

(No Model.)

A. T. HYDE.
HOLLOW STRUT CONNECTION.

No. 338,668.

Patented Mar. 23, 1886.

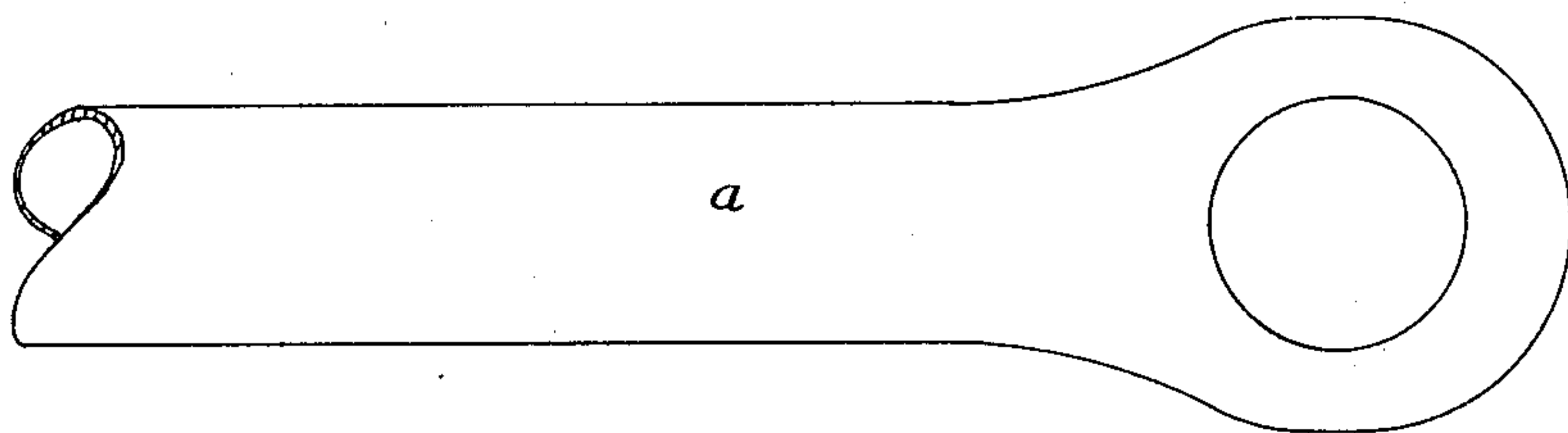


FIG. 1

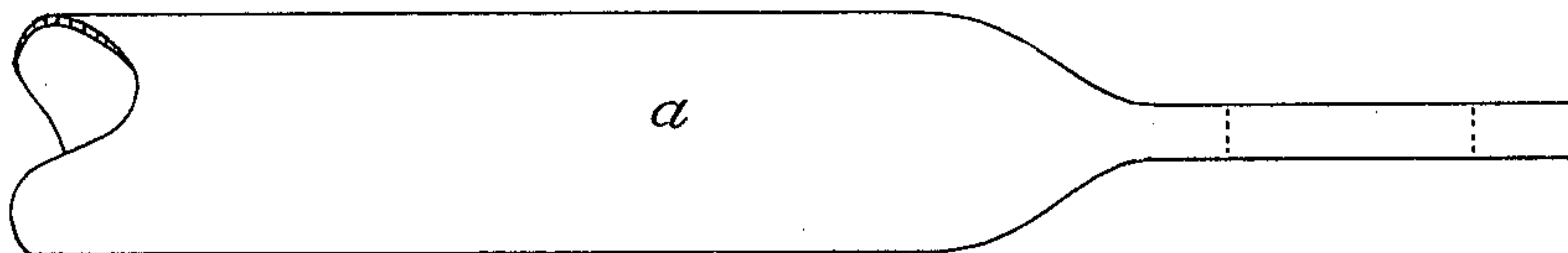


FIG. 2

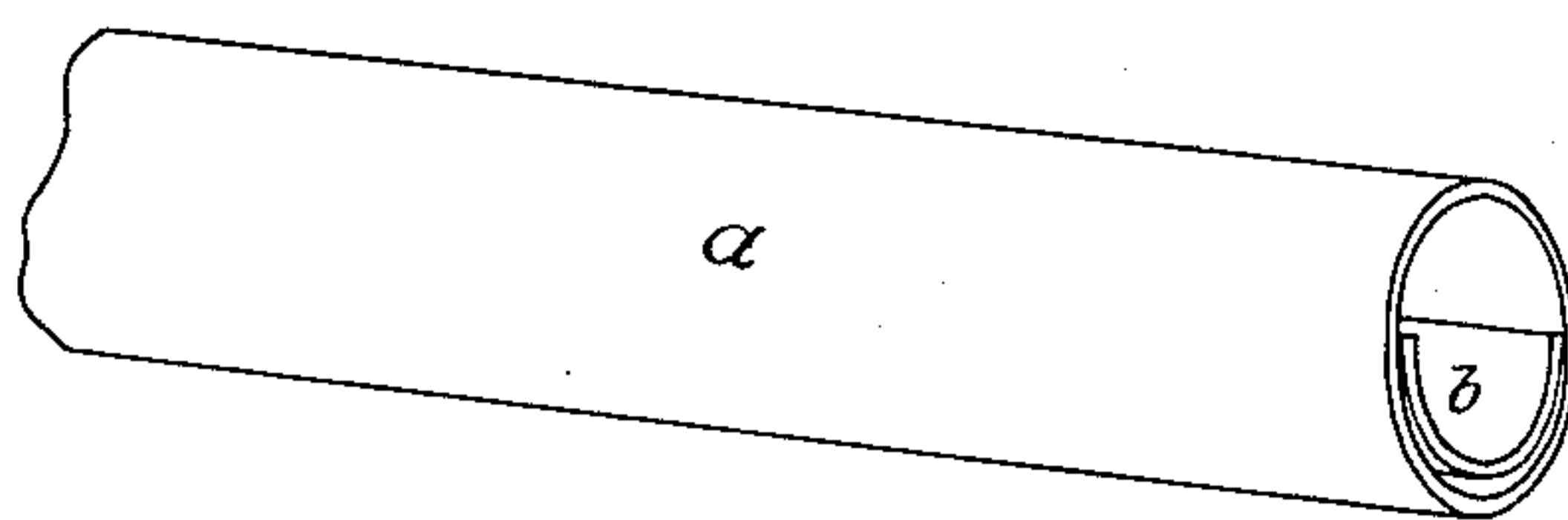


FIG. 3



FIG. 4.

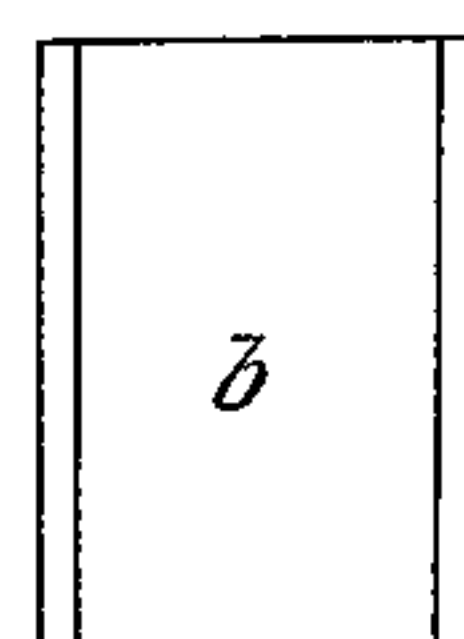


FIG. 5

WITNESSES.

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HOLLOW STRUT-CONNECTION.

SPECIFICATION forming part of Letters Patent No. 338,668, dated March 23, 1886.

Application filed November 21, 1885. Serial No. 183,537. (No model.)

To all whom it may concern:

Be it known that I, ALFRED T. HYDE, a citizen of the United States, residing at Oil City, in the county of Venango and State of Pennsylvania, have invented certain new and useful Improvements in Hollow Strut-Connections, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents an elevation of a hollow strut-connection, showing one end of the hollow strut swaged or in a finished condition. Fig. 2 is a plan view of the same, showing a bolt hole or eye formed in the swaged or finished end. Fig. 3 is a perspective of a tube, showing a re-enforcing plate inserted and the tube ready for forging. Figs. 4 and 5 represent an end and plan view of the re-enforcing-plate.

My invention relates to hollow strut-connections; and it consists in inserting a re-enforcing-plate in the end of said connection, and then forging or swaging the end.

It also consists in forming an eye in the forged end for the passage of the ordinary bolt or other connecting part.

The object to be gained by the use of my invention is that I am enabled to form a hollow closed strut which may easily be detached and replaced, and whose connections may not be likely to suffer during transportation. In addition to these features its lightness, durability, &c., make it a desirable connection for all purposes in which a strut beam or connection is employed.

In the said drawings, *a* represents a tubu-

lar blank, and *b* a plate adapted to be inserted in the end of the blank *a*, to re-enforce said blank at that point. In forming this peculiar connection I take the plate *b* whose width should be about one and one-half time the inside diameter of the blank, so that the plate may be curved and inserted in said blank. The blank is then forged or flattened to assume the form shown in Figs. 1 and 2. It will now be manifest that the plate and blank become firmly welded, thereby completely closing the end of the tubular blank or strut and preventing the injurious effects of moisture upon the inside of the tube, and also forming a solid re-enforce for that end of the tube which is to be attached.

During forging an eye may be formed for the ordinary securing-bolt.

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

1. A tubular strut-connection having at one end an inserted re-enforce-plate, the re-enforced end of the tube being flattened and closed upon the re-enforce-plate, substantially as described.

2. A strut-connection consisting of a tubular blank, the end of said blank being forged or swaged, a plate inserted within the end of the blank to re-enforce the same, and an eye formed in said re-enforced end, substantially as described.

ALFRED T. HYDE.

Witnesses:

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