

(No Model.)

C. A. KIEFER & F. C. EBY.

HOLDBACK FOR VEHICLES.

No. 357,086.

Patented Feb. 1, 1887.

Fig. 1.

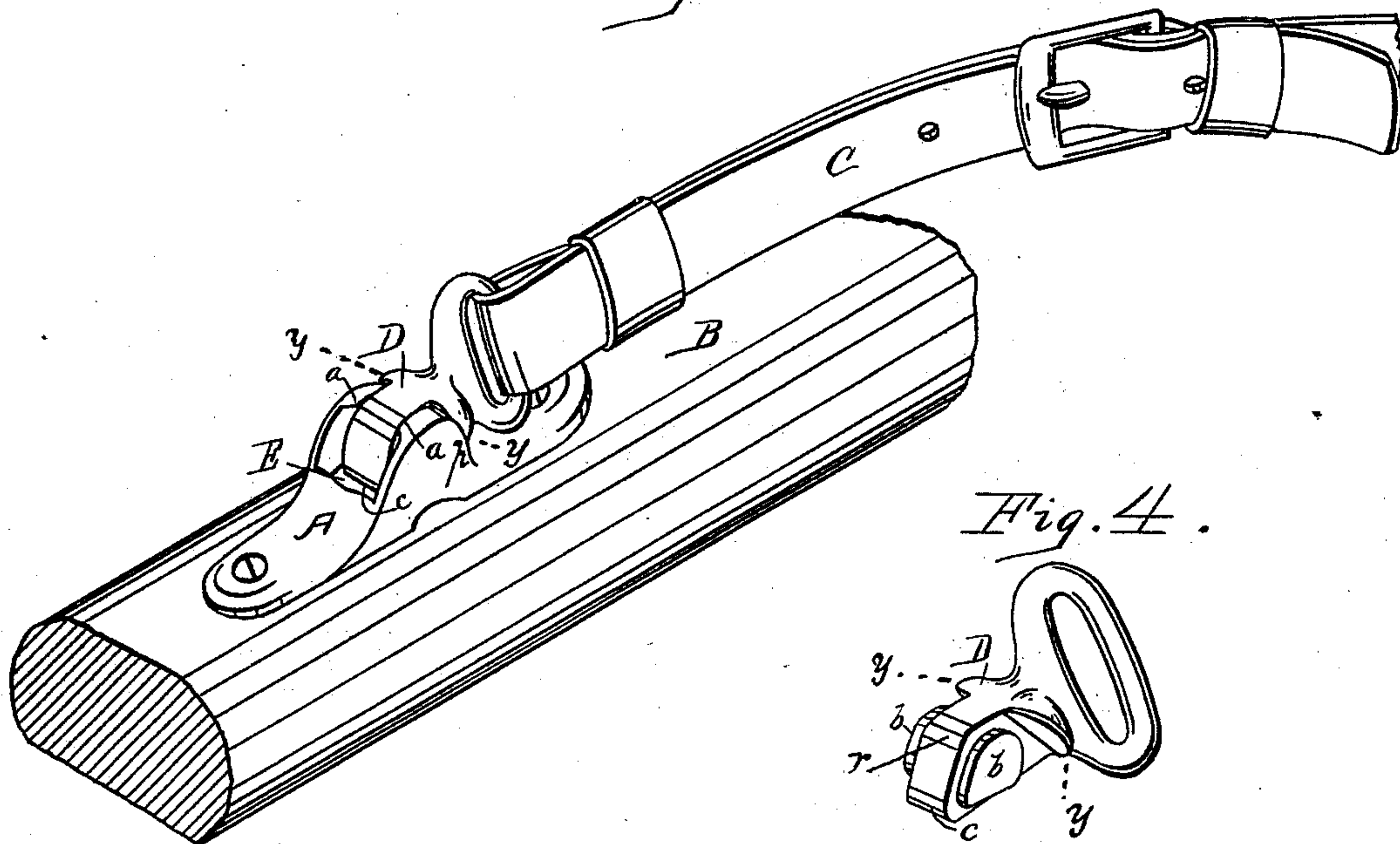


Fig. 4.

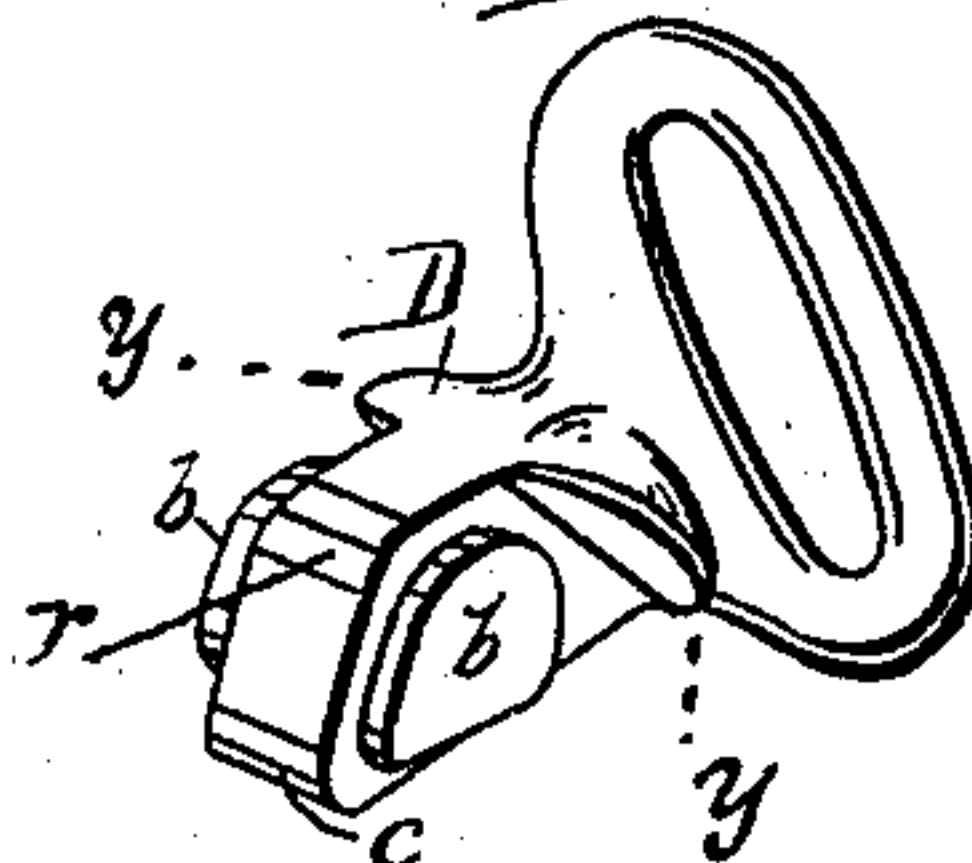


Fig. 2.

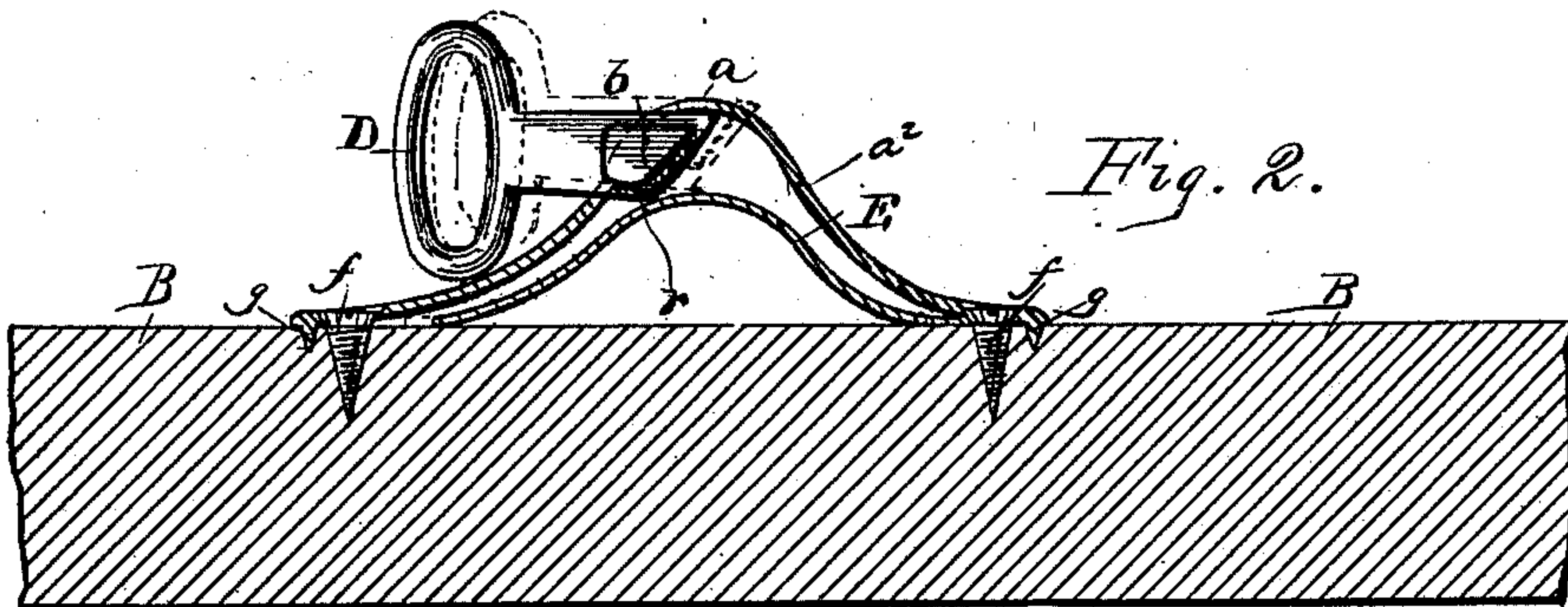
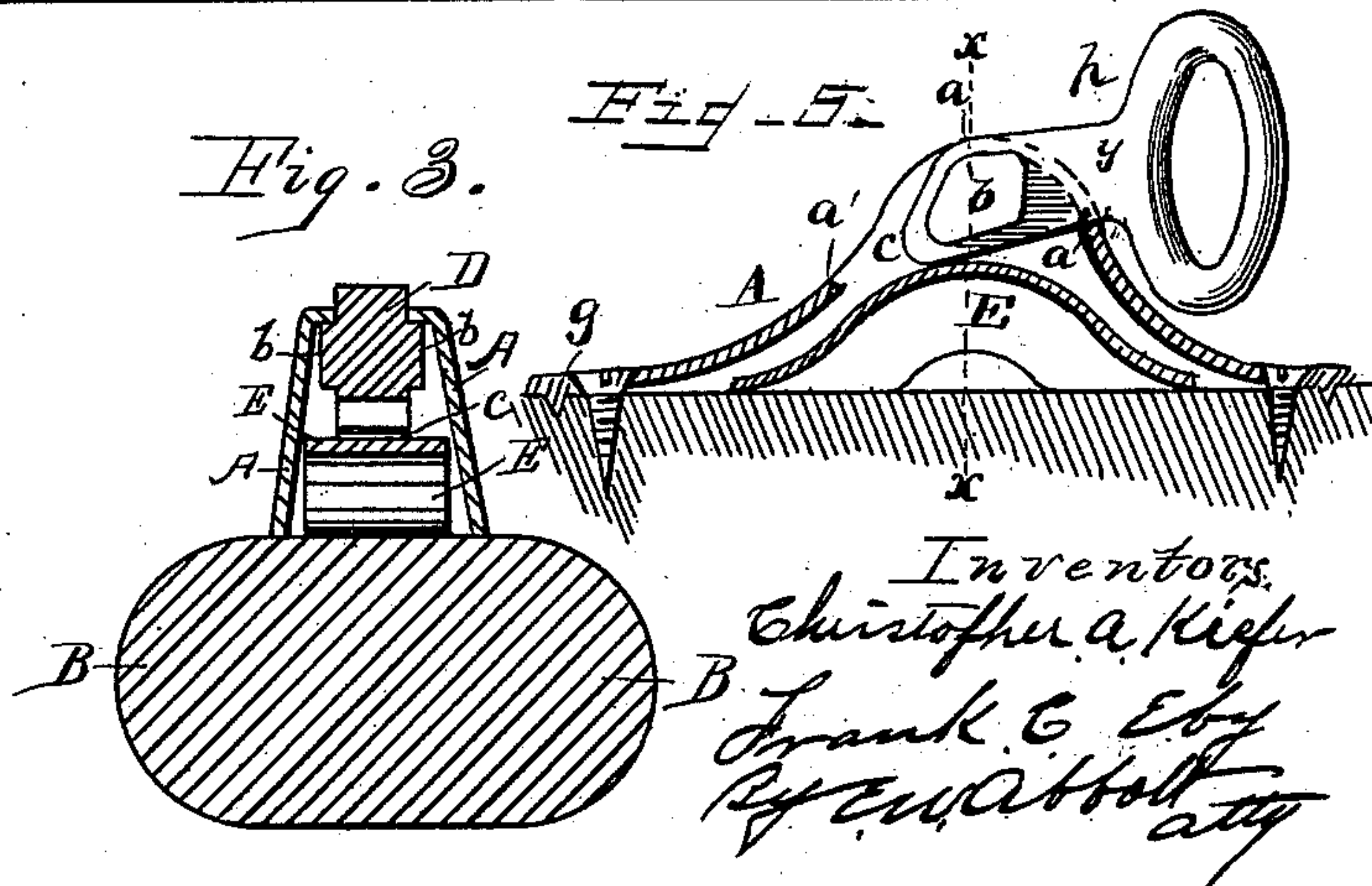


Fig. 3.



Attest

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UNITED STATES PATENT OFFICE.

CHRISTOPHER A. KIEFER AND FRANK C. EBY, OF DETROIT, MICHIGAN;
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HOLDBACK FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 357,086, dated February 1, 1887.

Application filed July 10, 1886. Serial No. 207,680. (No model.)

To all whom it may concern:

Be it known that we, CHRISTOPHER A. KIEFER and FRANK C. EBY, of the city of Detroit, county of Wayne, and State of Michigan, have invented new and useful Improvements in Safety-Holdback Attachments; and we hereby declare that the following is a full, clear, and exact description of the invention, and one that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Our invention relates to an improvement in safety-holdbacks for attaching breeching-straps to thills, which improvement will be fully understood from the following description, when taken in connection with the annexed drawings, in which—

Figure 1 is a perspective view of the improved device secured to part of a thill, and having a portion of a breeching-strap attached to it. Fig. 2 is a longitudinal sectional view showing the looped lock in the act of being inserted into case. Fig. 3 is a cross-section through the device in the plane indicated by dotted line *x x* on Fig. 5. Fig. 4 is a perspective view of the looped lock detached from its case; and Fig. 5 is a longitudinal section through the case and part of a thill, showing the looped lock in operative position.

A designates the cap or case, which is made of malleable iron with a T-shaped slot through its arched portion, presenting hooking-lips *a a* and shoulders *a' a'* at the ends of the slot, and also an external abutment, *p*, for a purpose hereinafter described. This case is also constructed with spurs *g g*, projecting from its open back, adapted to serve, in combination with screws *f*, for firmly securing the case to the thill B.

C designates part of a breeching-strap, which is suitably attached to our improved looped lock D. This looped lock consists of an elongated loop, to which the breeching-strap is attached, on which loop is formed a shank, which is adapted to enter the T-slot in the case when in the position indicated in full lines, Fig. 1. The shank is cam-shaped, and presents an acute rounded nose, *c*, at its extreme end, and an obtuse rounded shoulder, *r*, which is at the bottom of the shank when the lock D is in the

position represented in Fig. 2. On opposite sides of the shank we form two cam-shaped lugs or bosses, *b b*, clearly shown in Figs. 2 and 5 and in cross-section in Fig. 3. These bosses are shaped like the cam portion of the shank, with this exception: the surfaces are rounded and adapted to conform to the inner curved or hooking sides of the lips *a a* of the arched portion of the case A, as clearly shown in Fig. 5. In combination with the cams we form on opposite sides of the said shank two broad lips, *y y*, located at the root of this shank and so shaped that when the looped lock is in the position shown in Figs. 1 and 5 the lips *y y* will impinge against the abutment *p*.

E designates a leaf-spring, which is bow-shaped and applied loosely in the case A, so that its ends bear directly against the thill, and are free to contract and spread apart.

The looped lock is introduced into the case in the position indicated in Fig. 2 in full lines, in which position it will be observed that the shoulder *r* impinges against and compresses the spring E, and the upper straight portions of the cam-shaped lugs *b b* bear against the ends of the hooked lips *a*. The loop is then forced directly backward until the acute ends of the wedge or cam shaped lugs strike against the end of the arch, as indicated in dotted lines, Fig. 2. The loop is then swung back to the position indicated in Fig. 5, in which position the butts or rounded ends of the said lugs will be forced by the spring E into the hooked lips *a a*. The spring will then force the shoulders *y y* against the abutment *p*, and the shank against the rear end, *a'*, of the T-shaped slot through the case A. The locking of the loop is thus effected in a safe and secure manner, and it can only be unlocked by reversing the several movements described.

By reference to Fig. 5 of the annexed drawings it will be seen that owing to the peculiar shape of the four cams formed on the breeching-loop, when this loop is locked in position its proper axis will be forward of the dotted line *x x*. Consequently the action of the bow-spring E will be to hold the loop and its shank in the said position, and detachment can only be effected by a forcible compression of the spring E.

We are aware that it is not new in holdbacks

to combine with a case having a T-shaped slot through its arched portion a locking breech-strap loop having cylindrical pins on its sides for engaging with hooked lips and an enlargement having a flat side or edge adapted to bear on a pivoted platform acted on by a coiled spring. Such a device is shown in Letters Patent numbered 89,573, of 1869, and is not herein claimed. Neither do we broadly claim in hold-
backs hooking devices acted on by springs direct.

What we claim as new is—

The within-described holdback, consisting of an open-bottom case provided with spurs
and an arched portion having a T-shaped slot through it, the hooking-lips a , and a shoul-

der or stop, a^2 , in combination with a breech-
ing-strap loop shouldered at y , and having
a cam-shaped shank presenting the acute
rounded nose c , the obtuse rounded shoulder
 r , lugs b , of a cam or wedge shape, on its
sides, and a bow-spring, E , between the said
shank and the thill, all as specified.

In testimony that we claim the above we have
hereunto set our hands and affixed our signa-
tures, in presence of two witnesses, this 2d day
of July, 1886.

CHRISTOPHER A. KIEFER.

FRANK C. EBY.

In presence of—

E. W. ABBOTT,

FRANK STROHMER.