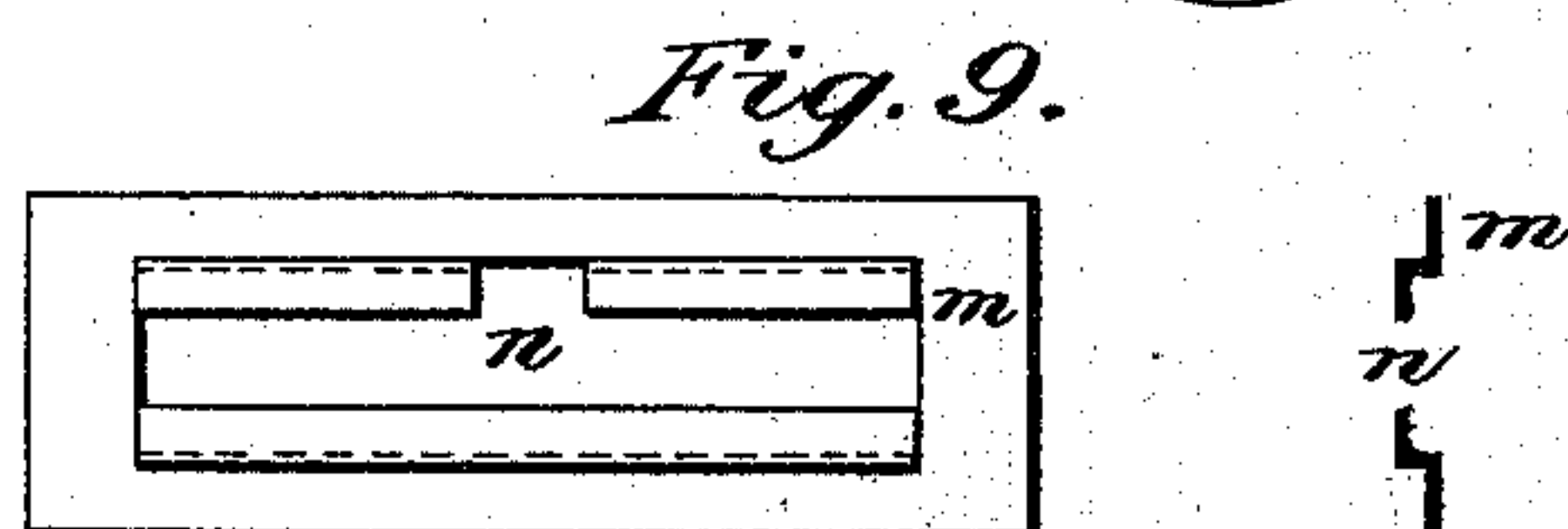
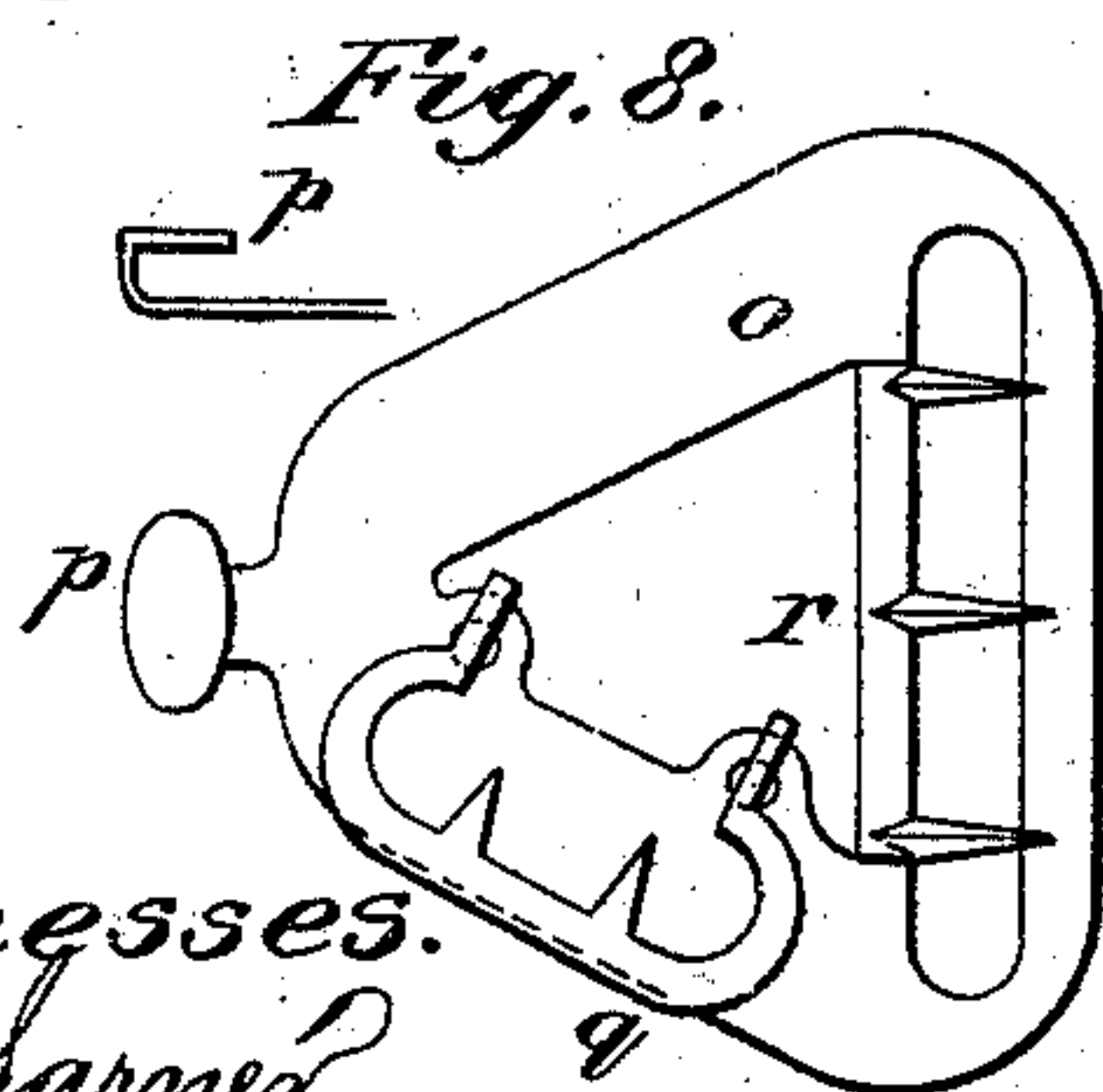
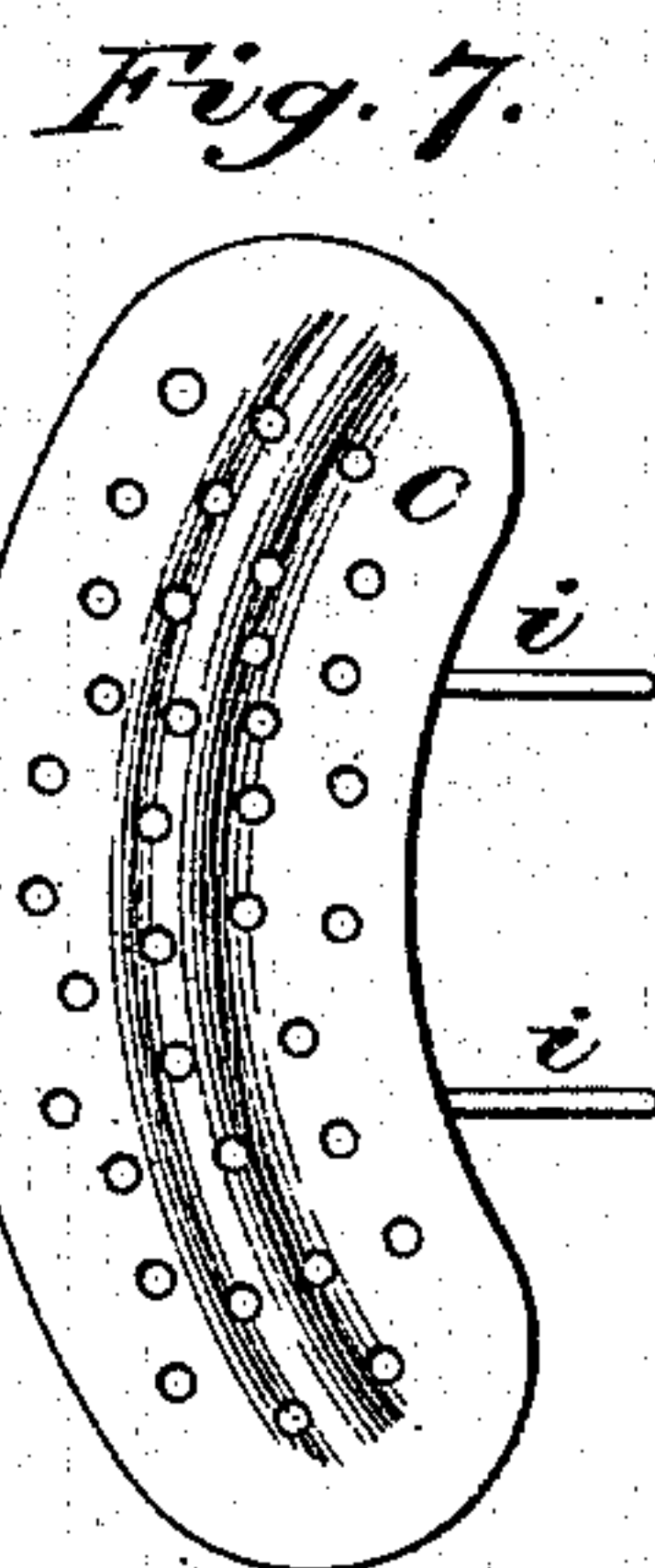
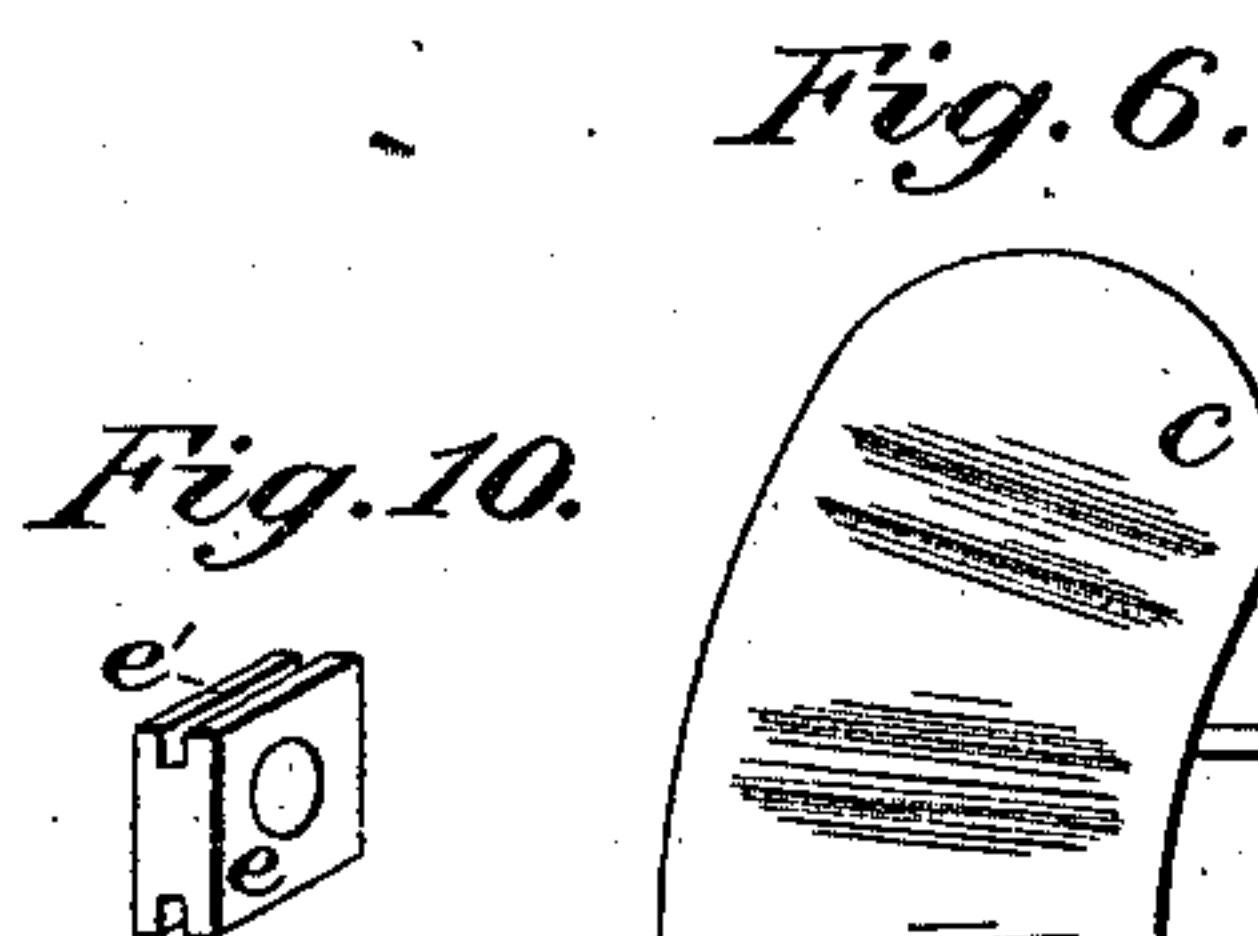
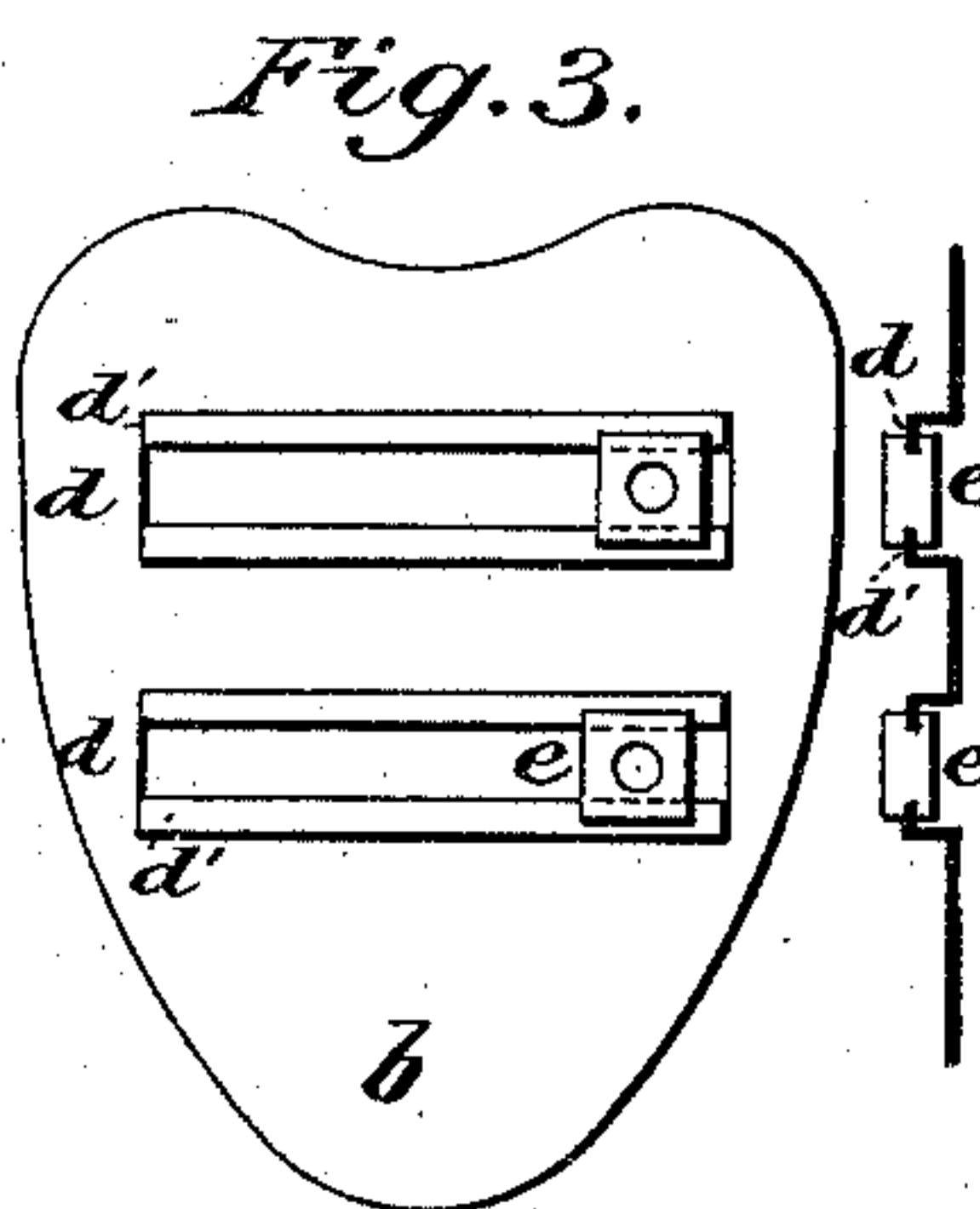
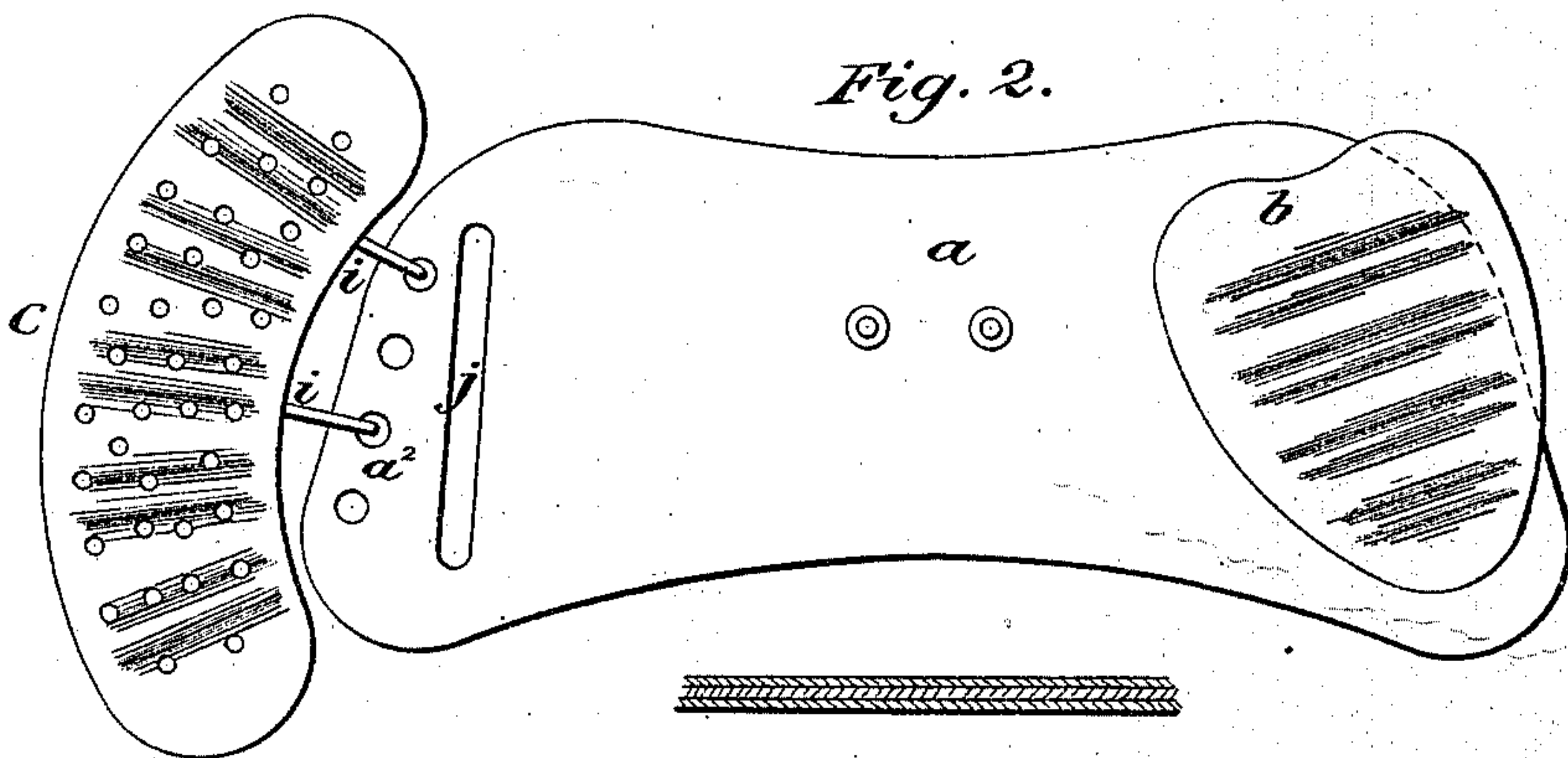
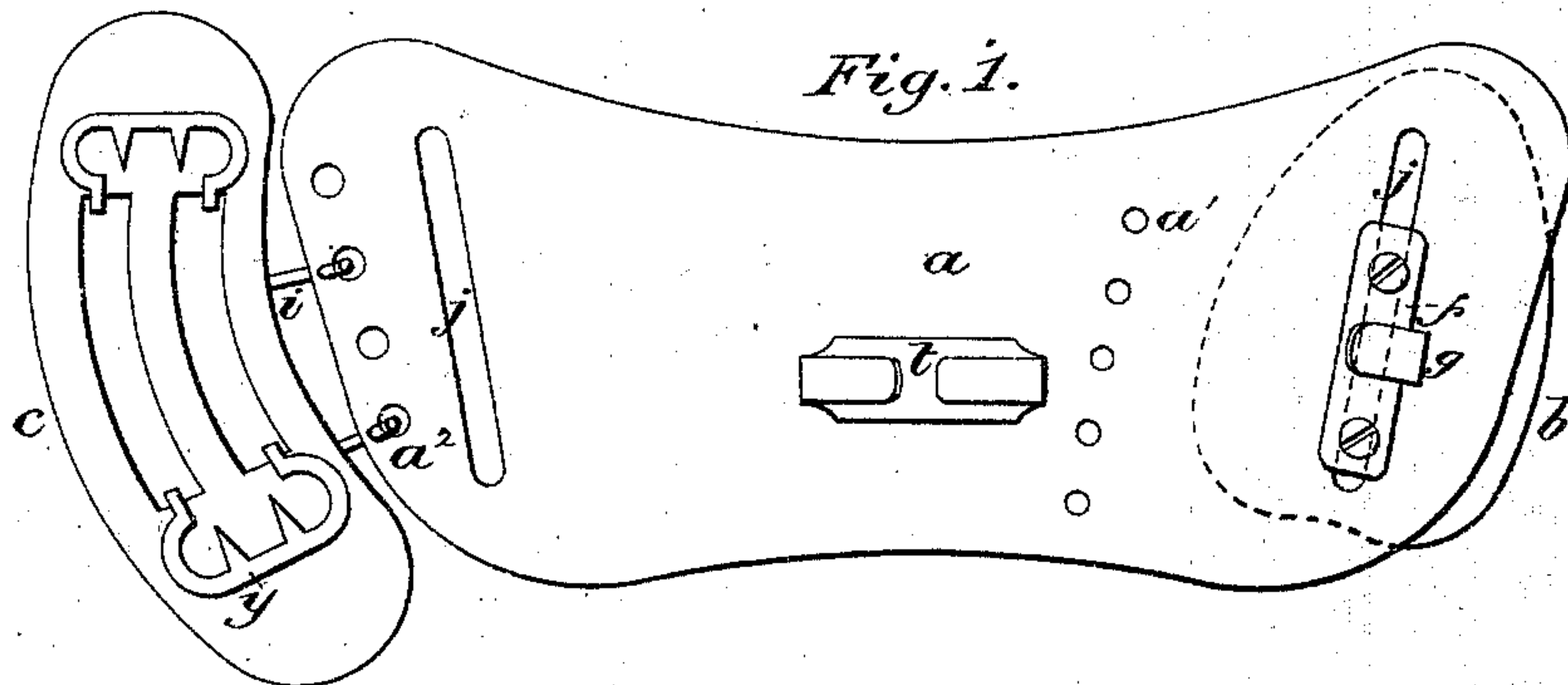


G. W. GREGORY.
Trusses.

No. 146,448.

Patented Jan. 13, 1874.



Witnesses.
Philip F. Garner.
A. B. Cauldwell.

Inventor:
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Fig. 4.

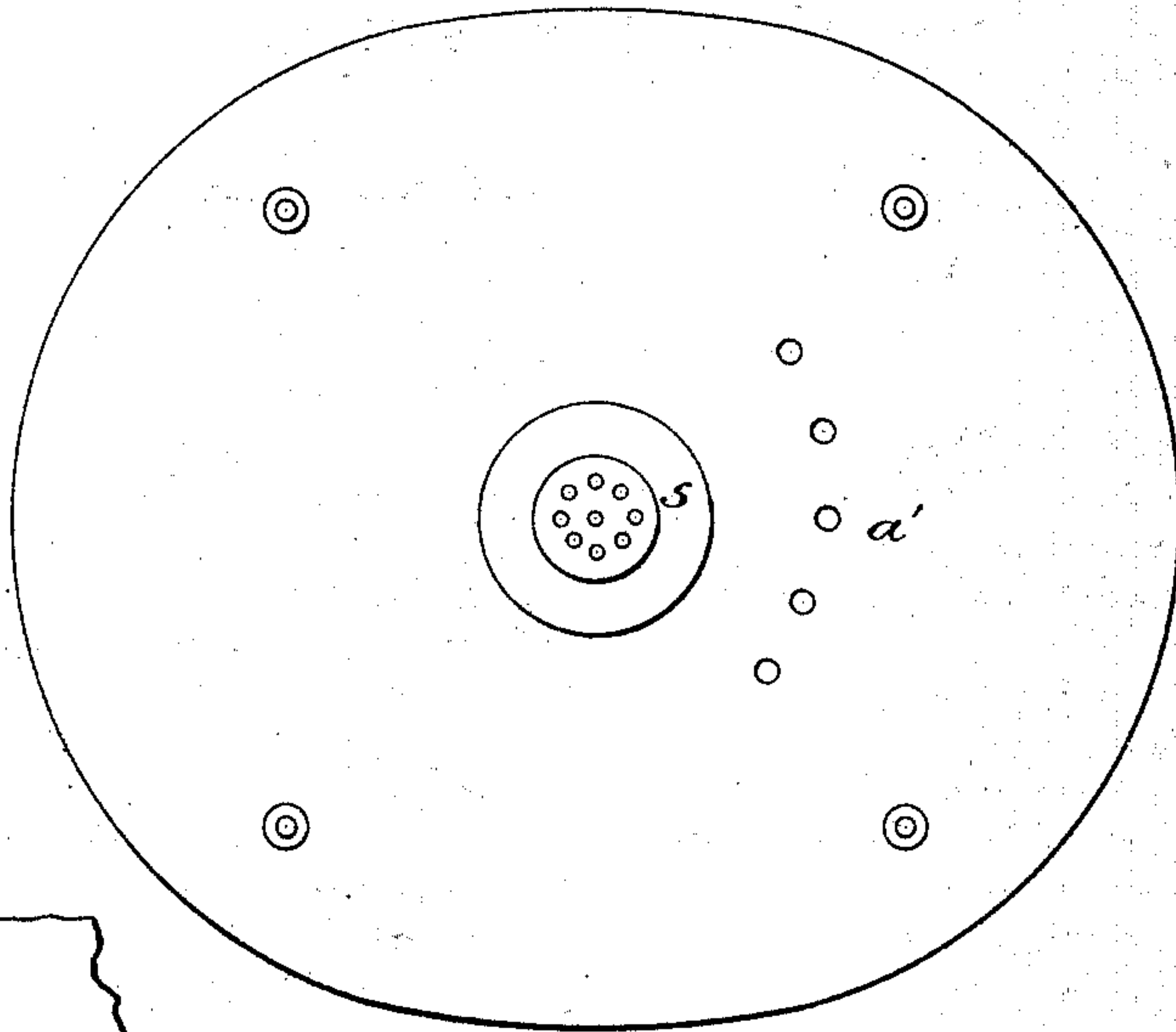


Fig. 13.

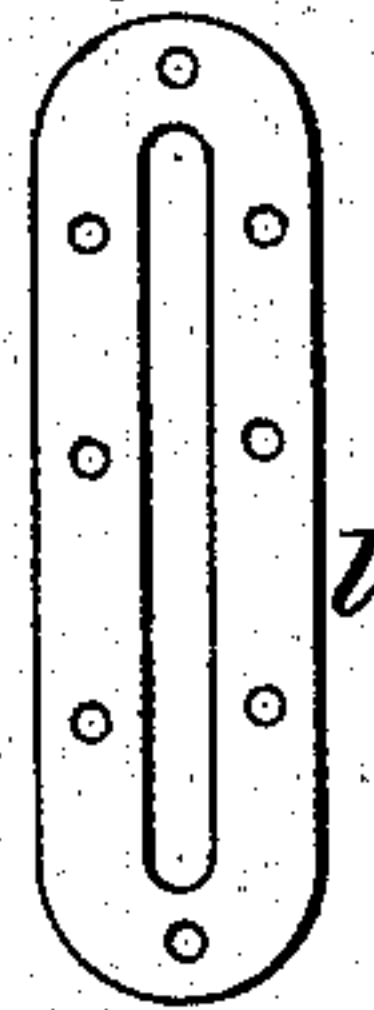


Fig. 11.

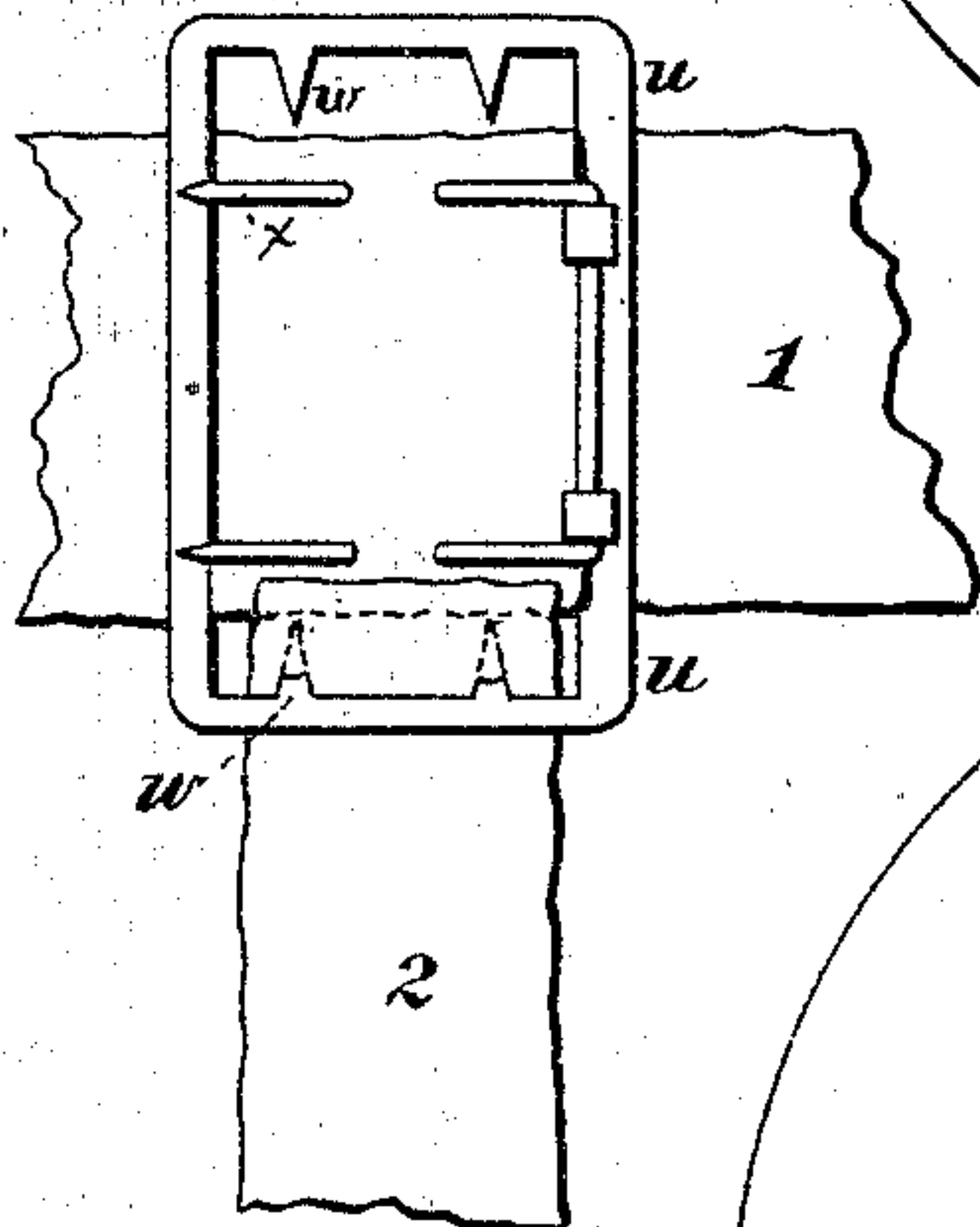


Fig. 5.

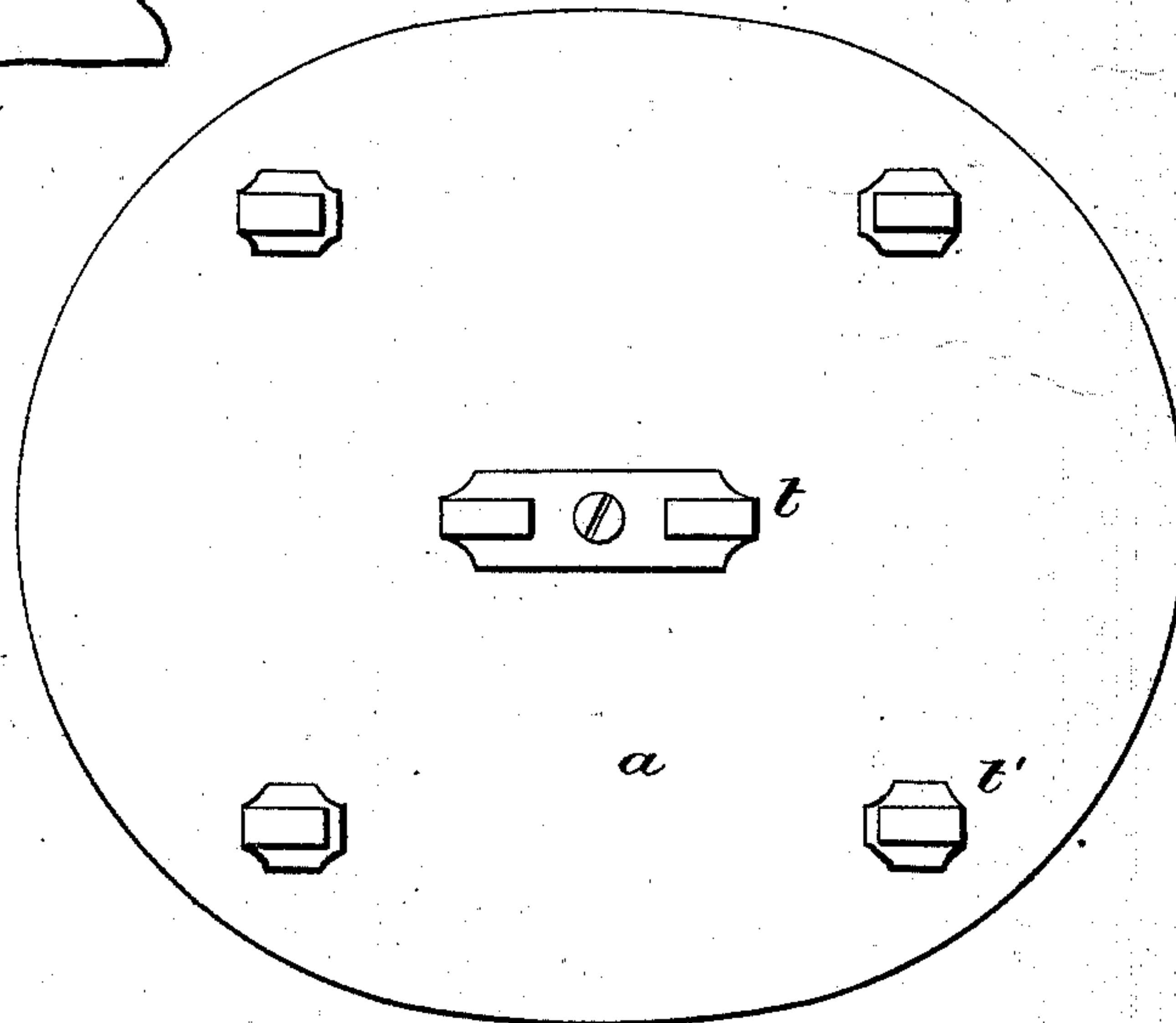


Fig. 12.

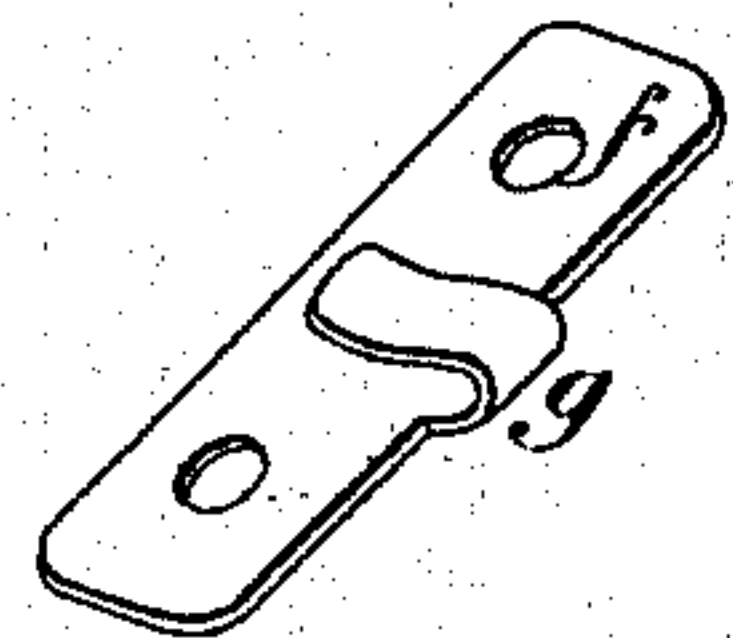
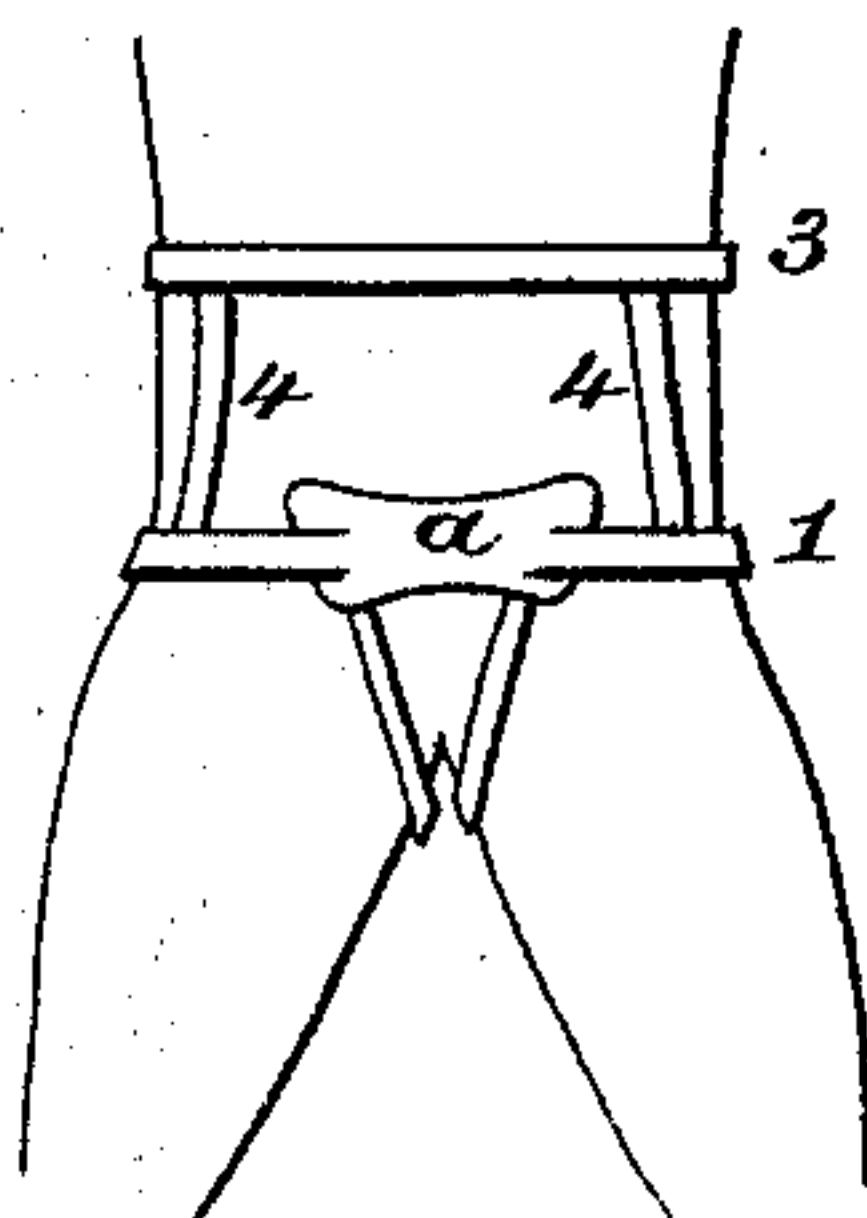


Fig. 14.



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Atty.

UNITED STATES PATENT OFFICE.

GEORGE WILSON GREGORY, OF SYRACUSE, NEW YORK.

IMPROVEMENT IN TRUSSES.

Specification forming part of Letters Patent No. **146,448**, dated January 13, 1874; application filed January 8, 1874.

To all whom it may concern:

Be it known that I, GEORGE WILSON GREGORY, of Syracuse, Onondaga county and State of New York, have invented Improvements in Trusses, of which the following is a specification:

Figure 1 represents a back view of one of my trusses with pad attached; Fig. 2, a front view of the same and a cross section. Fig. 3 is a back and sectional view of one of my oval pads, showing the method of holding the nut. Fig. 3^a is a longitudinal section of Fig. 3. Fig. 4 shows a front view of an umbilical truss. Fig. 5 shows a back view of the same. Figs. 6 and 7 show my curved pads adapted to be hinged to the truss-plate. Fig. 8 shows the attachment employed to secure the straps to the plate. Fig. 9 shows a plate in front and section to be secured to the back of the plate to work with the attachment, Fig. 8. Fig. 10 shows the pad-attaching nut. Fig. 11 shows the attachment for confining the thigh to the body-straps. Fig. 12 shows the adjustable hooked washer. Fig. 13 is a metal plate, provided with a slot, to be placed back of the pad, and to act as a lining to the slot in the plate. Fig. 14 shows a second body or belt strap, as hereinafter described.

The object of my invention is to provide a cheap and durable truss or supporter; and this invention is an improvement on my patent No. 138,640, wherein is employed a metallic corrugated plate, provided with slots for adjusting the pads. My present invention consists in a truss or supporter plate composed of two or more layers of wood, with the grain of the wood crossing, or two or more layers of wood and canvas united together by suitable glue or adhesive cement. It also consists in the combination, with a plate bearing across the body, of a free-moving, hinged, curved, oblong pad adapted to fit and conform to the shape of the groin. It also consists in a depressed back-plate for the pad and a slotted nut. It also consists in a novel attachment for uniting the thigh-straps to the body-strap; also, in an adjustable hooked washer placed on the back of the front plate, and movable with the pad, so as to retain the pressure of the straps on the center of the pad under its various adjustments.

The front plate *a* is composed of two or more thin layers of wood united by suitable glue or adhesive cement, or marine glue, the grain of the wood crossing. With the wood I may use a layer of canvas. This plate is preferably made in the form shown, but may be made of other well-known forms, to adapt it to different persons, and to ruptures located at any portion of the body, or it may be shaped for a supporter. It is provided at the end or centrally with slots *j* to receive screws to allow pads *b* to be attached and adjusted. The plate may also be perforated with small holes *a'* for ventilation, and may be coated with an enamel, and on the back of the plate is a fastening-plate, *m*, having an irregular slot, *n*, to receive the hook *p* of the body-strap attaching plate *o*. This attaching-plate differs from that shown in my former patent in the construction of the tongue-plates *g r*. The pads which are attached to the face of the plate are made of metal and corrugated, the corrugations preferably crossing the pad, thereby preventing in a measure vertical movement, but they may be made of other well-known shape. The back of the pad *b* is slotted at *d*, and ledges *d'* are thrown down, and to these ledges are fitted nuts *e*, having slots or openings *e'* to slide thereon. The nuts are placed on the ledges before the back-plate is secured to the bulged portion of the pad, and they cannot be misplaced. For ruptures in the groin I employ an oblong curved pad, *c*, curved to fit the groin, and attached to the front plate *a* by means of loops *i* and openings *a''* or hinges, which allow such pad to be pressed closely into the groin, and to adapt itself to the movement of the person. To produce extra pressure on this pad, a buckle-like attachment, *y*, is secured to it to receive the thigh-strap. This swinging pad may be corrugated in either direction, and be perforated, if desired, or may be provided with the depressed back-plate and slotted nut, so as to be attached to the front of the body-plate. These groin-pads may be used with the corrugated plate shown in my patent. When a pad requires to be adjusted very high or low on the front plate, the plate is liable to turn; and to counteract this tendency, and keep the pressure of the strap over the center of the pad, I employ a washer, *f*, having a hook, *g*.

This washer is placed at the back of the plate, and receives the screw or screws that pass through the slot in the plate and confine the pad. It is evident that the washer might be provided with a hole to receive a hook. Heretofore the thigh-straps have either been sewed to the body-strap, or attached by buckles to short pieces sewed to the body-strap. The thigh-straps have to be changed, and to do away with sewing, I have made the new attachment, Fig. 11, consisting of a frame, *u*, having prongs *w* and *x*. The body-strap 1 is doubled, passed through the attachment from its under side, and the prongs *x* are passed through the doubled portion, and the prongs *w* are then used to hold the thigh-straps 2. It is often difficult to adapt a truss to a corpulent person. The thigh-straps hold the plate well down; but to hold the plate up an additional belt or strap, 3, may be placed about the body above the usual body-strap 1, and from the strap 3 are suspending-straps 4, which are secured to the uppermost prongs *w* of the attachment *u*. The wood front plate may be strengthened by placing a slotted metal plate, *l*, Fig. 13, at its back, and surrounding the slots *j*, and it may also have a longitudinal metallic strip across the back or about its edges. When I adapt my plate to umbilical rupture I provide it centrally on its face with

a round pad, *s*, and on its back I place suitable hooks *t t'*, the latter being allowed to swivel.

Having described my invention, I claim—

1. A truss or supporter plate composed of layers of wood, or wood and cloth united, substantially as described.

2. A truss or supporter plate composed of layers of wood perforated and provided with pad-adjusting slots, substantially as described.

3. A truss-plate adapted to extend across the body, in combination with the free-moving curved, oblong, hinged groin-pad, substantially as described.

4. The back-plate of the pad provided with the depressed ledges and combined with the slotted nut, substantially as described.

5. The combination, with the plate and adjustable pad, of the hooked washer, substantially as described.

6. The hinged pad provided with the buckle to hold the thigh-strap, substantially as described.

7. The attachment *u*, having prongs *w x* for confining the body and thigh straps.

In witness whereof I have hereunto set my hand this 29th day of December, 1873.

GEO. WILSON GREGORY.

Witnesses:

THOMAS MERRIAM,
FRANK COLLINS.