

(No Model.)

C. F. DULING.

CLEVIS.

No. 268,785.

Patented Dec. 12, 1882.

Fig. 1.

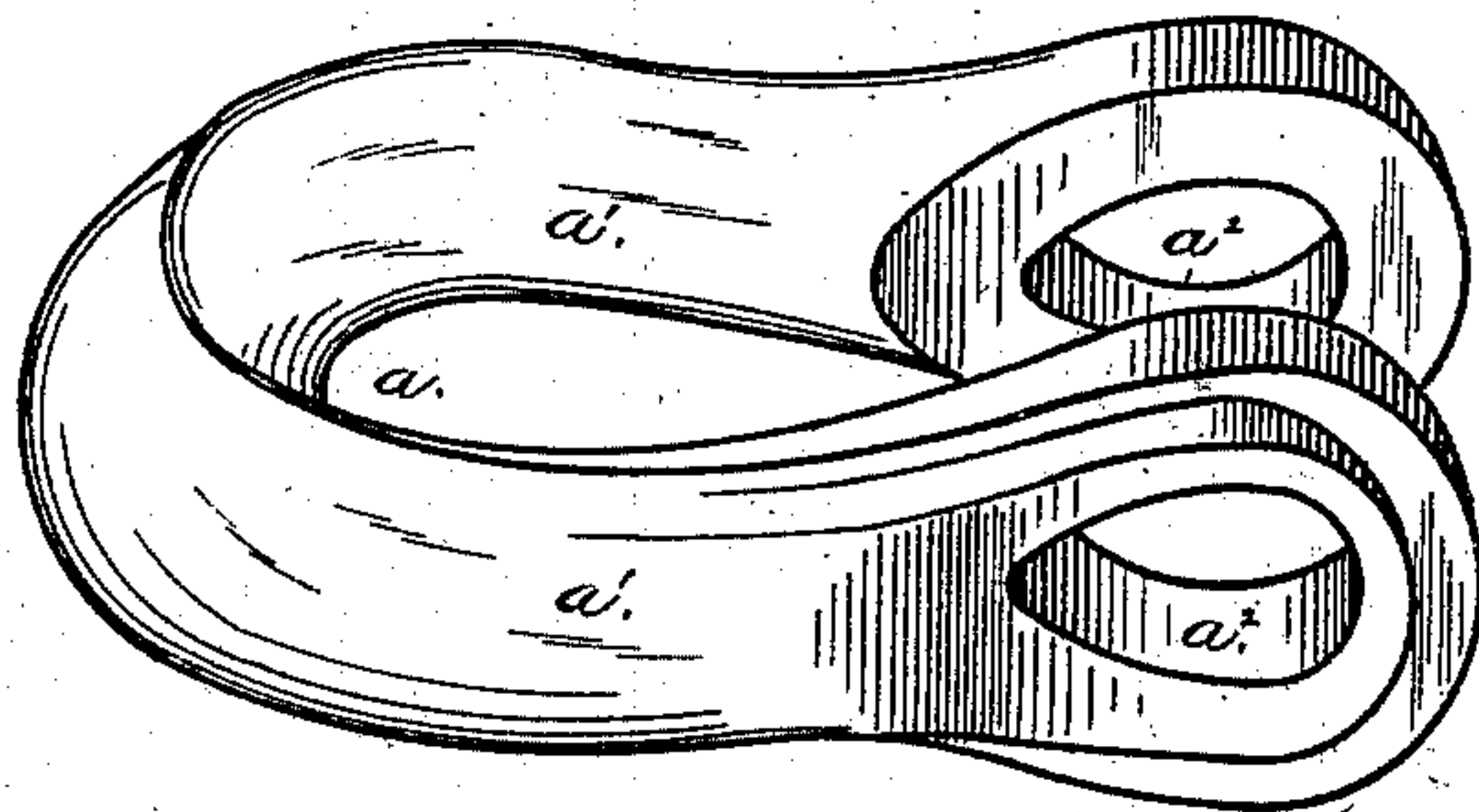


Fig. 4.

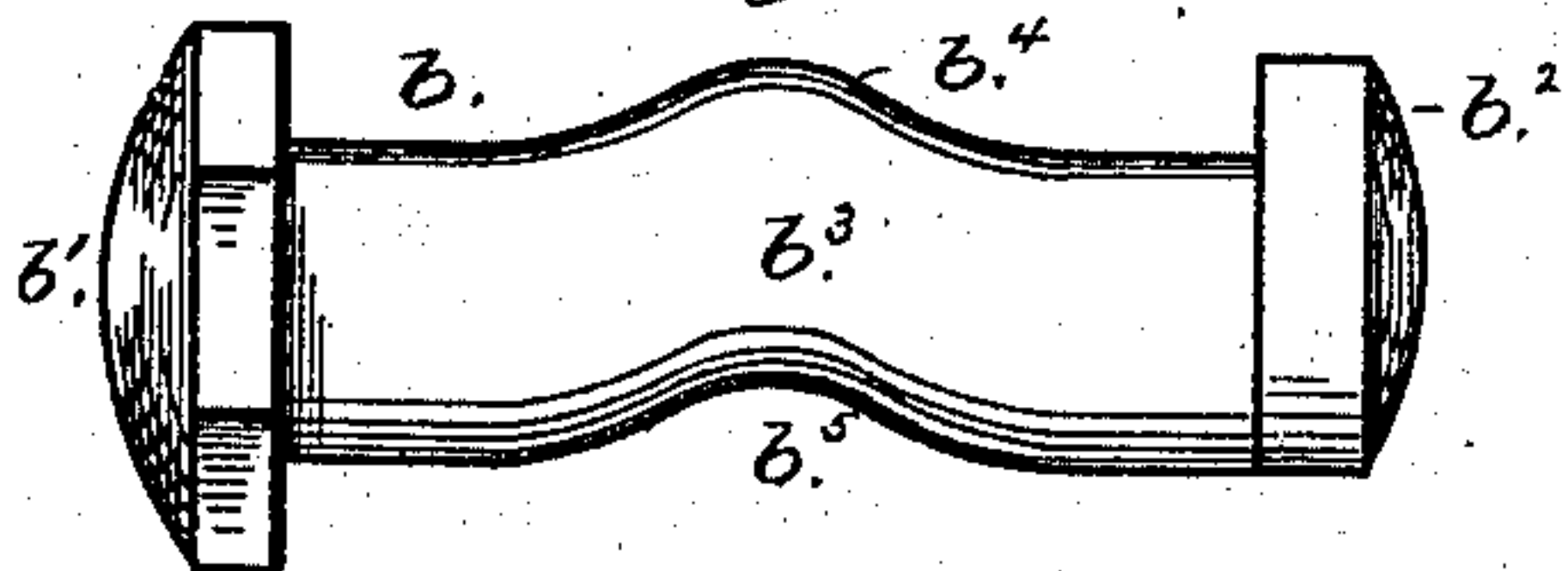


Fig. 3.

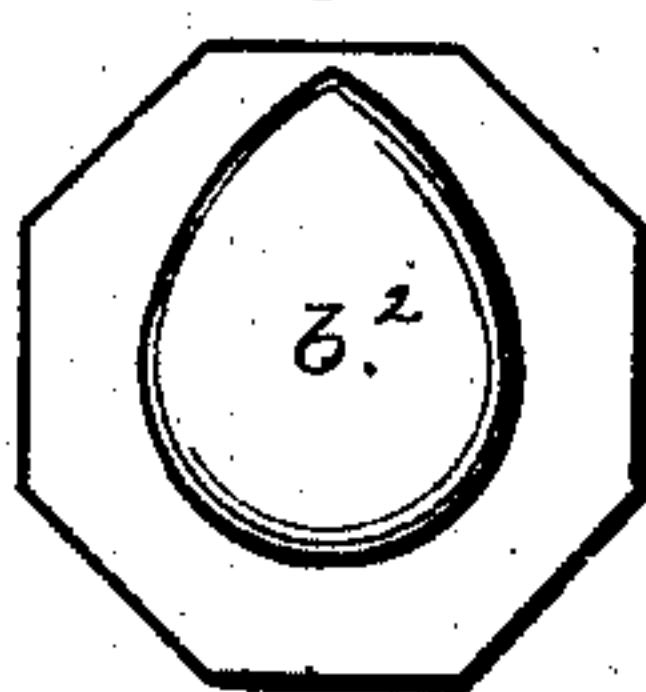
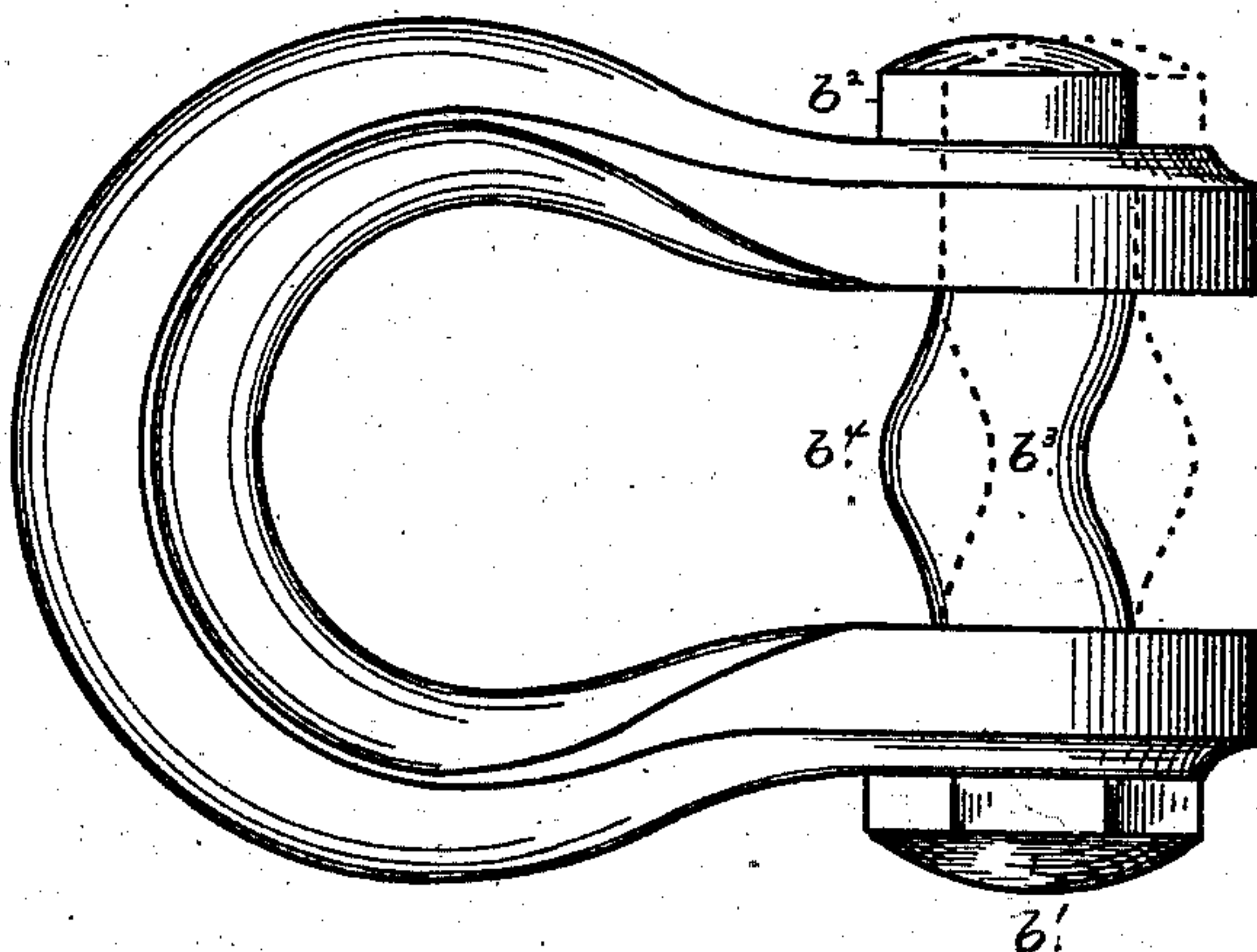


Fig. 5.



Fig. 2.



WITNESSES

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# UNITED STATES PATENT OFFICE.

CHARLES F. DULING, OF CHARLESTON, WEST VIRGINIA.

## CLEVIS.

SPECIFICATION forming part of Letters Patent No. 268,785, dated December 12, 1882.

Application filed May 20, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES F. DULING, a citizen of the United States, residing at Charleston, in the county of Kanawha and State of West Virginia, have invented certain new and useful Improvements in Clevises; and I do declare the following to be a full, clear, and exact description of the invention, such as it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in clevises or coupling devices.

It has for its object to provide a safe coupler and one that is readily operated; and it consists in the peculiar construction of the pin, in connection with the open link, as will be hereinafter fully described, and specifically pointed out in the claim.

In the drawings, Figure 1 is a perspective view of the open link. Fig. 2 is a side view of a link with pin inserted. Fig. 3 is an end view of pin; and Figs. 4 and 5 are side views of the pin in different positions, as will be described.

$a$  represents the link, made substantially the shape of the ordinary clevis-link, having the arms  $a'$ .

$a^2$   $a^2$  are openings through the arms  $a'$ , near the ends of same, and they are made preferably egg-shaped, with the point projected toward the rear, as shown, to correspond to the construction on end of pin, as will be described.

$b$  represents the pin, having the head  $b'$  at one end and the projection  $b^2$  at the opposite end. This projection is extended at right angles from the end of the pin, and in connection therewith provides a construction corresponding in conformation with the openings  $a^2$  through arms of link, and of proper size to slide snugly through the said openings when properly inserted, as will be described. This projection  $b^2$  is extended to what I call for convenience of reference the "front" of the pin. The opposite side I call the "rear" of the pin. The portions of the pin next the head  $b'$ , and which bear against the forward rounded wall

of opening  $a^2$ , are perfectly round, as shown in Fig. 4.

$b^5$  is a depression in rear of the pin, midway the head  $b'$  and projection  $b^2$ . This depression is arranged to receive the link of the chain connected to the clevis in the operation of the device, as will be described.

On the opposite side or front of the pin I form the projection  $b^4$  in longitudinal line with the depression  $b^5$ . This projection extends forward and prevents the pin from turning when draft is exerted thereon.

In the operation of my invention the end link of the chain to be connected is inserted between the arms  $a'$  of the clevis-link, and the pin  $b$  is passed through openings  $a^2$  in link  $a$ , and the link of chain to be connected into the position shown in Fig. 2. In this position it will be observed the projection  $b^2$  is in line with the openings  $a^2$ , and the pin may be removed at pleasure. When the pin has been inserted, as described, I turn it half round to the position indicated in dotted lines, Fig. 2, when it is securely held from escaping through openings  $a^2$  by projection  $b^2$ . When the pin has been turned within the link of the chain to be connected with the clevis, as described, the said link will fall into the depression  $b^5$ , and the draft will be exerted on the pin within the said depression. The projection  $b^4$ , being within the said link, prevents the pin from turning when draft is exerted thereon.

It will be observed that by the construction shown and described I provide a pin that may be turned within the link of the chain connected to the clevis when draft is not exerted thereon in the operation of coupling and uncoupling, and yet one that will be securely prevented from turning when under draft, as described.

I am aware that in clevises a straight coupling-pin provided with a central rib or lug projected forward has been used in connection with open links, and I do not broadly claim such construction as my invention.

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

The combination, substantially as described,

with the link  $a$ , having its arms formed with the openings  $a^2$ , of the pin  $b$ , provided with the head  $b'$  and the end projection,  $b^2$ , constructed with the depression  $b^5$  in its rear, and the projection  $b^4$  in the front of the same in longitudinal line with the depression  $b^5$ , the said pin being adapted to be inserted and turned within the openings  $a^2$  of the link, and operating substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES FRANKLIN DULING.

Witnesses:

W. E. TRUSEOW,  
W. D. SCOTT.