## G. F. HOLLAND.

## Hold-Back.

No.  $\begin{cases} 3,032, \\ 34,036. \end{cases}$ 

Patented Dec. 24, 1861.



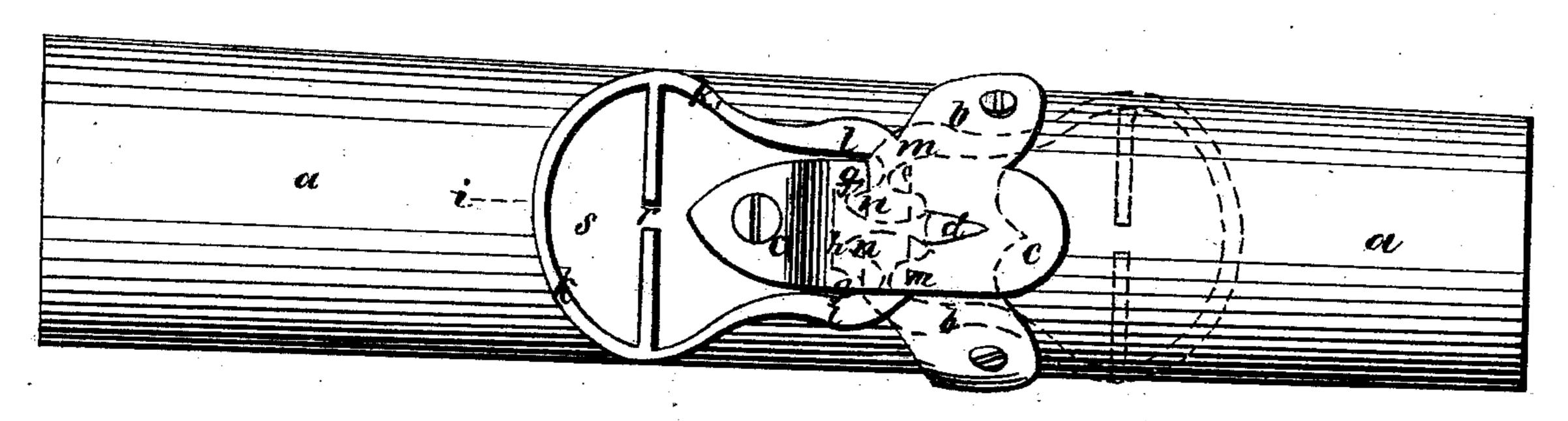


Fig. 2.

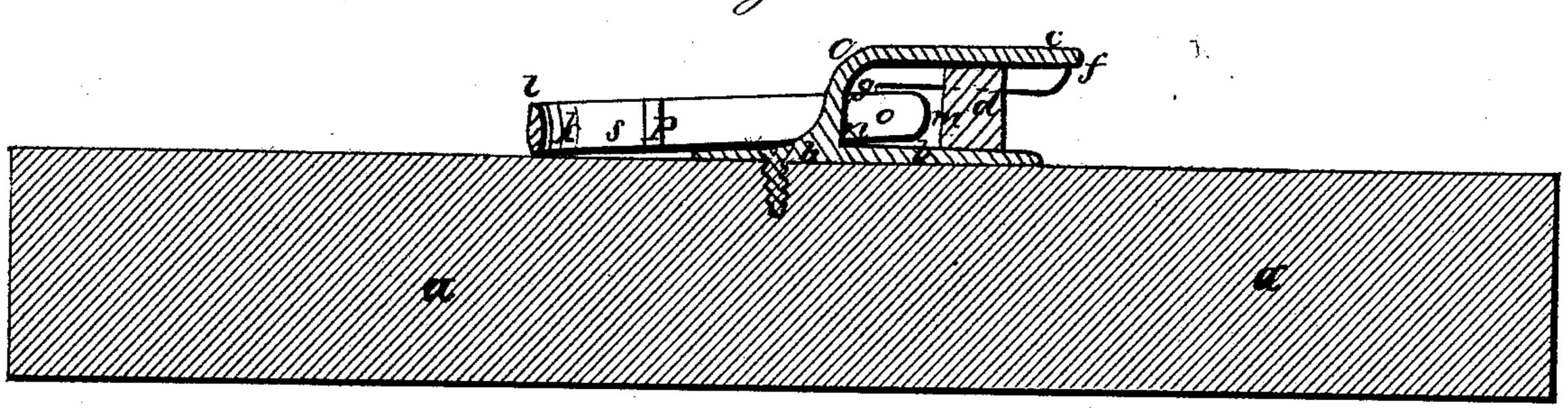
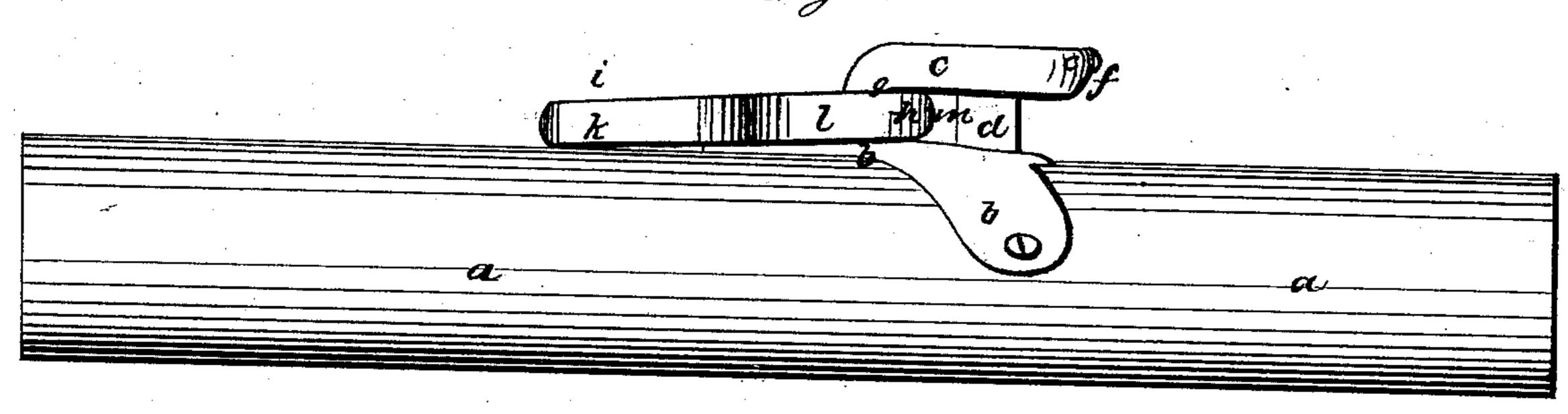


Fig. 3.



Witnesse

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Inventor:

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## United States Patent Office.

G. F. HOLLAND, OF LEOMINSTER, MASSACHUSETTS.

IMPROVEMENT IN MODE OF ATTACHING BREECHING TO SHAFTS OF CARRIAGES.

Specification forming part of Letters Patent No. 34,036, dated December 14, 1861.

To all whom it may concern:

Be it known that I, G. F. Holland, of Leominster, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in the Mode of Attaching the Holdback-Straps to Thills of Vehicles; and I do declare that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvements by which my invention may be distinguished from all others of a similar class, together with such parts as I claim and desire to have secured to me by Letters Patent.

The present invention consists in providing a new and peculiar mode of attaching the holdback-straps or breeching to the thills of vehicles, by means of which the said straps are immediately self-unfastened in case the tugs should break or become unhitched. The many advantages resulting from so attaching the holdback-straps to the thills as to permit of their being self-unfasteners in case of any accident to the vehicle, whereby the horse is set free from the same, are evident, and therefore I need not herein particularly specify them.

I accomplish the above-described and much-desired result by attaching to each end of the holdback-straps that have usually been secured directly to the shaft a spring-clutch, which so engages with a standard or stud upon the shafts as to be immediately relieved from the same if any accident occur or the traces become unhitched or broken.

The principal features and objects of my improvements having been thus set forth, I will proceed to describe in detail the peculiar construction and operation of the same.

In the accompanying plate of drawings, Figure 1 is a plan or top view of my improved arrangement of devices for attaching the breeching of the harness of a horse to shafts of carriages. Fig. 2 is a central longitudinal vertical section through a portion of the shaft of a carriage with my improvements applied thereto. Fig. 3 is a side view of the same, and Fig. 4 is a transverse vertical section.

a a in the accompanying drawings represent the shaft of a carriage or vehicle. Upon sired.

the upper surface of the shaft a is permanently secured by screws or otherwise a metallic plate b having a hook c.

d is a stud or projection with beveled sides placed upon or forming a part of the plate b, and which extends above the same to the under surface of the hook c at or near the end f of the same. g is a lip upon each side of the surface h of the hook c.

i is a spring-clutch, made of the form represented in the drawings and consisting of a circular portion k with spring jaws or arms l. Upon each end m of the jaws or arms l and forming a part thereof are hooks n that meet at or near the central longitudinal axis of the spring-clutch i, and which have the outer surface o of each beveled, as represented in Fig. 1.

p p is a partition extending from each side of the curved portion k of the clutch i nearly half-way across the same, thereby leaving a slot r, through which the holdback-strap is slipped into the opening s of the said curved portion k.

To each end of the breeching of the harness of a horse a spring-clutch, constructed as set forth, is permanently attached, as hereinabove described, and the spring jaws or arms l, being passed under the hook c of the shaft a beyond the stud or projection d, will engage with the lips g of the hook c. The clutch i of the harness in holding back the carriage acts against the hook c; but when a breakage of the tugs or traces or an unhitching of the same occurs the clutch is disengaged from the shaft as follows, viz: The clutch i swings in its bearings of the hook c by the drawing of the breeching occasioned by the forward motion of the horse until it is reversed, or nearly so, in position, as represented by red lines in Fig. 1, when the beveled sides o pass by or slip over the stud or projection d, thereby relieving the clutches of the harness from the shafts.

It will be seen from the above description that the stud or projection d serves to retain the clutch in its proper position under the hook c when the straps are acting to hold back the vehicle or carriage, but that it is so arranged as to permit of the immediate release of the clutch from the hook when desired

It will be evident that various forms of spring-clutches other than that herein described may be used, the principal object and feature of the present invention being to attach to the holdback-straps or breeching of a harness a spring-clutch which will so engage with a hook having a suitable stud or projection placed upon the shaft of the carriage as to be immediately self-released from the same when a breakage or unhitching of the tugs should occur.

Having thus described my improvements, I shall state my claim as follows:

I do not claim, broadly, any arrangement | Witnesses:
of devices which will permit the breeching | A. W. Brown, to be disengaged from the shafts of vehicles

whenever the tugs or traces become detached therefrom; but

What I do claim as my invention, and desire to have secured to me by Letters Patent, 

The particular combination and arrangement herein described, the same consisting of a spring-clutch attached to the harness and a fixed stud or standard permanently affixed to the shaft, the two operating together, substantially as described.

G. F. HOLLAND.

Joseph Gavett.