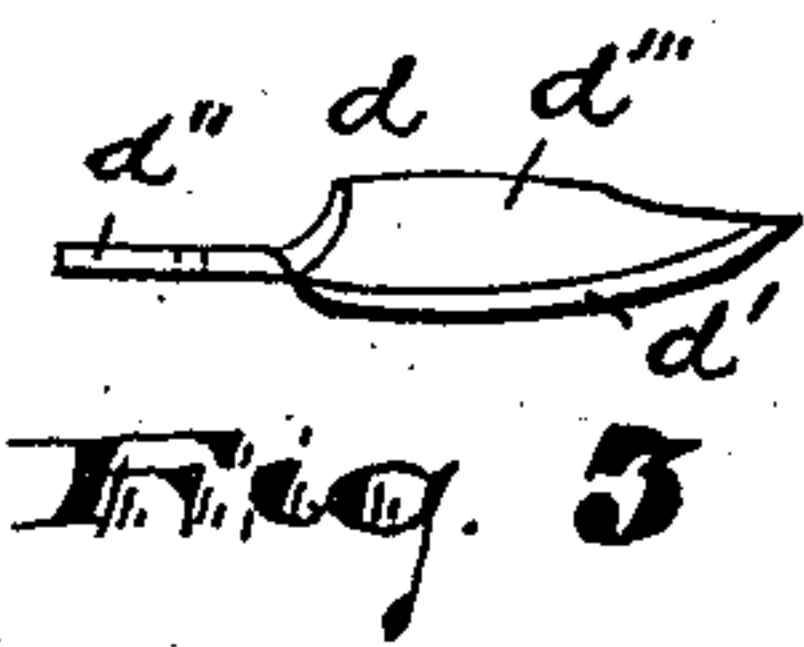


Fig. 3.



Fig. 4.

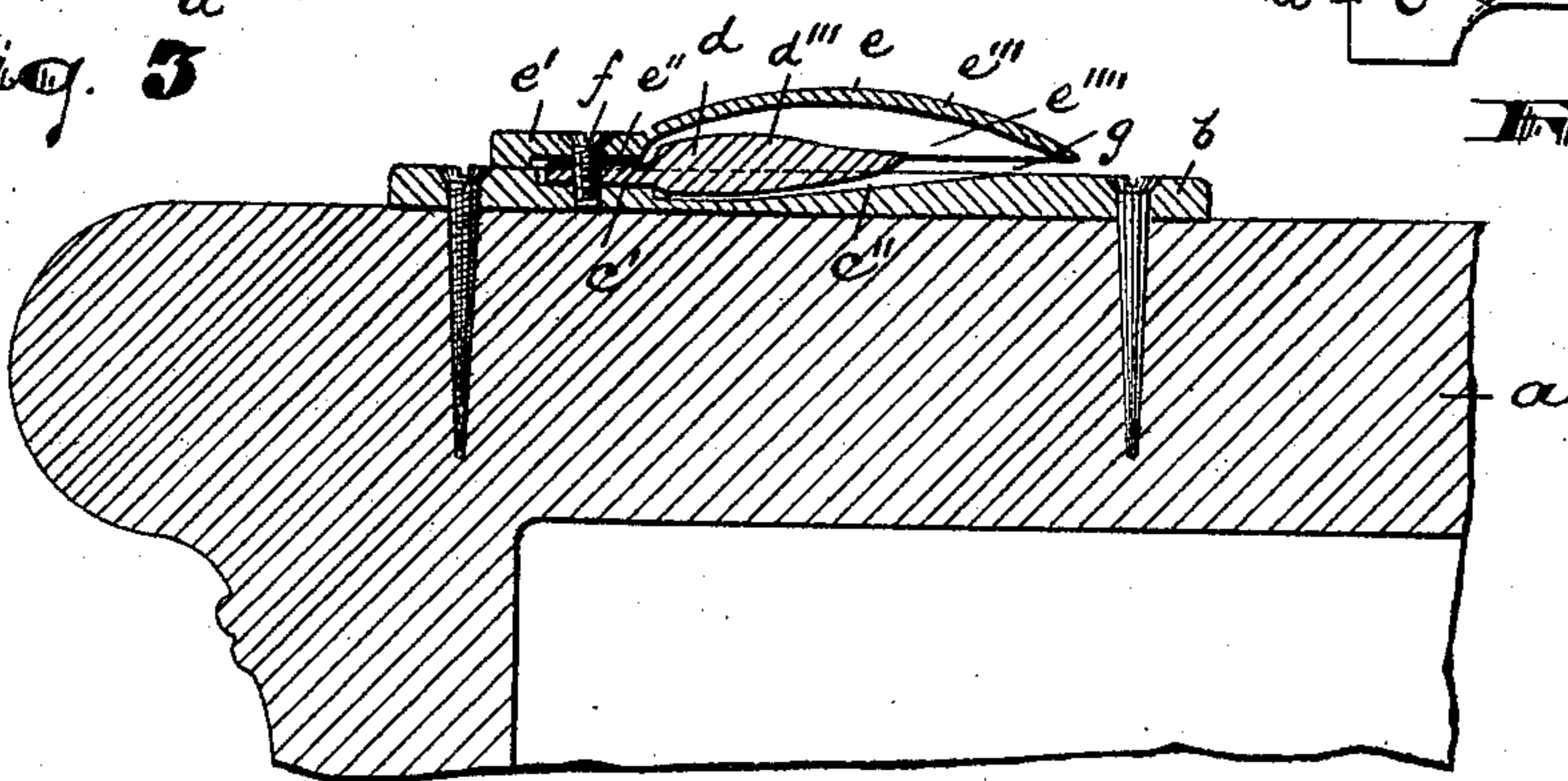


Fig. 2.

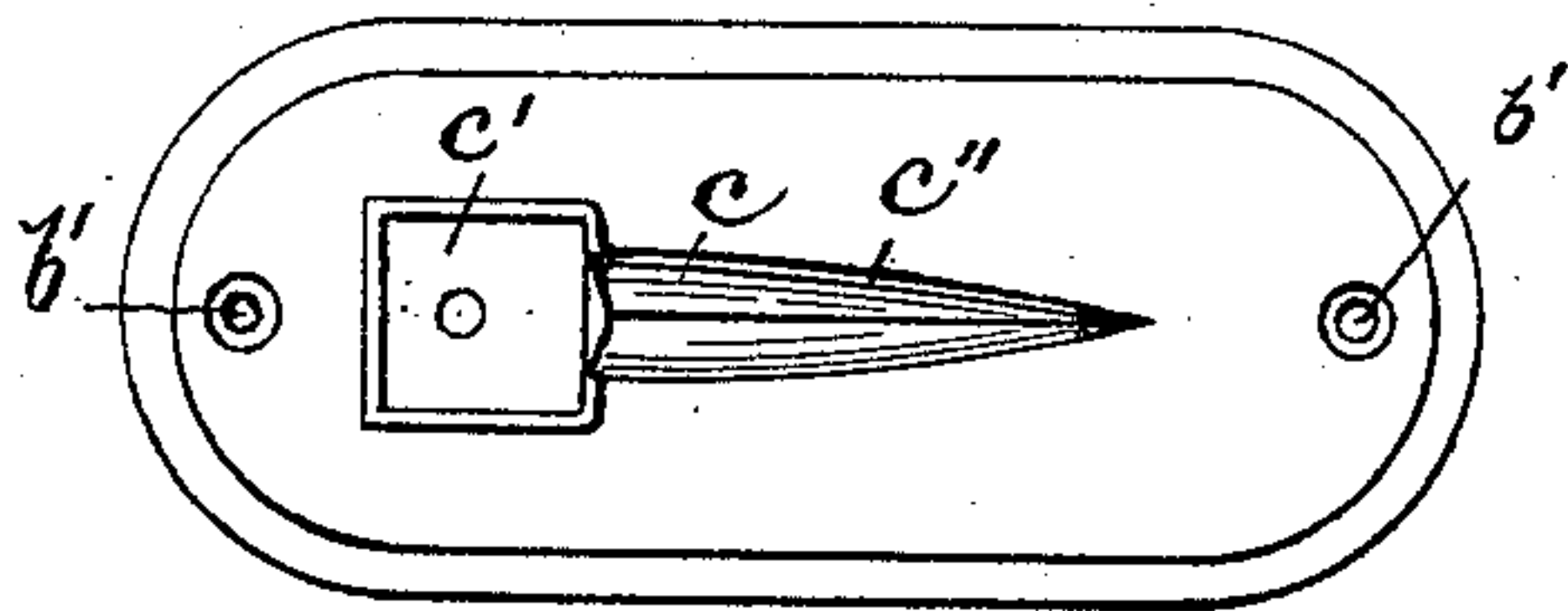


Fig. 5.

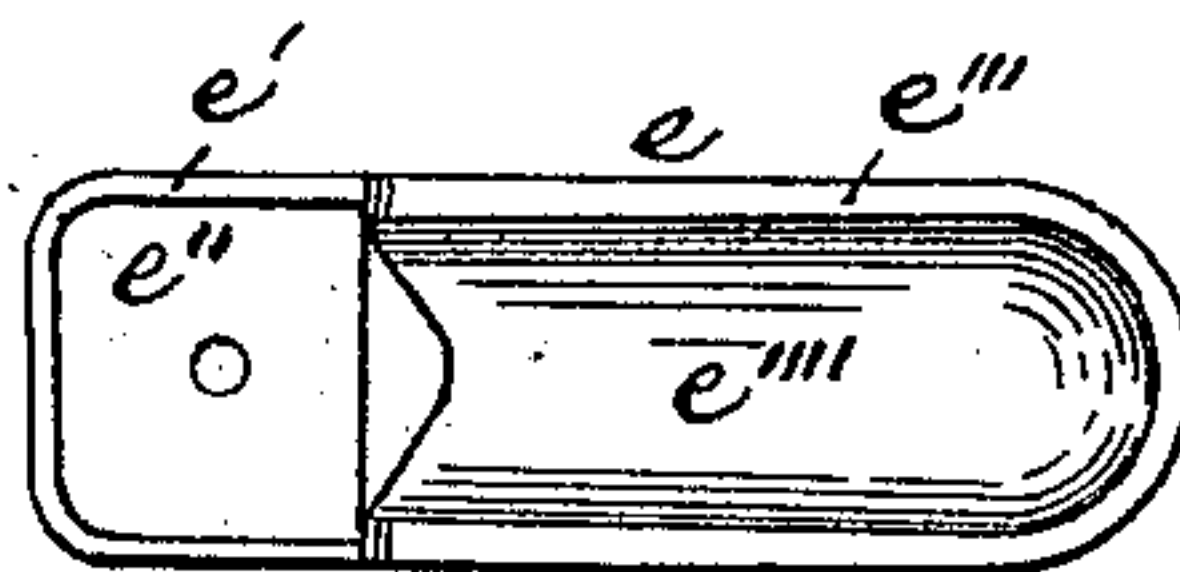


Fig. 6.

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## PACKING-TWINE CUTTER FOR COUNTERS, &c.

SPECIFICATION forming part of Letters Patent No. 617,515, dated January 10, 1899.

Application filed October 27, 1897. Serial No. 656,513. (No model.)

*To all whom it may concern:*

Be it known that I, MICHAEL T. SHINE, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Packing-Twine Cutters for Counters, &c.; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to facilitate the operation of tying bundles, or, more particularly, to enable the wrapping-twine to be cut after the formation of the knot with greater quickness, to prevent injury to the fingers due to the frequent drawing of the twine when breaking the string, to prevent wastage of twine in the operation of tying, to facilitate the work, and to secure other advantages and results, some of which may be referred to hereinafter in connection with the description of the working parts.

The invention consists in the improved twine-cutter for counters and in the arrangements and combinations of parts of the same, all substantially as will be hereinafter set forth, and finally embraced in the clauses of the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the views, Figure 1 is a plan of my improved cutter. Fig. 2 is a section of the same through line *x*, Fig. 1, showing said cutter arranged on a counter, near the edge thereof. Figs. 3 and 4 are respectively a side elevation and a plan of the said cutter in detail. Fig. 5 is a plan of the bed-plate of the said cutter, the other parts of said cutter being removed therefrom to show the interior construction of said bed-plate more clearly; and Fig. 6 is an under side view of a certain top plate, all of which parts will be hereinafter more fully described.

In said drawings, *a* indicates the counter, and *b* the foundation or bed plate of the cutter, which comprises a comparatively thin casting

having on its upper side a longitudinal recess *c* to receive the cutting-blade, the said recess *c* at one end *c'* being very shallow and wide, the bottom being made flat to receive a horizontal portion *d''* of the cutter, and the remaining portions *c''* of said recess *c* being more narrow and of somewhat greater depth to receive the lower edge of the vertical portion *d'''* of the cutter. This narrow portion *c''* of the recess extends longitudinally near to the opposite end of the bed-plate from that having the more shallow portion *c'*. Near the extremities of said bed-plate the same is provided with screw-holes *b'* to receive the screws by means of which the cutter is firmly secured to the counter, as indicated in Figs. 1 and 2.

Upon the bottom of the shallow part of the recess *c'* is seated a blade *d*. This consists of a piece of sheet-steel struck out by suitable dies and having its lower edge sharpened, as at *d'*, Fig. 3, the blank from which the blade is formed being twisted at a point about midway of its length, so as to form a horizontal part *d''*, adapted to fit into the shallow portion *c'* of the recess, and a vertical part *d'''*, adapted to lie longitudinally at the center of the elongated portion *c''* of said recess. The parts are so formed and arranged that the cutting edge of the blade will lie at or near the bottom of the elongated recess and so that the said cutting edge, excepting at the free extremity thereof, will project below the level of the top of the bed-plate, as shown in Fig. 2, and the twine, under tension, when passed over the top of the said bed-plate, will be caught under the blade and drawn downward by the cutting edge in such a manner as to effect the desired cutting with certainty and quickness. Above the said blade and the recess containing the same is arranged the top plate *e*. This consists of a concavo-convex casting, which is provided at one end with a suitable seat *e'* to engage the bed-plate and at its opposite end *e'''* raised a distance above said bed-plate equal to or slightly greater than the thickness of the cord or twine to be cut when the parts are fastened together. The cord or twine slot or opening *g*, formed between the plates, extends horizontally, so that the twine can be conveniently hooked



under the top plate and drawn under the cutting edge. Said seat  $e'$  of the said top plate  $e$  is on its under side provided with a shallow recess  $e''$  to receive the upper side of the horizontal portion  $d''$  of the blade. The said horizontal portion thus lies partly in the recess of the bed-plate and partly in the recess  $e''$  of the top plate, breaking the joint formed by said parts and serving as a feather, key, or spline by means of which the said parts are prevented from turning one on the other, with the fastening screw or rivet  $f$  as the pivotal center. The raised part  $e'''$  of the top plate is concaved or recessed, as at  $e''''$ , on the under side to receive the upper part of the blade and at the top is made convex to permit the bundle to be moved over the device without injury to said bundle or its contents. The cutter thus formed projects but slightly from the top surface of the counter and does not interfere materially with the handling of the bundles preparatory to cutting the cord, and yet when the bundle is tied and it is desired to sever the string to permit the bundle to be set aside or delivered the cutting operation can be performed with convenience and ease and there is no necessity of searching after scissors or a knife. Furthermore, the top plate  $e$  serves in protecting the bundles or the fingers of the person tying the bundle from the blade, so that while I have the advantage of a rigid blade fixed to the counter closely adjacent to where the cut is to be made there is no danger of the fingers being cut or the blade cutting the

paper or the contents during the preliminary operations.

Having thus described the invention, what I claim as new is—

1. The combination with the bed-plate,  $b$ , having a recess in its upper side and a top plate  $e$ , having a corresponding recess on its lower side, of a blade arranged in said recesses, and means for joining said plates and holding the cutting-blade therebetween, substantially as set forth.

2. The combination of the bed-plate  $b$ , having on its upper side the recess  $c$ , shallow and wide at one end  $c'$ , and of greater depth at the opposite end  $c''$ , a top plate  $e$ , having recesses to receive said cutting-blade, and a blade twisted midway of its length and forming a seat portion adapted to serve as a key, feather, or spline, and a vertical portion provided with a cutting edge, substantially as set forth.

3. The combination of the bed-plate  $b$ , having a longitudinal recess, a top plate having a longitudinal recess, disposed above the recess of the bed-plate, and a blade arranged between said plates and in said recesses, an opening  $g$ , being formed between said plates through which the twine is drawn in gaining access to the blade, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of September, 1897.

MICHAEL T. SHINE.

Witnesses:

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C. B. PITNEY.