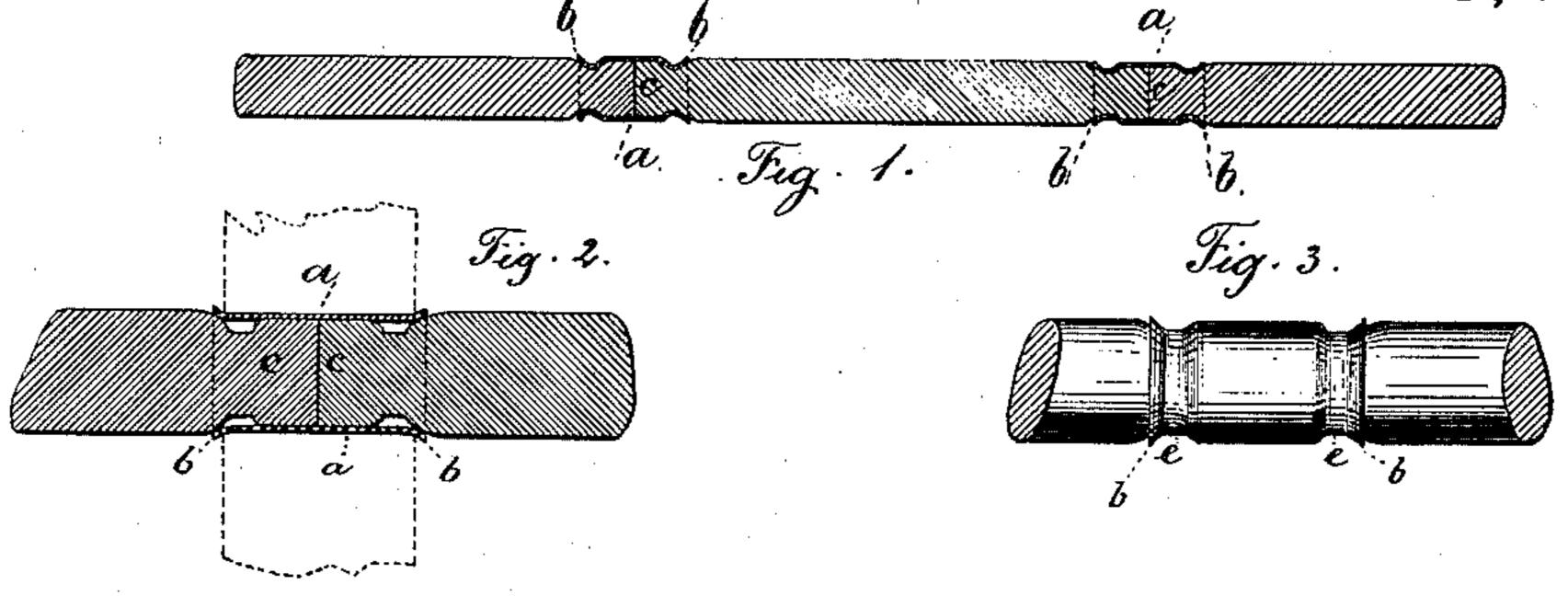
(No Model.)

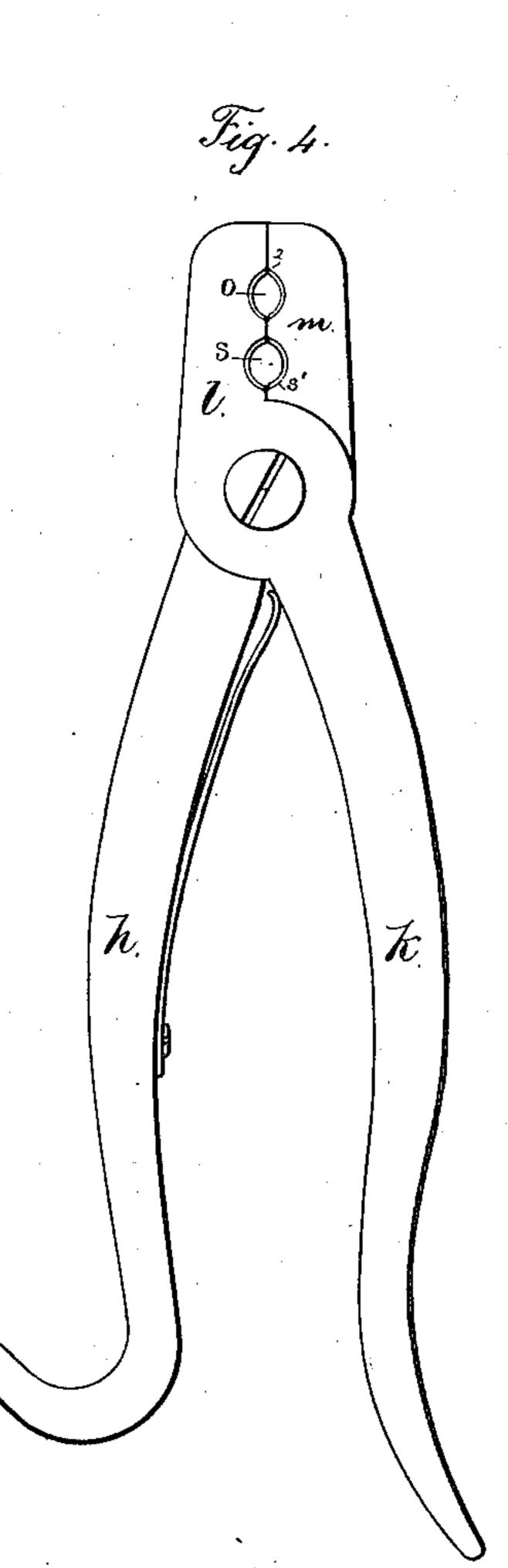
## W. M. WHITING.

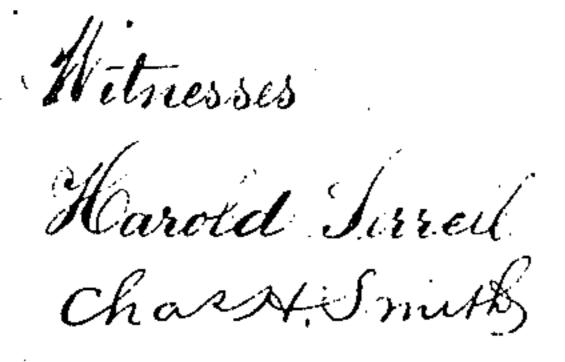
Belt Clasp.

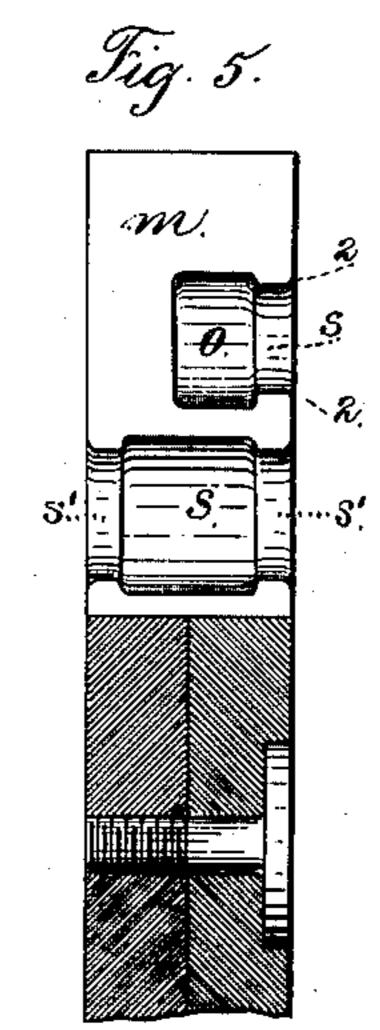
No. 243,480.

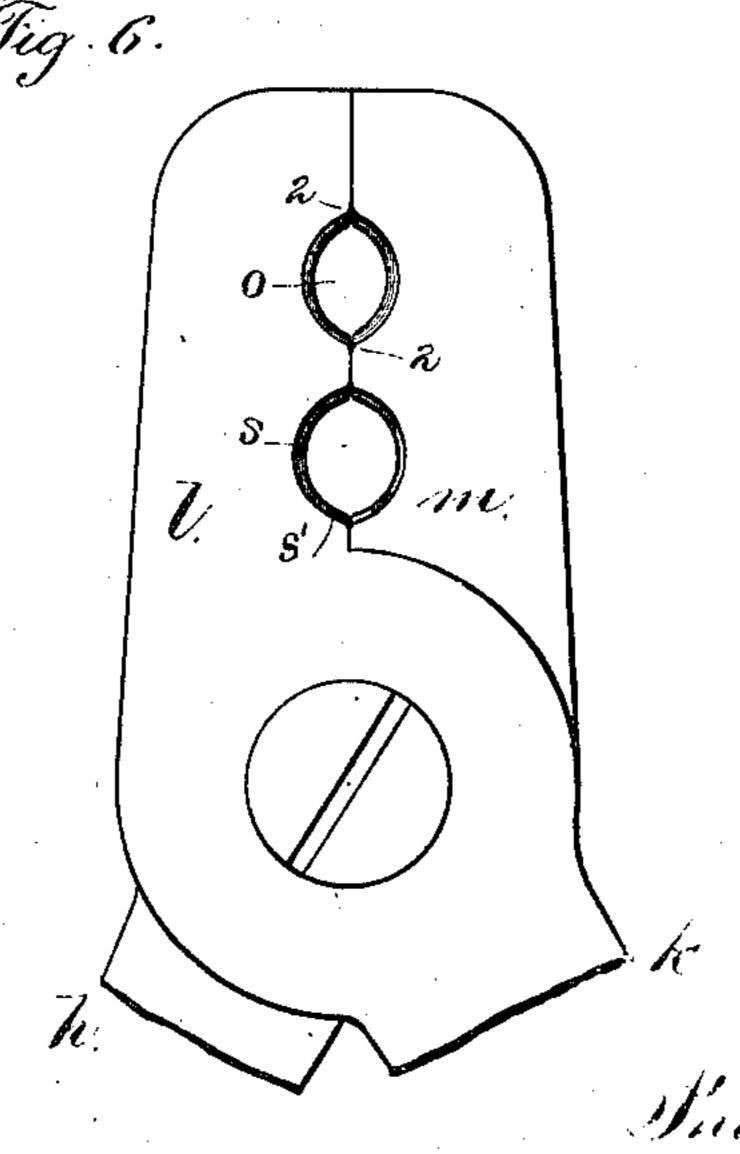
Patented June 28, 1881.











Milliam III. Whiting Lemuel W. Servell atti.

## United States Patent Office.

WILLIAM M. WHITING, OF ELIZABETH, NEW JERSEY, ASSIGNOR TO RACHEL L. WHITING, OF SAME PLACE.

## BELT-CLASP.

SPECIFICATION forming part of Letters Patent No. 243,480, dated June 28, 1881.

Application filed November 15, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. WHITING, of Elizabeth, in the county of Union and State of New Jersey, have invented an Improvement 5 in Belt-Clasps, of which the following is a specification.

In Letters Patent granted to me September 21, 1880, No. 232,428, a metal tube is described for connecting the ends of round belts, the 10 same being compressed near the ends to form an inward rib that grasps the belt near the ends. In this character of tubular clasp difficulty arises in introducing the end of the round belt into the tube, because the tube is parallel 15 throughout, and after the clasp has been applied the end of the tube is liable to cut the leather of the belt because it forms a square or sharp end that is in contact with the belt.

My present invention is made for removing 20 these difficulties; and it consists in a tubular clasp for round belts, having the ends slightly spread or bell-mouthed, so that the ends of the belt are easily inserted into the tube, and are pressed therein endwise, and hence will 25 fit tightly before the inward rib is made in the tubular clasp. Furthermore, the inward rib is not at the end of the tube, but a small distance from the bell-mouthed end, so that there is no sharp angle in contact with the 30 material composing the belt; hence it is not liable to be cut thereby when in use.

In the drawings, Figure 1 is a section of the belt and clasp, of about the ordinary size. Fig. 2 is a section, in larger size, of the tubular 35 clasp a, having the bell-mouthed ends b b, for the reception of the ends c of the round belt, of leather or similar material, such as rawbide or catgut, and showing by dotted lines the position of the pinchers. Fig. 3 represents the 40 outside of the tubular clasp after the same has been secured upon the ends of the belt by the external grooves and inward ribs, e, being compressed into the same, as in my aforesaid patent, with the exception that the bell-mouthed 45 ends b b are allowed to remain, for the purposes aforesaid, instead of the extreme ends | 1. As a clasp for connecting the ends of

view of the pinchers employed by me; and Fig. 5 is a face view of one of the jaws, and Fig. 6 a side view, both of which latter figures 5c are of a size corresponding to the clasp in

Figs. 2 and 3.

In using the pinchers shown in my aforesaid patent, I have found that the sharp edges of the semicircular recesses are liable to nip 55 and injure both the belt and the metal clasp. I therefore make these recesses semi-ellipses, with the corners and edges rounded, as shown, so that the pressure can be more easily applied to the belt in producing the peripheral 60 compressions therein near the ends without nipping the material, and also the grooves can be compressed in the metallic tubular clasps with facility without the risk of injuring the metal.

In Figs. 4, 5, and 6 the pinchers have handles h k and jaws l m; and o o are the semielliptical recesses, with rounded edges at 2, for compressing the belt near the ends, and s s are the semi-elliptical recesses, with rounded 70 edges and with ribs s', for compressing the sheet-metal tubular clasps around the ends of the belt, and forming therein the grooves and interior ribs for holding the belt.

It will be apparent that the bell-mouthed 75 ends pass slightly beyond the peripheral grooves that are compressed into the belt, and that when the peripheral grooves are compressed into the sheet-metal tube the bellmouthed ends remain, and the metal is forced 80 inwardly into the previously-formed grooves, the pinchers having the corners rounded off, so as not to compress the bell-mouthed ends.

I am aware that rings have been made with the ends flaring; but they were not of a size or 85 shape adapted to the clasp for a leather belt. My tubular clasp, with both ends flaring, is of a length equal to at least twice its diameter, in order that it may receive sufficient of the ends of the round belt to allow them to be se- 90 cured firmly.

I claim as my invention—

of the tube being pressed in. Fig. 4 is a side | round belts, a metal tube having both of its

ends bell-mouthed and of a length adapted to receive and secure the ends of the belt, as set forth.

2. In combination with a round belt, a metal tubular clasp having bell-mouthed ends and inward peripheral ribs near the ends that grasp the material of the belt near its ends, substantially as set forth.

3. The pinchers for applying the tubular belt-

clasps, formed with elliptical recesses with ribs 10 and rounded corners, as and for the purposes set forth.

Signed by me this 6th day of November, A. D. 1880.

WM. M. WHITING.

Witnesses:

HAROLD SERRELL, WILLIAM G. MOTT.