

(No Model.)

L. WERLE.

ATTACHMENT FOR TUGS OR TRACES.

No. 353,185.

Patented Nov. 23, 1886.

Fig. 1.

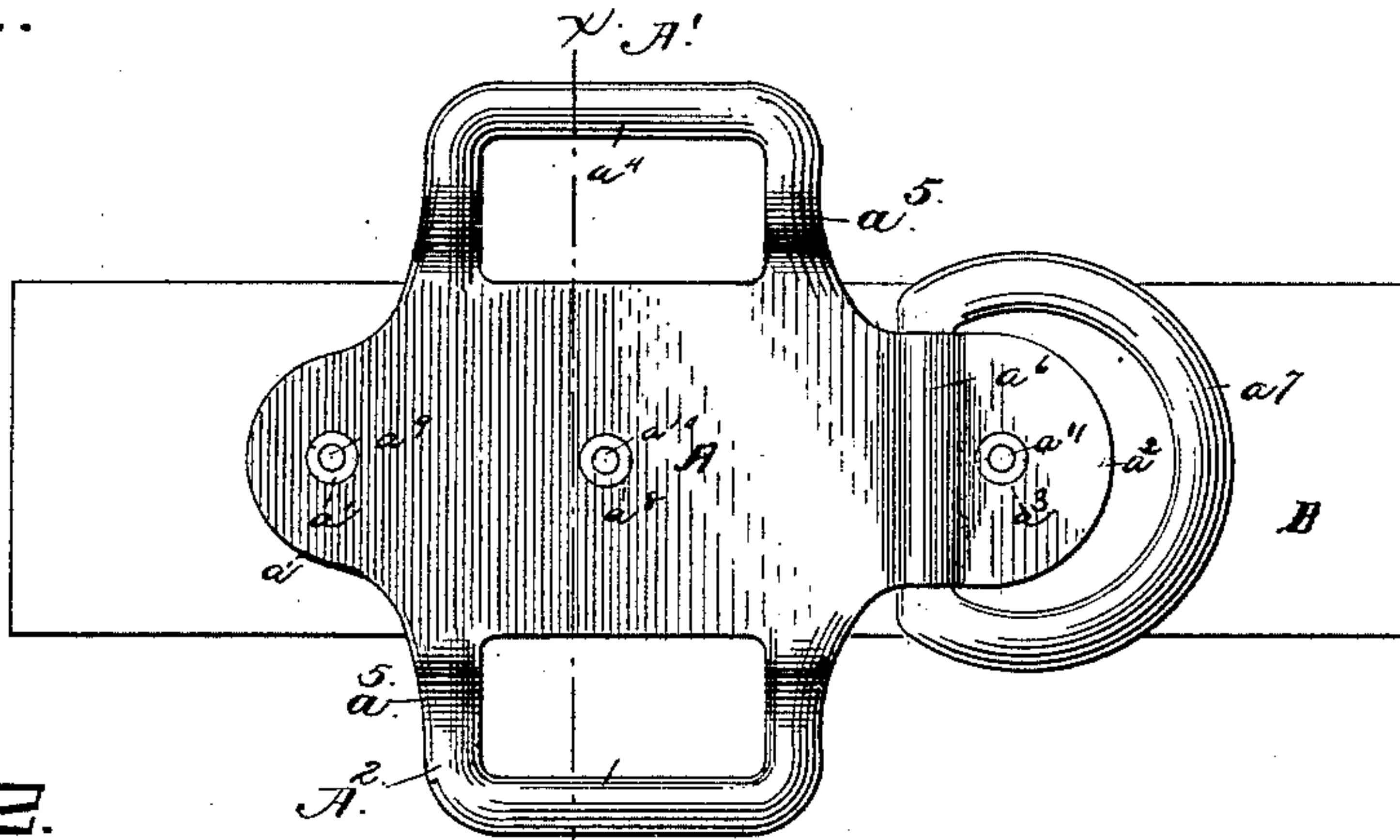


Fig. 2.

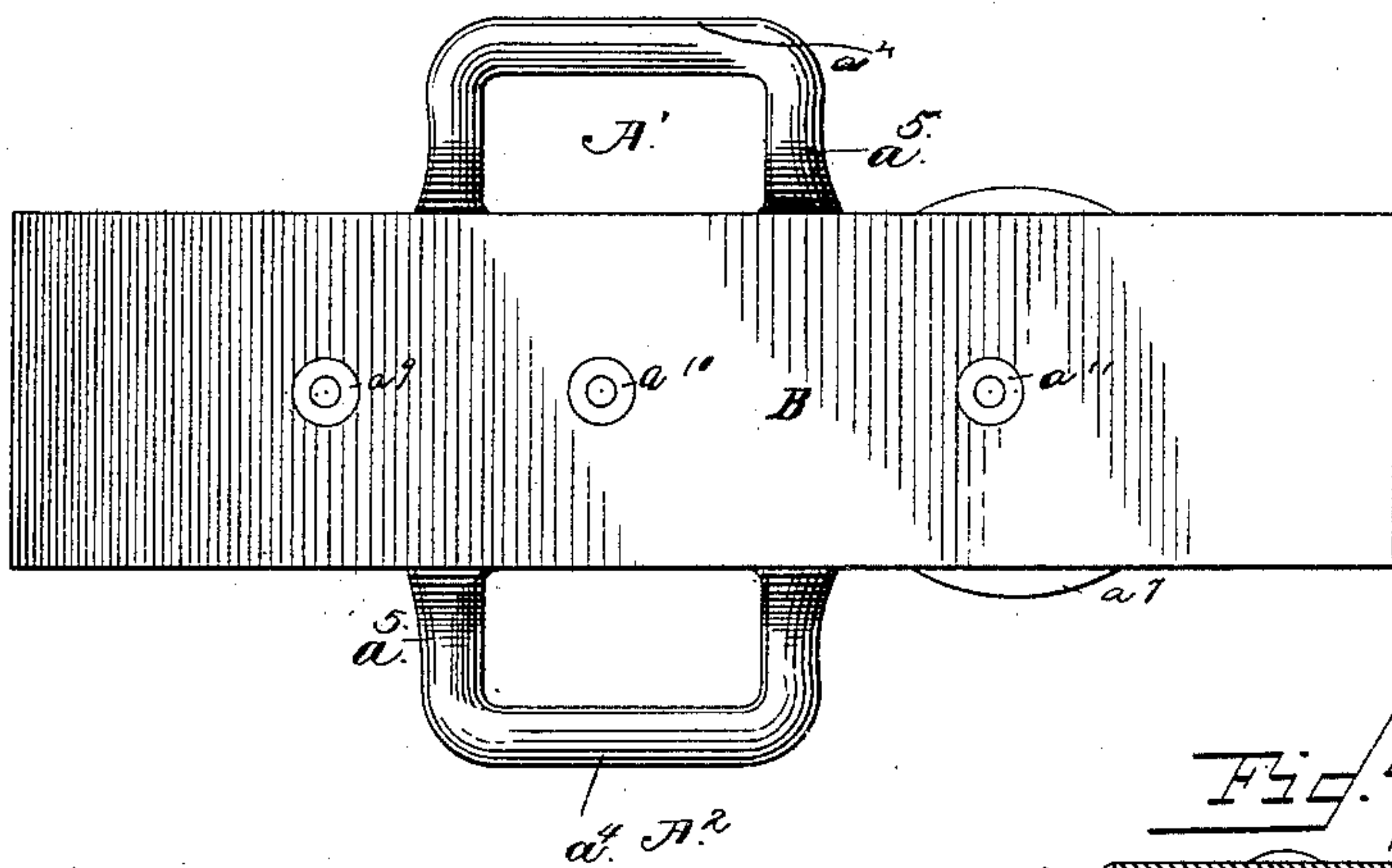
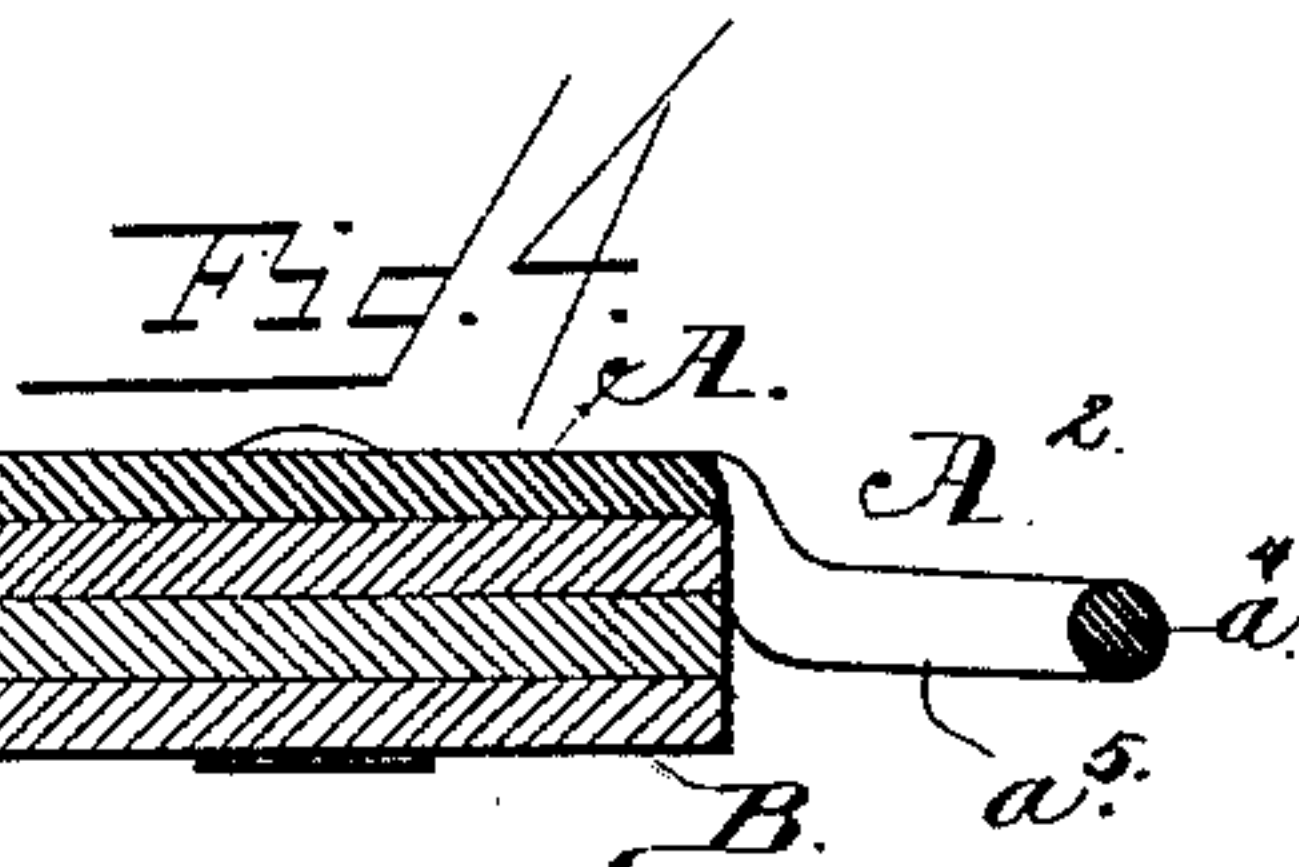
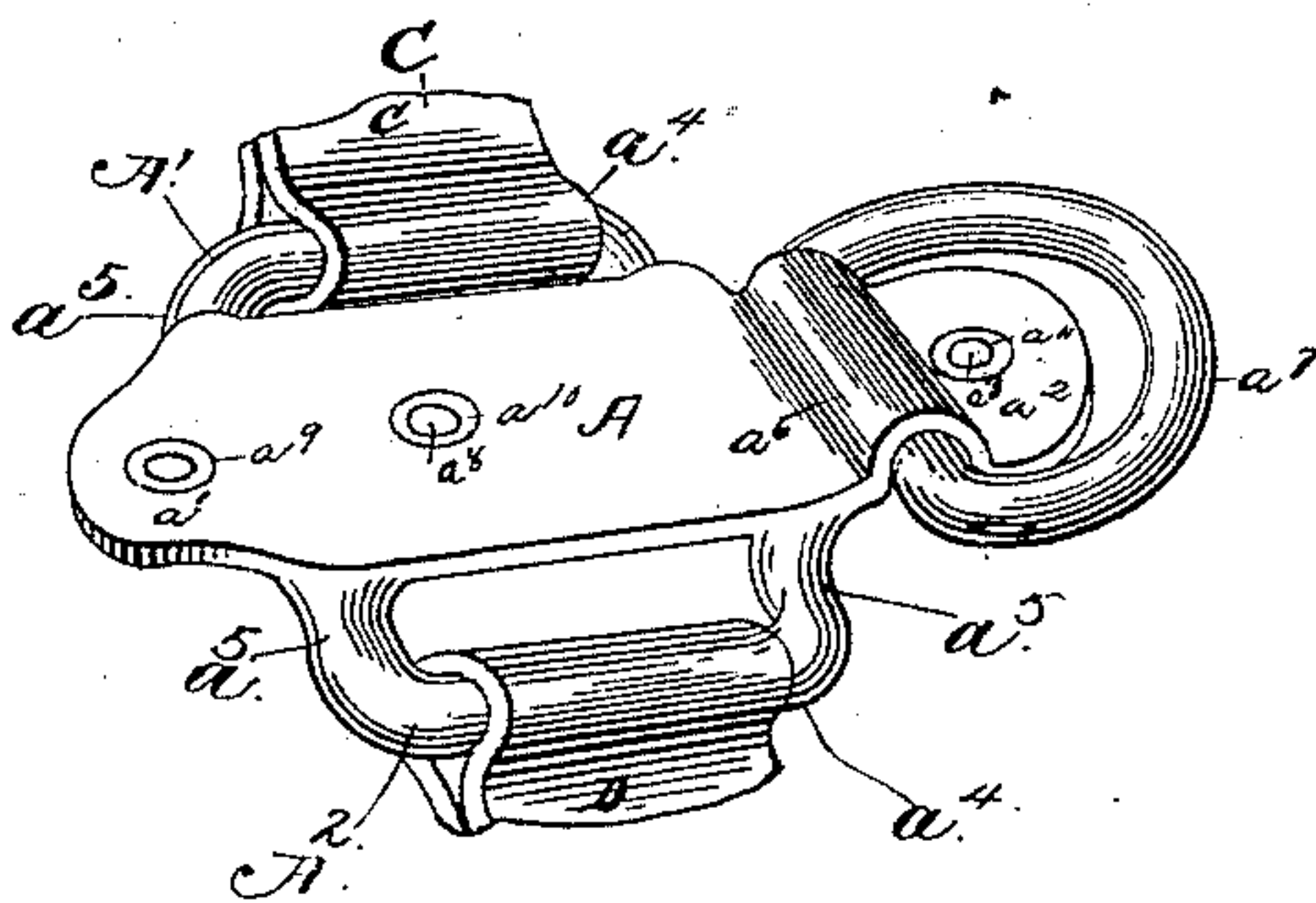


Fig. 3.



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LUIS WERLE, OF WARREN, PENNSYLVANIA.

ATTACHMENT FOR TUGS OR TRACES.

SPECIFICATION forming part of Letters Patent No. 353,185, dated November 23, 1886.

Application filed July 14, 1886. Serial No. 203,018. (No model.)

To all whom it may concern:

Be it known that I, LUIS WERLE, a citizen of the United States, residing at Warren, in the county of Warren and State of Pennsylvania, have invented a new and useful Improvement in Attachment for Tugs or Traces, of which the following is a specification.

My invention relates to the connection of the back and belly bands to the tugs or traces of heavy harness; and the object of my invention is to avoid the clumsy and wasteful mass of leather which has heretofore been found at the point of connection between the back and belly bands and tugs or traces.

To the above purpose my invention consists in the peculiar and novel construction and arrangement of the attachment, as hereinafter described and claimed.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved attachment in operative position. Fig. 2 is a similar view of the same from the opposite side to Fig. 1. Fig. 3 is a detached view of the attachment. Fig. 4 is a vertical transverse sectional view on the line X X of Fig. 1.

In the said drawings, A designates the body portion of the attachment, said body portion consisting of a plate, preferably of malleable iron and oblong in shape. At one end this plate is formed with a reduced portion, a , having a hole, a' , and at the opposite end with a similar reduced portion, a^2 , with a hole, a^3 . The plate A is provided on its opposite side edges with loops A' A^2 , which are formed or cast integral with the same. These loops are arranged on a place considerably to one side of the plate and out of line therewith, so that the strain of the back and belly bands of the harness, which are connected to the said loops, is brought directly upon the center of the harness-tug and not upon the upper and lower sides thereof, as will be very readily understood. Each of the loops comprises the side bars, a^4 , which are arranged to one side and out of line with the body or plate of the attachment, and the end bars, a^5 , which connect the said side bars, a^4 , with the body or plate A, the extremities of the end bars being curved

forwardly and out of line with the side bars at the points where they join the body or plate of the attachment, as clearly shown in the sectional view, Fig. 4.

The back-band C of the harness is connected to the upper loop, A' , of the attachment, and the belly-band D is connected to the lower loop of the attachment, as shown in Fig. 3 of the drawings, and as the side bars, a^4 , of the said loops are arranged to one side of the body or plate of the attachment and in line with the vertical center or axis of the harness-tug B, to which the attachment is secured, the strain of the said back and belly straps is brought directly in line with the center of the tug B, thereby relieving the attachment of the direct strain of the straps C D and materially adding to the strength and durability of the structure.

At the point of union between the reduced portion a^2 and the body A is formed transverse ridge a^6 , the under side of which is grooved out to receive a D or ring, a^7 . In the middle of the body A is formed a hole, a^8 .

The plate A is secured to the harness as follows: B designates the trace or a leather section of a tug, and a^9 a^{10} a^{11} designate rivets passing, respectively, through the holes a' a^3 a^8 of the plate. These rivets pass also through the leather B, and are clinched on the inner side of the same, leaving a practically smooth inner surface to the leather.

The straight bar of a D is fitted in the groove of the ridge a^6 of the plate A, or a ring may be fitted therein, the groove in the latter instance being curved to conform to the shape of the ring. The D or ring is confined between the ridged part of the plate A and the tug B, and it is free to swing back and forth and accommodate itself to the movements of the breeching-strap, which is padded therethrough. The D is thus swiveled between the plate and tug, and it is arranged on the opposite or outer side of the plate or body A to the integral loops A' A^2 thereof, so that it is free to swing back and forth and accommodate itself to the motions of the breeching-strap without coming in contact with the said loops A' A^2 . When whiffletrees are connected to neck-yokes of harness for holding-back purposes, and with straps running from the whiffletrees to the

breeching, the said holdback or breeching-
straps are passed through the swiveled **D** or
loop, which swings freely and readily accom-
modates itself to any position and movement
5 of the straps without stretching the loops **A'**
A², thereby forming a secure support for the
breeching-straps and permitting free move-
ment thereof.

By virtue of this attachment much time and
10 labor are saved in making up the harness, and
much material is also economized. The un-
der side of the tug or trace at the point of at-
tachment of the device is smooth, so that all
chafing of the animal is avoided.

15 I am aware of Patent No. 237,191 for a hame-
tug, which shows a tug formed of a number of
pieces of leather sewed together and having a
hame-clip swiveled to the front end thereof.

The shank of the hame-clip has a groove on
20 its under side, in which is fitted a flat rectan-
gular loop, which is thereby swiveled in place
and receives and supports a trace of the har-
ness. I am also aware of Patent No. 177,563
for a harness attachment, which comprises a
25 body or plate having projecting flanges on op-
posite sides, between which is arranged a har-
ness-tug, the said tug being riveted to the
plate. This plate is further provided with
three loops, two of which are arranged on op-
30 posite sides of the plate and the other one at
one end thereof. All of these three loops are
cast integral with the plate, and they are ar-
ranged in line therewith or in the same verti-
cal plane. My invention differs from the de-
35 vices shown in the patents hereinbefore re-
ferred to in that I arrange the side loops of
the plate or body to one side of the said body
and out of the same vertical plane of the same,
whereby the strain of the back and belly bands
40 is brought upon the center of the harness-tug.
My invention further differs from the devices

of the said patents in that I provide the plate
or body with a swiveled **D**, which is arranged
in a vertical position and at right angles to the
integral loops of the said body in the oppo- 45
site side of the said plate to the loop thereof,
so that neither it nor the breeching-strap sup-
ported thereby will strike the loops. The
breeching-strap passes freely through the said
D without interfering with or striking the 50
loops, and the **D** will swing freely to accom-
modate itself to the motions of the said breech-
ing-strap.

I am further aware that it is not new to pro-
vide a harness-buckle with oblique loops, and 55
this construction I therefore broadly disclaim.

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

As an improved article of manufacture, an 60
attachment for traces or tugs, comprising a
flat plate or body, **A**, provided with holes for
the insertion of rivets or like means for secur-
ing the plate or body to one side or face of the
trace or tug, the said plate or body being bent 65
outward transversely at one end to provide a
ridge, **a**⁶, the inner side of which ridge pro-
vides a groove or space between the plate and
the leather, a swinging **D**, **a**⁷, journaled in the
said groove or space, and the integral loops **A'** 70
A², at opposite sides of the plate or body **A**,
said loops being deflected in rear of a vertical
line drawn through the body or plate **A**, so
that the loops come directly on a line with the
solid portion of the trace or tug, as set forth. 75

In testimony that I claim the foregoing as
my own I have hereto affixed my signature
in presence of two witnesses.

LUIS WERLE.

Witnesses:

JACOB J. LEONHART,
JACOB GAUDER.