

(No Model.)

E. S. LAFFERTY.

HORSE COLLAR LOCK.

No. 299,481.

Patented May 27, 1884.

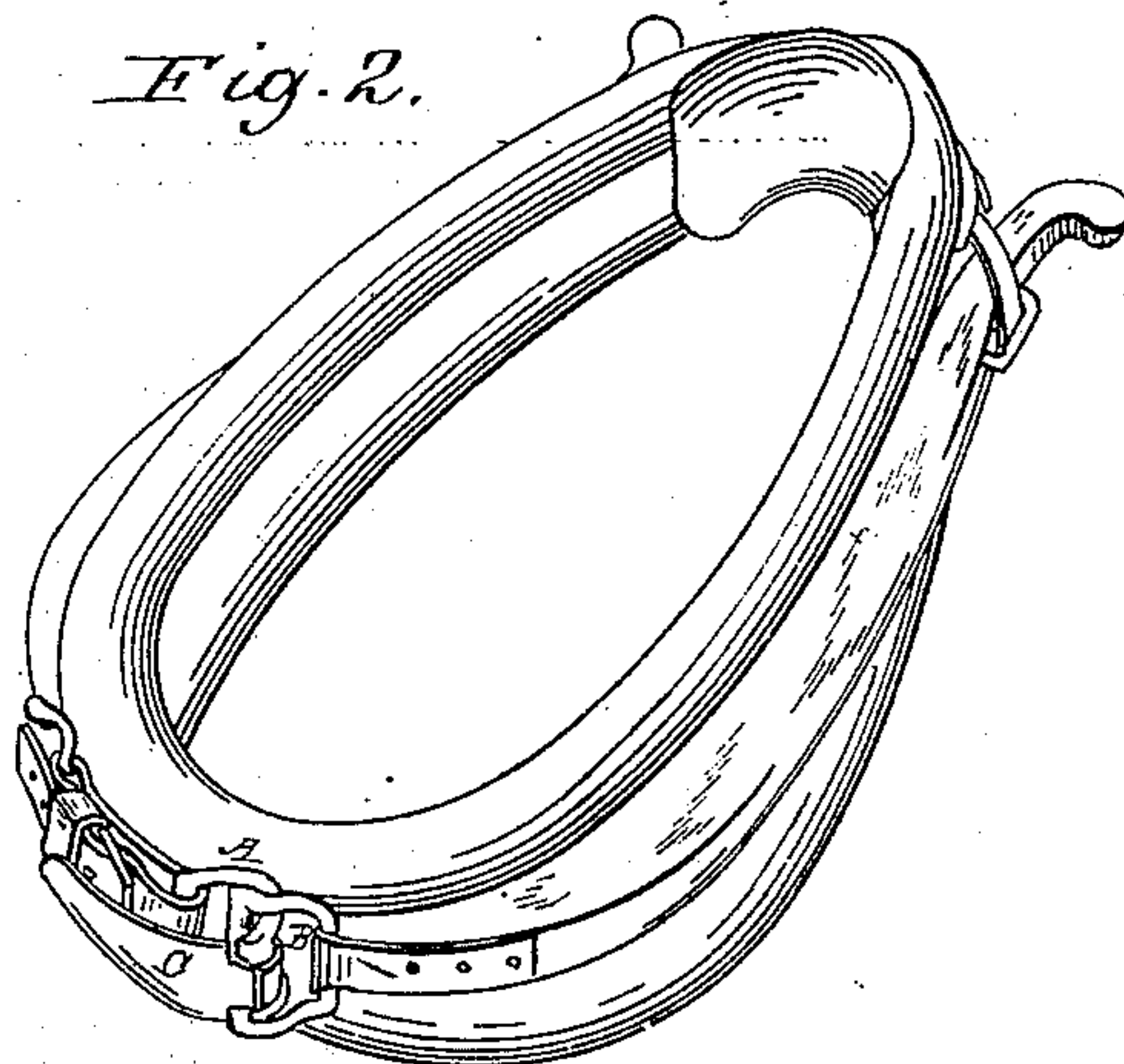
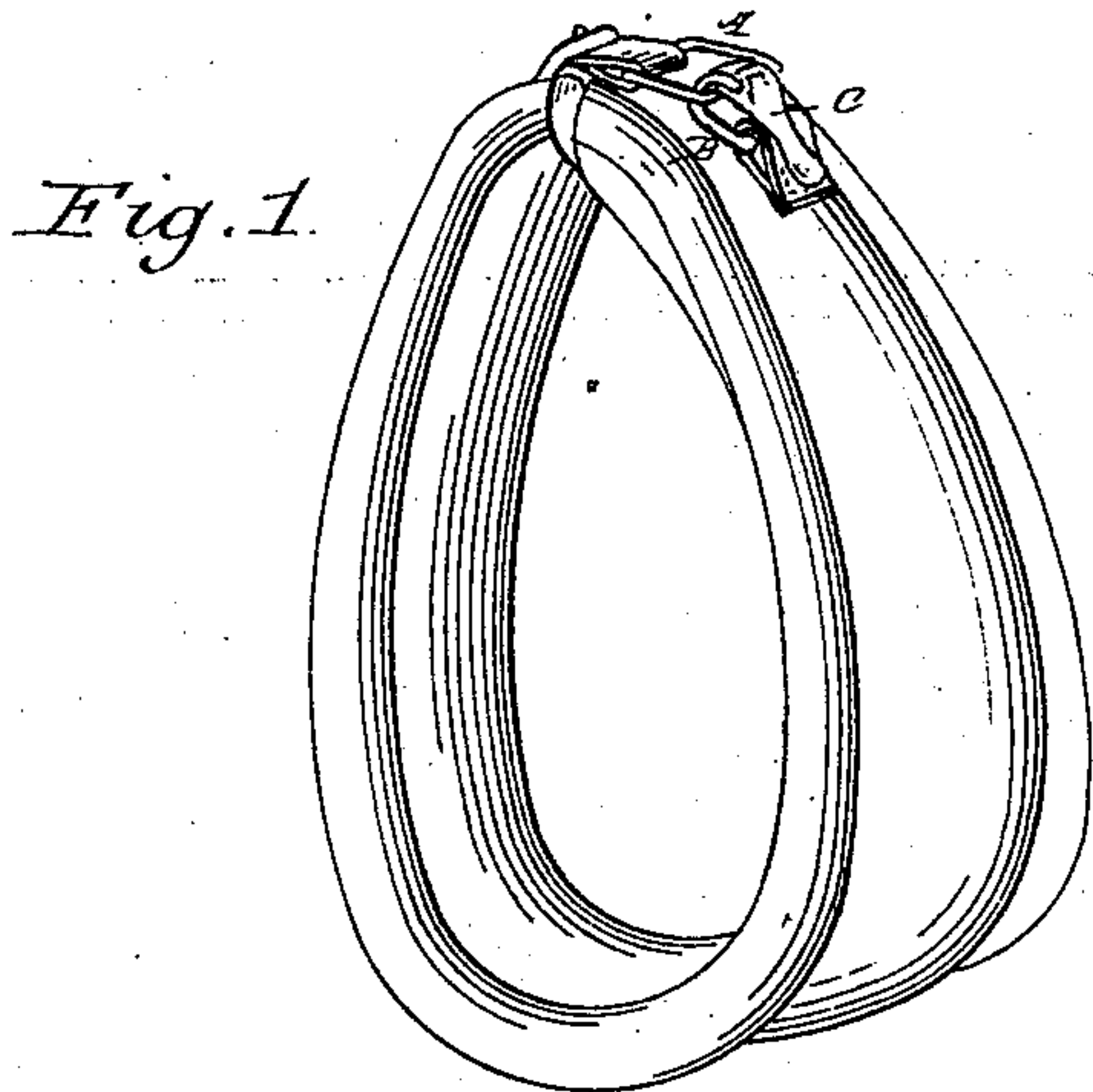


Fig. 3.

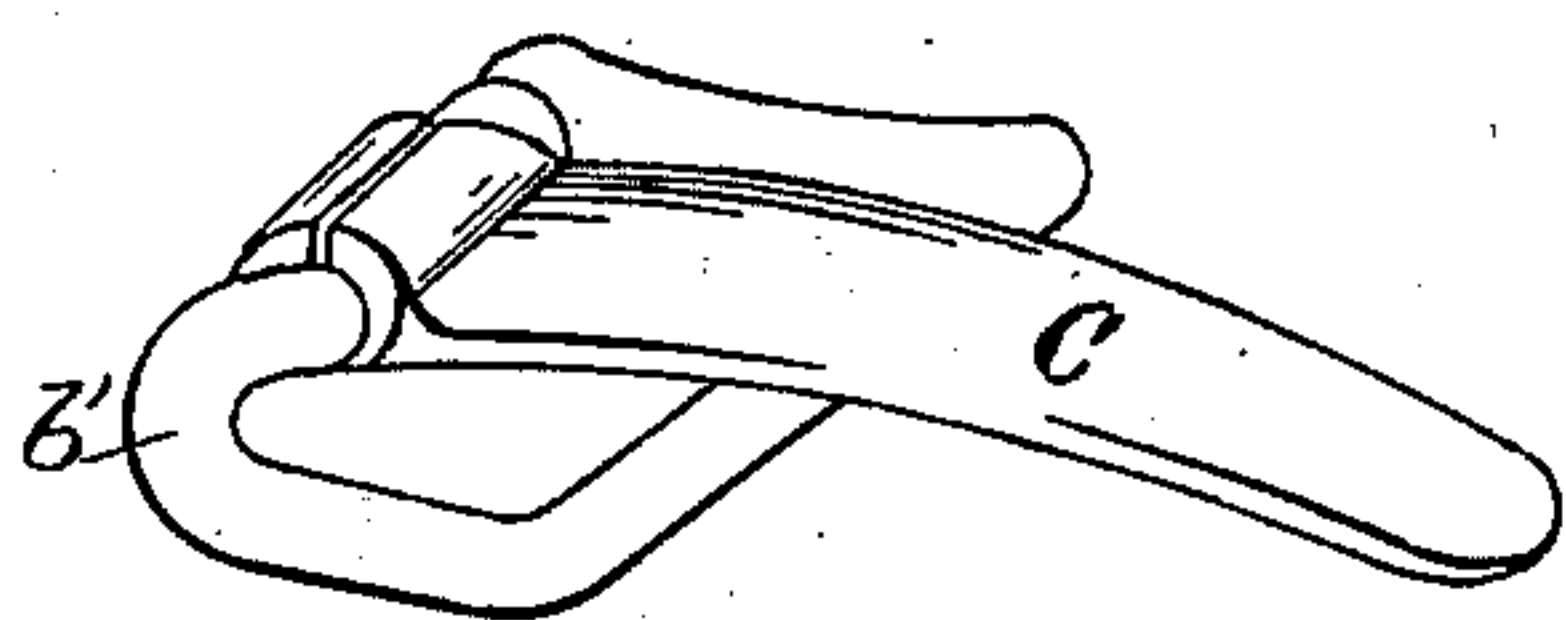


Fig. 4.

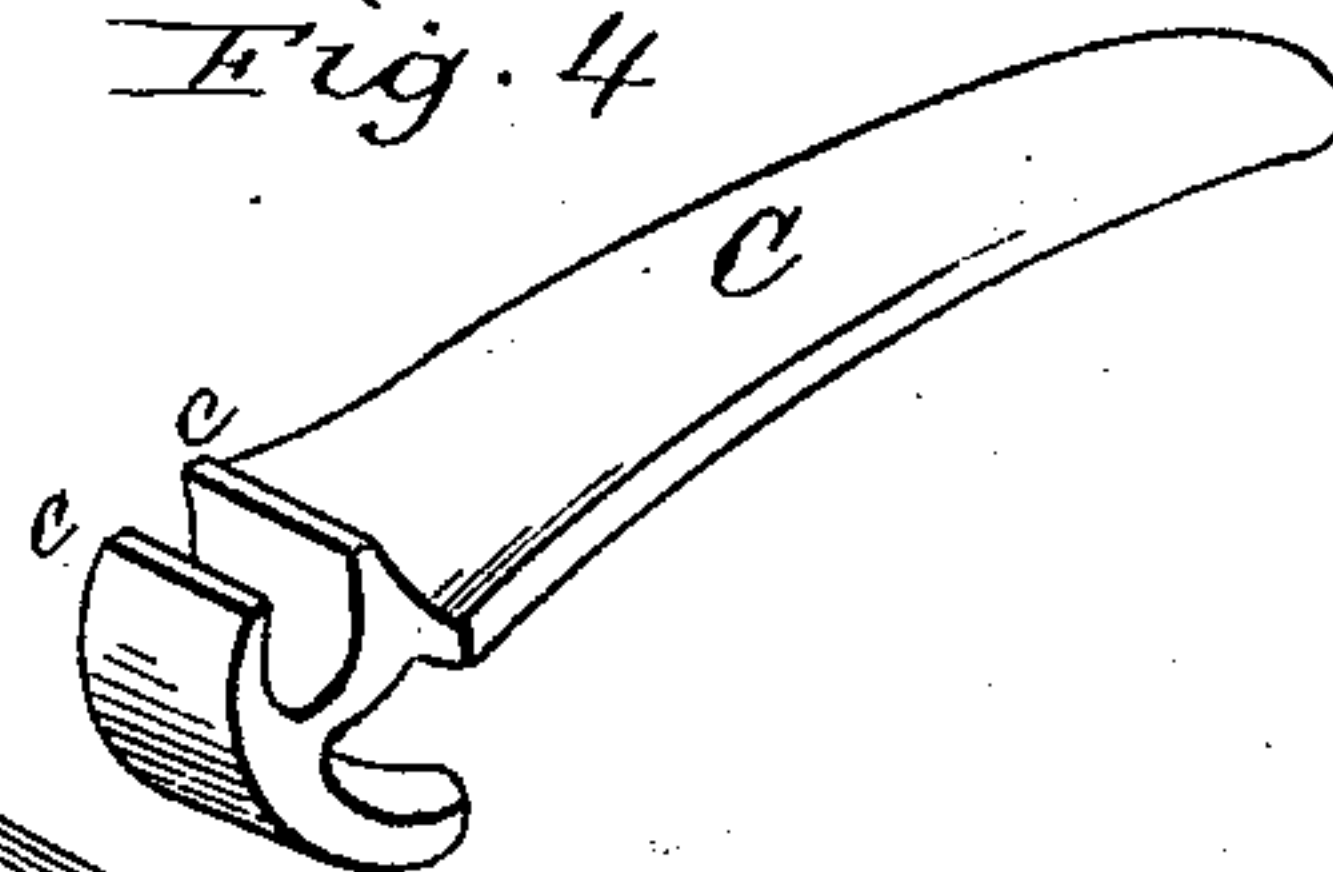


Fig. 5.

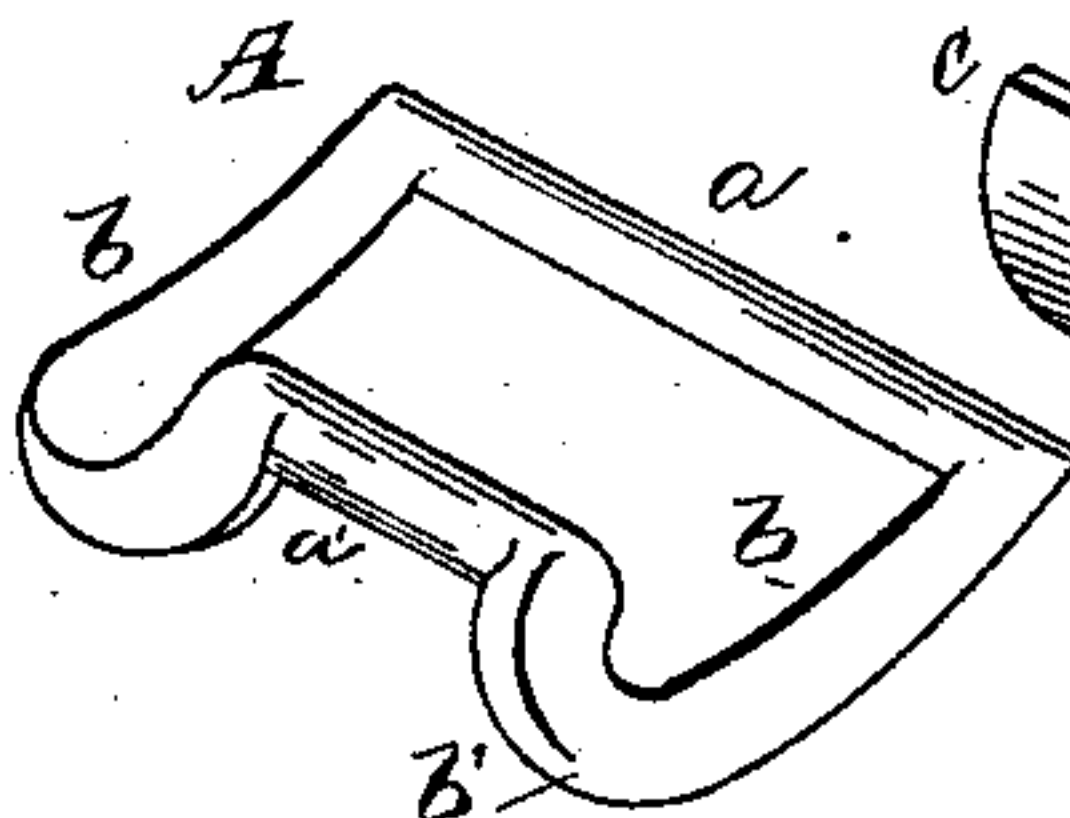


Fig. 7.

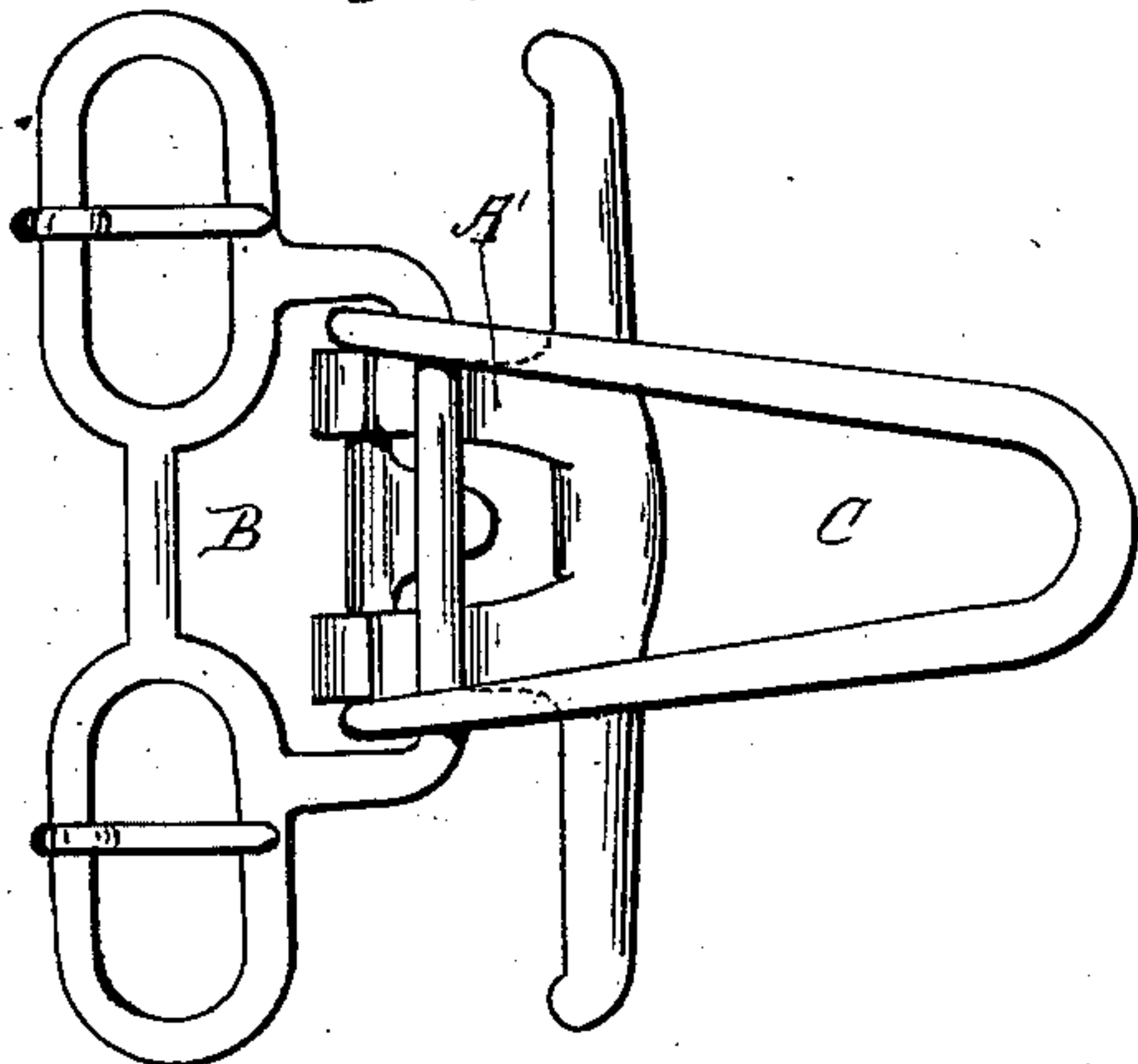
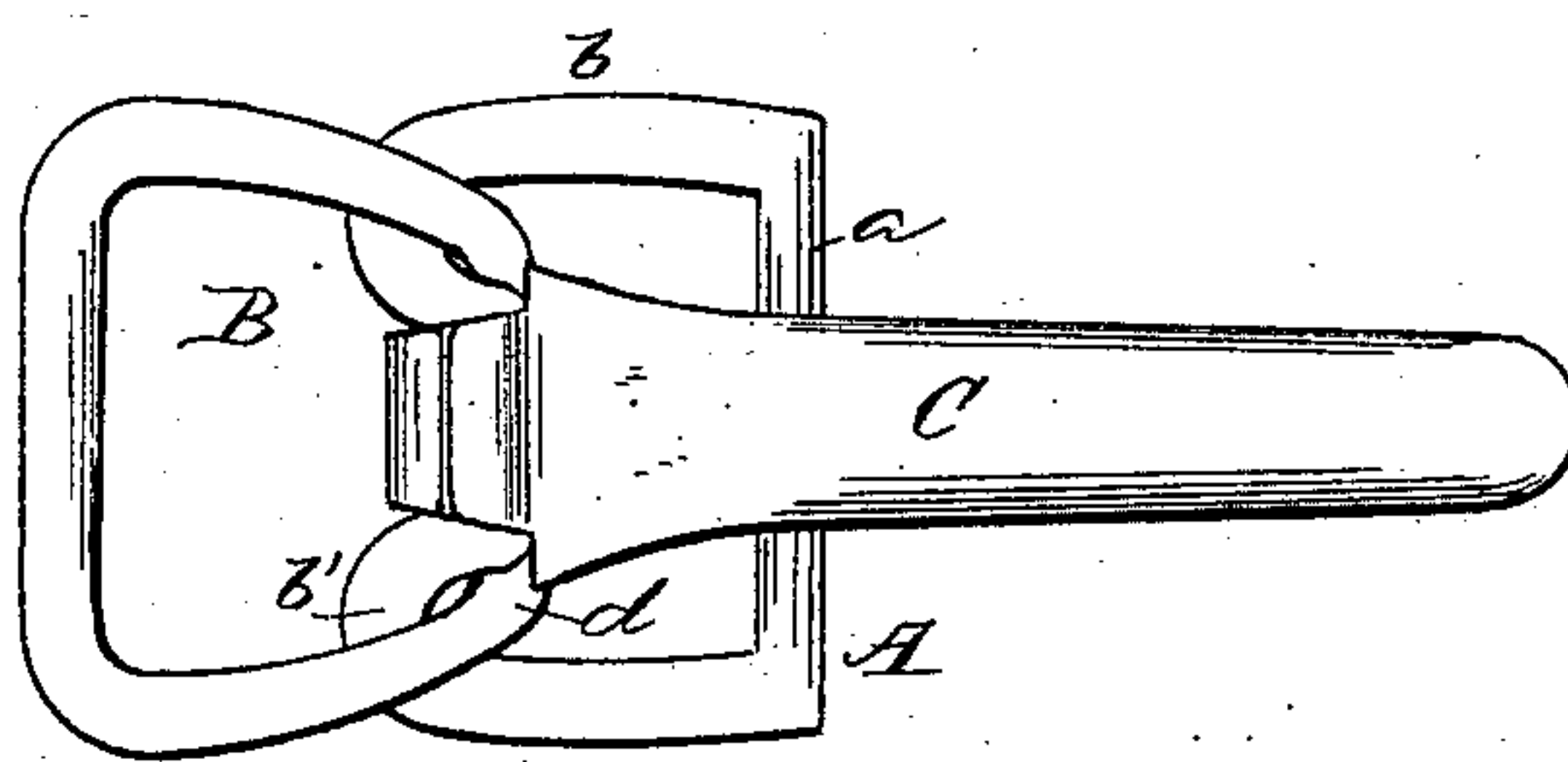


Fig. 6.



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UNITED STATES PATENT OFFICE.

ERASTUS S. LAFFERTY, OF INDIANA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO GODFREY MARSHALL, OF SAME PLACE.

HORSE-COLLAR LOCK.

SPECIFICATION forming part of Letters Patent No. 299,481, dated May 27, 1884.

Application filed June 11, 1883. (No model.)

To all whom it may concern:

Be it known that I, ERASTUS S. LAFFERTY, a citizen of the United States of America, residing at Indiana, in the county of Indiana and State of Pennsylvania, have invented certain new and useful Improvements in Horse-Collar Locks; 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 or figures of reference marked thereon, which form a part of this specification.

The object of my present invention is to provide a device for more conveniently detaching or locking the ends of horse-collars or hames, in order to dispense with buckles, whereby the ends may be readily secured to each other and detached when desired; and it is designed more especially as an improvement upon my patents dated July 4, 1876, and July 2, 1878, in which patents I have shown the curved lever with a hooked end, which lever in my former patents bore the lateral strain, while in my present invention this strain is borne by the end of the loop and the lever is attached to a cross-bar of said loop by upsetting a portion of the metal, either on the loop or lever, whereby said lever will be securely and cheaply held in position; and with this end in view my invention consists in the construction and combination of the parts, as will be hereinafter more fully set forth, and pointed out in the claims.

In the annexed drawings, which illustrate my invention, Figures 1 and 2 are views showing the same attached to a collar and to the hames of a collar. Figs. 3, 4, and 5 are detail perspective views of one style of buckle which may be used either as a hame or collar fastener. Fig. 6 is a plan view of the collar-fastener. Fig. 7 is a modification of the same.

In the annexed drawings, A represents the loop which is provided at one end with cross-bars *a* and connecting side bars, *b*, which are curved outwardly and back upon themselves, and are united by a round transverse cross-bar, *a'*. By this construction hooks are formed upon the ends of the loop A, over which the

loop B, which is attached to the opposite end or collar to be attached, is secured. The cross-bar *a'* on the loop A is circular in cross-section, and the side bars, *b*, which are formed integral therewith extend slightly to the rear of this cross-bar *b*, so as to provide side flanges, *b'*.

When my device is designed to be placed either upon a hame or an ordinary collar having a single strap, the fastening device is provided at one end with projecting lugs *c c*, which are formed thereon. Otherwise the lever, which may be termed a "cam-lever," is of ordinary construction. By means of these projections *c c*, the loop A and the lever C may be secured to each other by simply upsetting or bending these projections *c c*, so as to embrace the cross-bar *a'* of the loop, thus bringing the parts together.

The loop B, hereinbefore referred to, has its end *d* bent downward, as shown.

When it is desired to unite either hames or the ends of the collars when this style of fastening is used, it is only necessary to pass the free end of the lever C through the loop B, when the loop will slip down to the end of the lever adjacent to the hinge, and by depressing the end of the lever will be brought within the upturned end of the loop A, thus securing the parts to each other.

It will be also noticed that by having the lugs *c c* opened on the outer side of the lever C, no pressure is brought to bear against these lugs beyond the mere weight of the lever C, and when this lever is used as a cam the pressure is against the solid portion of the same. The hook upon the end of the lever C is of such shape that when the parts are brought together there is no pressure upon it and it will only come in contact with the cross-bar of the loop B when the lever is raised.

The ends of the loops A and B are attached to the hame or collar by means of straps, one or both of which may be adjustable, and the loops B, when used upon a hame, may, if desirable, be permanently secured thereto.

In Fig. 7 I have shown a modification of my invention, which is designed to be used upon horse-collars which are provided with double straps at their upper ends between which pass the hames, in which modifica-

tion the cross-bar of the loop B, as herein-
before referred to, is extended laterally and
provided with eyes, to which eyes may be se-
cured tongues, thus converting the same into
5 buckles, thus providing means for attaching
the separate straps on the sides of one end of
the collar.

The loop A', which corresponds to the loop
A, may be either an open loop, as shown in
10 Fig. 5, or a single cross-bar with projecting
ends, as shown in Fig. 7. To the central
portion of this loop, projecting upwardly, are
formed two arms provided at their ends with
eyes constructed similarly to that shown upon
15 the lever C, which embrace, after being upset,
the cross-bar formed on the end of the lever,
which is opened and provided at its end with
a grooved connecting-bar, within which the
hames may lie.

20 It will be noticed that one of the main fea-
tures of my invention consists in connecting
the lever to one of the loops by a portion of
the metal formed thereon, thus dispensing en-
tirely with rivets, and forming a secure hinge,
25 which will considerably reduce the cost of
manufacture, and does not impair the strength
of the fastener.

That portion of the fastener upon which the
lugs are formed (which are upset so as to form
30 the hinge) is constructed of malleable iron.

This fastener may be supplied to the trade
with any degree of finish that may be desired,
and may be readily attached to collars and
hames of any construction.

35 I am aware that prior to this application it
was not broadly new to provide a hame or
collar fastener with a cam-lever for uniting

the parts, which cam-lever would be held
against the hame or collar by pressure after
the parts are united, and I do not claim such 40
as my invention.

The hame and collar fastener hereinbefore
described, with the exception of the modifica-
tion shown in Fig. 7, may be manufactured in
two sizes, the smaller size being of less width 45
and is adapted especially for hames, while the
collar fastener will be of greater width, so that
their mechanical construction otherwise will
be identical.

Having thus described my invention, what 50
I claim as new, and desire to secure by Letters
Patent, is—

1. In combination with a hame or collar
having a loop attached to one of the free ends
of the same, a cam-lever, C, having lugs *c c* 55
formed on its upper side, which are adapted
to be upset so as to embrace a cross-bar of a
loop attached to the opposite free end of the
hame or collar, said lever being provided with
a hook on its underside, substantially as shown, 60
and for the purpose set forth.

2. In a hame or collar fastener, the loop A,
provided with rounded cross-bar *a'*, raised
above the plane of the portions *a* and *b*, in
combination with the cam-lever C, with lugs 65
c c, embracing the bar *a'*, and loop B, attached
to the opposite side of the hame or collar, the
parts being organized substantially as shown.

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

ERASTUS S. LAFFERTY.

Witnesses:

THOMAS MORITZ,

GEORGE TABLER.