

(No Model.)

H. BRUNSON.
HOLDBACK FOR VEHICLES.

No. 413,357.

Patented Oct. 22, 1889.

Fig. 2.

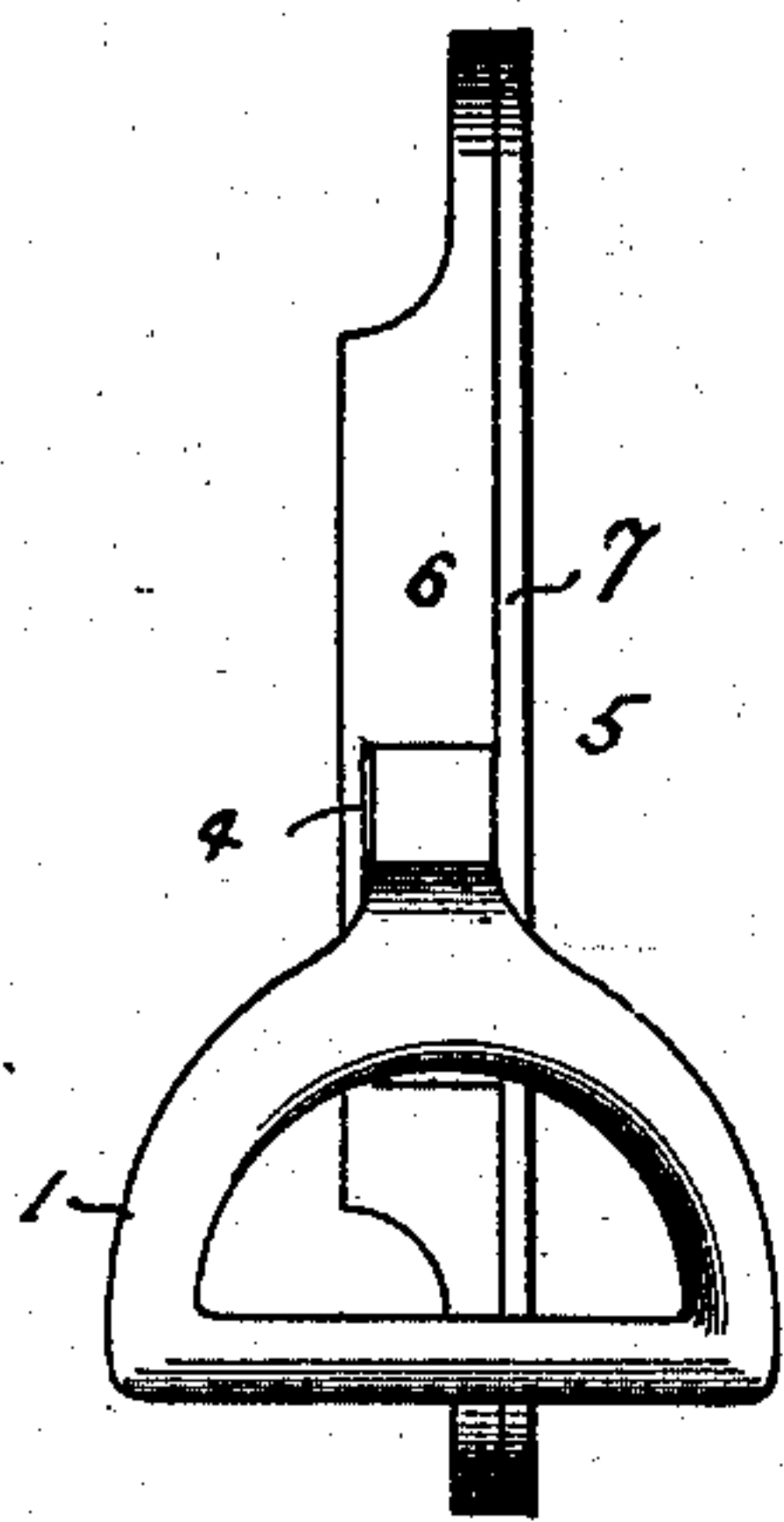


Fig. 3.

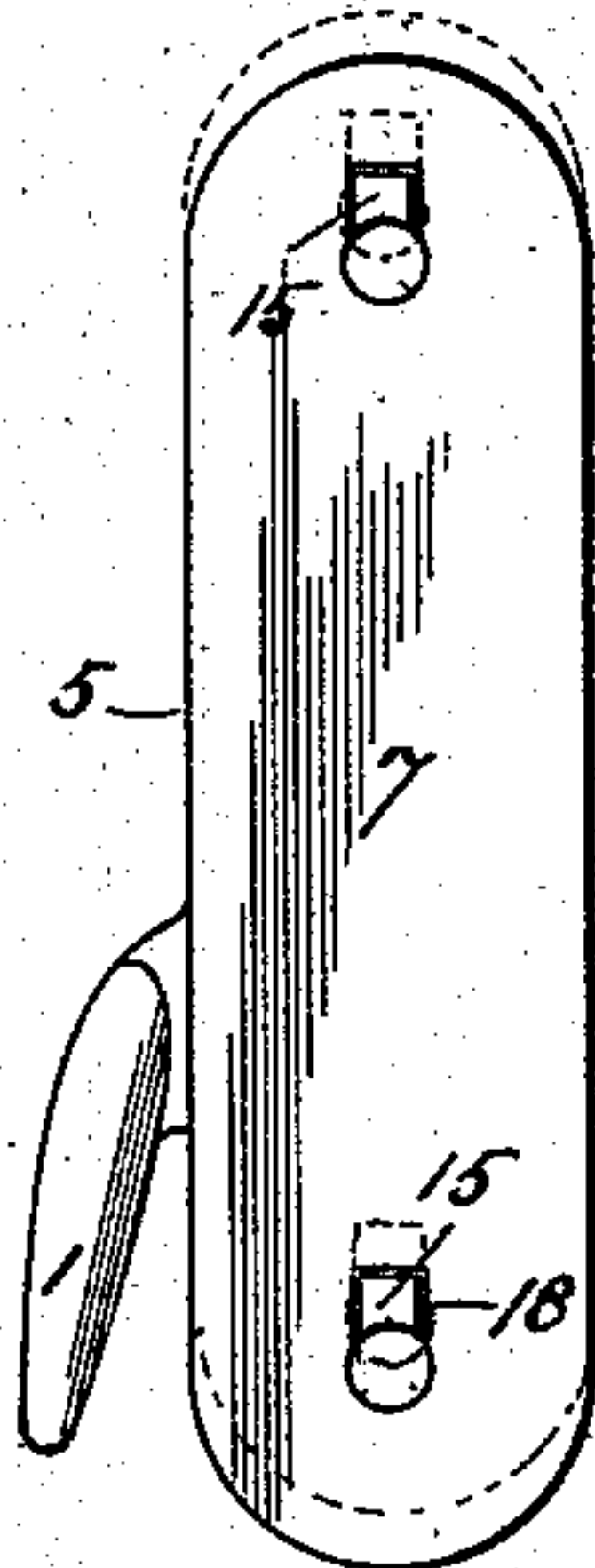


Fig. 4.

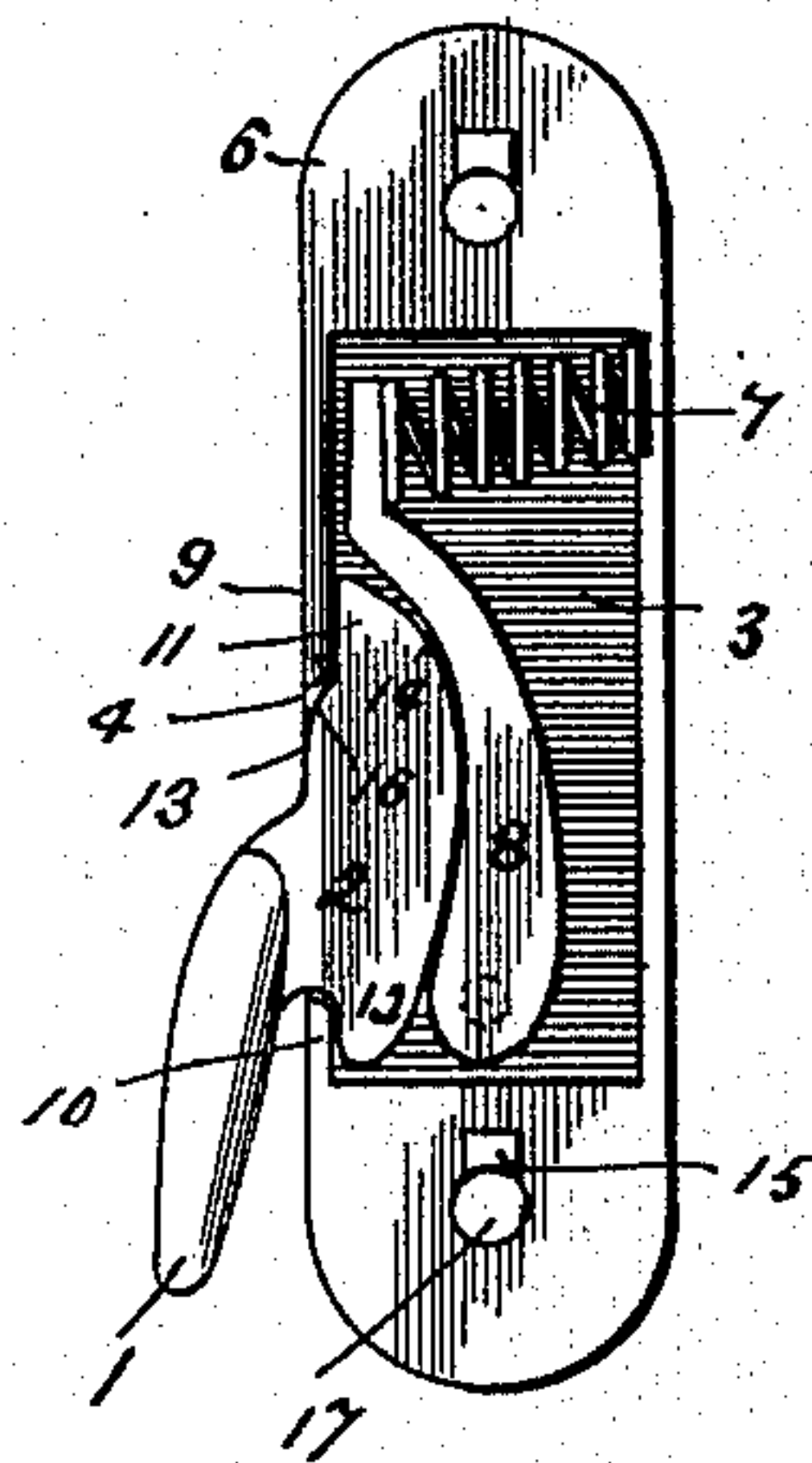


Fig. 5.

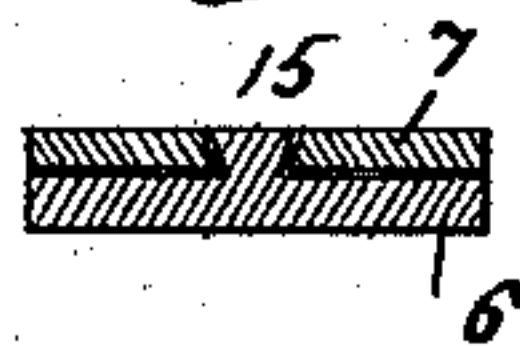
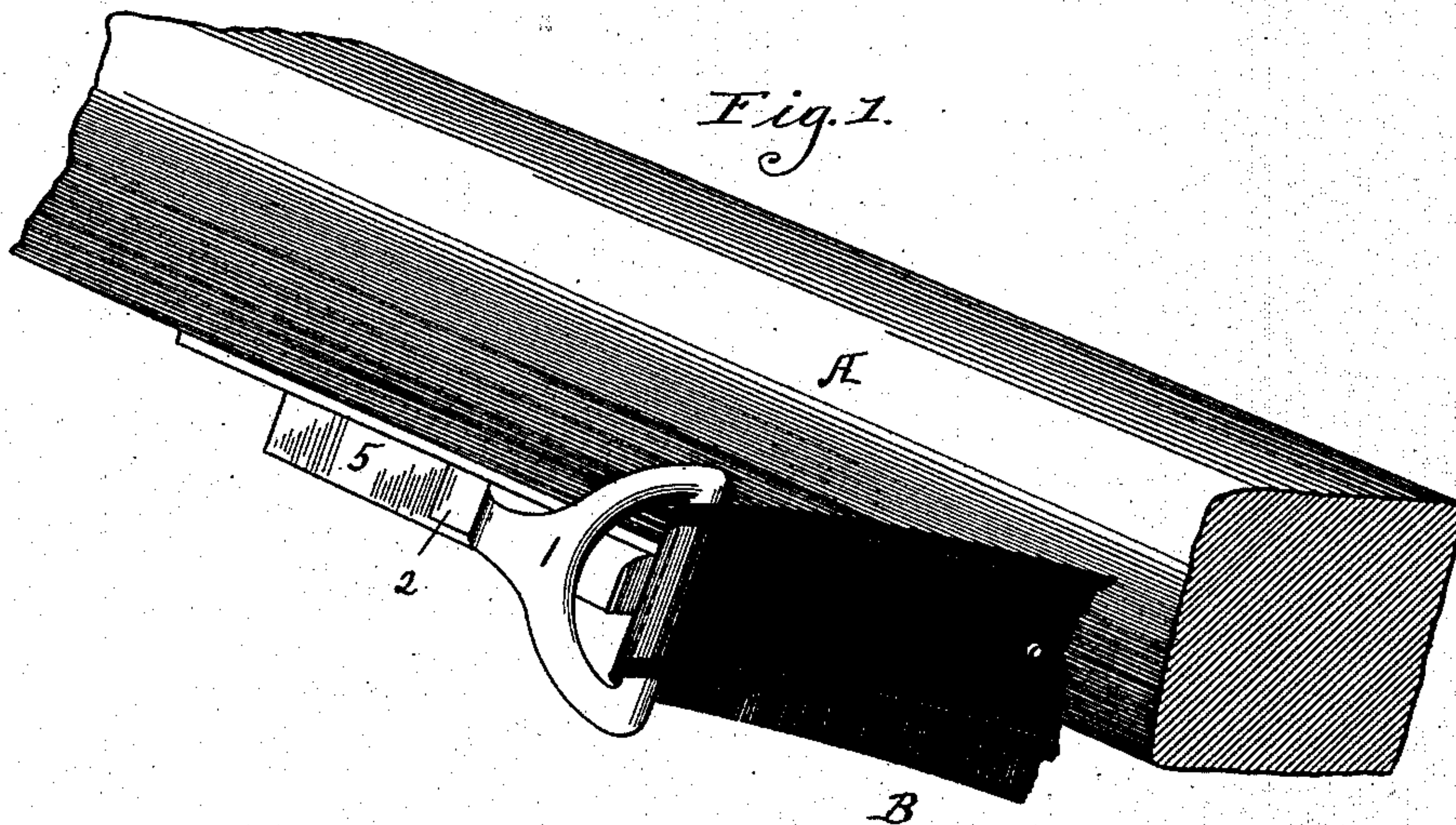


Fig. 1.



Witnesses,

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UNITED STATES PATENT OFFICE.

HORACE BRUNSON, OF CHICAGO, ILLINOIS.

HOLDBACK FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 413,357, dated October 22, 1889.

Application filed August 14, 1889. / Serial No. 320,666. (No model.)

To all whom it may concern:

Be it known that I, HORACE BRUNSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Holdbacks for Vehicles, of which the following is a specification.

This invention relates to holdbacks for vehicles; and it consists of a catch or hook adapted to be connected with the breeching-strap of the harness, and a socket or case with which the catch or hook engages, the said catch and case being of the novel construction hereinafter pointed out, and illustrated in the drawings, wherein—

Figure 1 is a perspective view illustrating my invention secured to a carriage-thill. Fig. 2 is an edge view of the device. Fig. 3 is a side view of the same. Fig. 4 is a view similar to Fig. 3 with one of the plates of the case removed, showing the interior arrangement thereof; and Fig. 5 is a section on the line 5 of Fig. 3.

In the drawings, A designates a thill, and B a breeching-strap, which is looped in an eye 1 of a catch having a head or hook portion which is adapted to enter through an opening 4, the chamber or socket 3, formed in a case 5, which is adapted to be secured to the under face of the thill. The case is preferably formed of two metallic plates 6 and 7, secured together, the outer one 6 being shaped to form the chamber 3. Within the chamber 3 is mounted the lever 8, which has a socket fitting over a stud carried by one of the plates, on which stud the lever is fulcrumed, the face of which lever opposite the opening 4 is preferably curved, as shown, while a spring 7 bears upon its free end and tends to force it toward the said opening. The head 2 of the catch is thin, and is so shaped that it may be passed into and out of the opening and in the case by direct forward and backward movements and without necessitating its being turned after entering the case in order to insure its being held in operative position. It is provided at its rear end under the loop 1 with a hook or catch-lug 12, adapted to fit under or inside of the flange 10 of the plate 6 in rear of the opening 4. The end of the head opposite the hook 12 has its outer face shaped to form the flat bearing 11, the raised por-

tion 13 adjacent to the neck of the loop 1, and the shoulder 16 between the parts 11 and 13. The rear or inner face 14 of the head 2 is curved to substantially fit the outer face of the lever 8, the function of which lever is to hold the head in position with its hook 12 bearing against the rear flange 10 and its flat bearing-face 11 against the forward flange 9, in which position the face 13 lies flush with the outer faces of the flanges 9 and 10 of the plate 6, and in connection with the shoulder 16 serves to close the opening 4, and thus prevent the entrance of dirt, &c., into the chamber 3. The catch is made to engage with the case by thrusting the head 2 forward through the opening 4 into the chamber 3 until the neck of the loop strikes the rear edge of the flange 9, which movement serves to force inward the lever 8 against the action of the spring 7. The loop 1 is then pressed inward, carrying the hook 12 into the chamber 3, in which position the action of the outer face of the lever 8, under the force of the spring 7 upon the rear curved face 14 of the head 3, forces the catch rearward, with its hook 12 under the flange 10. When in this position, it is practically impossible to accidentally detach the catch from its case, since both ends of the head 2 are hooked under the ledges or flanges 9 and 10 of the case; and, further, they are held in such position by reason of the peculiar shape of the head and the engaging portion of the lever 8, so that any force which will disengage the said parts must operate to force forward the catch against the action of the spring-lever and at the same time move it outward from the case. The shoulder 16 serves as a sort of lock to keep the catch in place, since, when in the position shown in Fig. 4, the catch cannot be forced forward without compressing the spring 7.

By preference the two parts 6 and 7 of the case are detachably secured together, and for this purpose the inner face of one of the plates is provided with undercut lugs 15, (see Fig. 5,) and the other plate with the key-hole-shaped openings 18, the enlarged portions of which permit the plate in which they are formed to be passed over the lugs 15 when placed in the position indicated by dotted lines, Fig. 3, after which it may slide into the full-line position, where the two parts will be

locked together, thus completing the case. When in this position, the enlarged portions of the openings 18 correspond with the screw-holes 17 in the other plate, so that when the case is secured to a thill the screws which hold it also lock the sliding plates. This arrangement renders the interior of the case readily accessible, so that should the spring or lever become broken or disarranged it may be replaced, and so that the chamber 3 may be easily cleaned should foreign matter accumulate therein.

My invention is simple and inexpensive in construction, is of a neat and compact form, is well adapted to prevent the entrance of dirt into the case, which nevertheless may be easily cleaned when found necessary, and the parts are so formed that when in operative relation it is practically impossible to accidentally detach the hook from the case, while such detachment can be intentionally made by a simple longitudinal movement against the action of the spring.

Without limiting myself to the precise construction and arrangements of parts shown, I claim—

1. The combination of a chambered case having an opening 4 into the chamber and the flanges at the opposite ends of the said opening, and a catch having a head adapted to pass through the said opening into the case and engage with the inner faces of the said flanges at the opposite ends of the opening, substantially as set forth.

2. The combination of a chambered case having an opening 4 into the chamber and the flanges at the opposite ends of the said opening, a spring-actuated lever mounted within the said chamber, and a catch having a head adapted to pass through the said opening into the case and to bear against the inner faces of the said flanges at the opposite ends of the opening, in contact with which it is held by the said lever, substantially as set forth.

3. The combination of a chambered case having the opening 4 into the chamber and the flanges at the opposite ends of the said opening, a spring-actuated lever mounted within the chamber, and a catch having a head adapted to enter the chamber through the said opening and having at its rear end a

hook 12 and at the other end a bearing-face, the said hook and bearing-face being arranged to engage with the under or inner faces of the said flanges, substantially as set forth.

4. The combination of a case having a closed chamber with an opening 4 therein and flanges at the opposite ends of the said opening, a spring-actuated lever mounted in the said chamber, and a catch having a head adapted to enter the said chamber through the said opening and to engage at its opposite ends with the said flanges and provided with the shoulder 16 and the raised portion 13, with its outer face flush with the outer faces of the flanges, substantially as set forth.

5. The combination of the chambered case having the opening 4 and flanges 9 and 10, the spring-actuated lever 8 with an outer curved surface, and the catch having the hook 1 and the head 2, the latter having the curved rear face 14 and provided with the hook 12 at one end and the flat bearing-face 11 at the other end, substantially as set forth.

6. The combination of the chambered case consisting of the plates detachably secured together and the catch which engages with the said case, substantially as set forth.

7. The combination of the chambered case consisting of two plates, one provided with lugs and the other with key-hole-shaped openings, whereby they are detachably united, and the catch having a head adapted to enter the chamber in the said case, substantially as set forth.

8. In a holdback, the chambered case 5, adapted to be secured to a carriage-thill consisting of two plates, one provided with studs 15 and the other with key-hole-shaped openings 18, whereby the plates are adapted to be detachably secured together, the enlarged portion of the said openings 18 registering with the screw-holes 17, through which the screws attaching the case to the thill pass, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HORACE BRUNSON.

Witnesses:

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E. N. GILFILLAN.