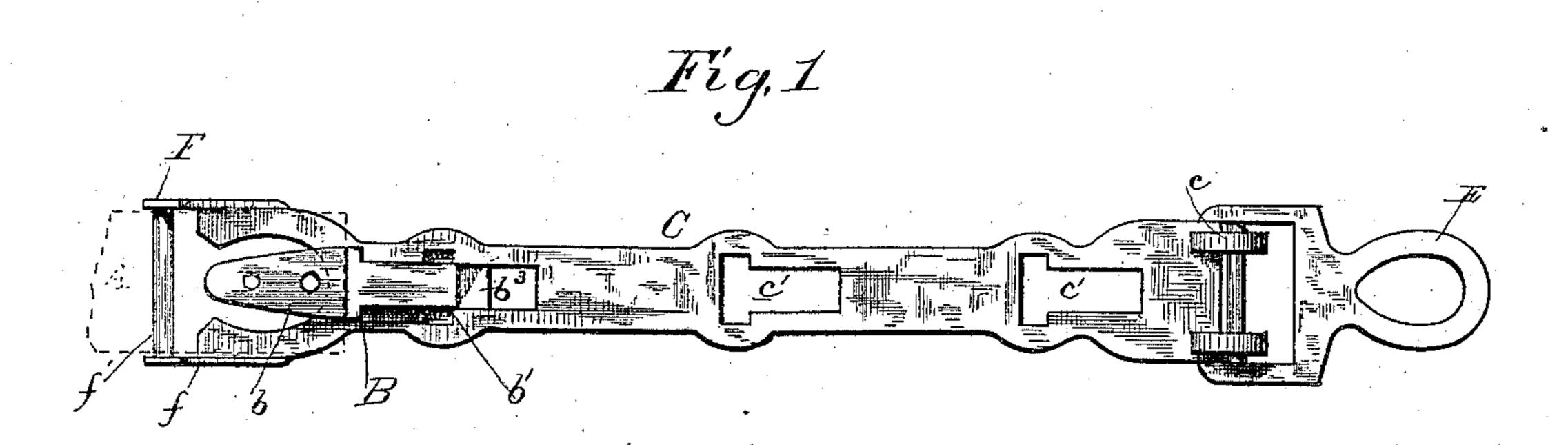
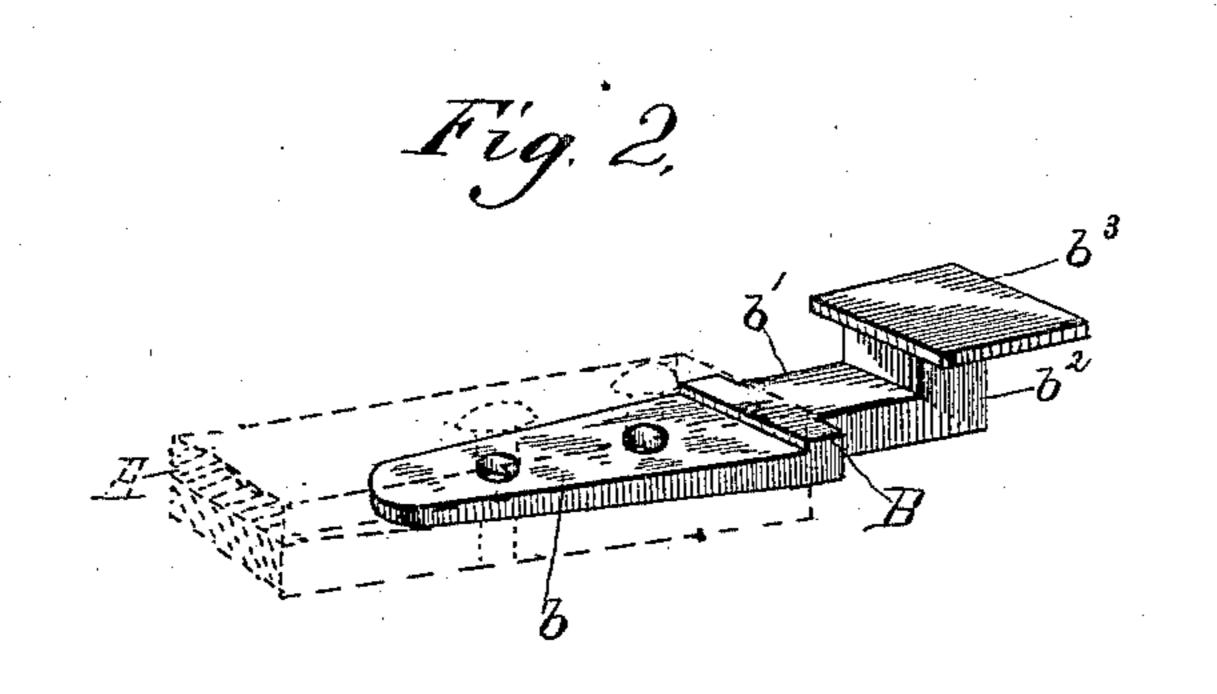
(No Model.)

C. H. SCHICK. HAME TUG.

No. 427,619.

Patented May 13, 1890.





MITNESSES: Mich. II, Commigles L. J. Bacon INVENTOR
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United States Patent Office.

CHARLES H. SCHICK, OF BURLINGTON, IOWA.

HAME-TUG.

SPECIFICATION forming part of Letters Patent No. 427,619, dated May 13, 1890.

Application filed March 21, 1889. Serial No. 304,158. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. SCHICK, a citizen of the United States, residing at Burlington, in the county of Des Moines and State of Iowa, have invented new and useful Improvements in Trace-Tighteners, of which the following is a specification.

My invention relates to an improvement in trace-tighteners; and it consists in the construction and arrangement of parts hereinafter described and claimed.

The object of my invention is to provide a simple, strong, and efficient trace tightening or adjusting device. I attain this object by the device illustrated in the accompanying drawings, wherein like letters of reference indicate corresponding parts in the several views, and in which—

Figure 1 is a front view of my device and 20 a portion of a trace therein, and Fig. 2 is a detail view of hook.

I am aware that many minor changes in the construction and arrangement of the parts of my device can be made and substituted for

In the drawings, A represents a portion of a trace having a hook B on its end.

The hook B is formed with a tongue b, having apertures therein, which is adapted to be inserted between the folds of the trace and there secured. The outer end b' of this hook is somewhat narrower than the tongue portion and has a lateral projection b^2 on its outer extremity. On this projection b^2 is secured a flat plate b^3 , its edges and ends extending beyond the sides of the projection.

C represents a metallic frame having ears c on its outer end, to which is secured the loop

35 E by a suitable pintle.

The frame C has a series of openings or eyes c' made therein. They are formed substantially T shape, the cross or widened portion being narrow. On the outer face of the inner end of the frame is formed a support or guide F, it consisting of two laterally-extending arms f and a cross-piece f', the space between the same and the frame being large enough to admit the trace to pass through and be snugly fitted therein. To permit the hook B to pass through the guide, the end of the frame is cut away or bifurcated, so that the hook may pass

into this bifurcated portion, and thus be passed under the cross-piece f'.

By the above-described construction it will 50 be readily seen that when it is desired to increase or shorten the length of the trace it is only necessary to insert the hook B in one of the openings c' in the frame, the projection b' remaining in the opening and preventing 55 any longitudinal movement of the trace, while the plate on the end of the projection prevents the hook from coming out of the opening. By the construction of the opening in a T shape the plate b^2 may be readily inserted 60 therein, as the thickness of the same is less than the widened portion of the opening. The projecting edges of the plate extend beyond the sides of the opening, and thus prevent the hook from coming out.

I am aware that many minor changes in the construction and arrangement of the parts of my device can be made and substituted for those shown and described without in the least departing from the nature and principle 70 of my invention.

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

Patent, is—

The tightener herein described for the rear 75 end of traces, consisting of the long metal bar C, having a series of \mathbf{T} -shaped openings therethrough, ears, as c, on the end of the bar, the loop E, secured to the ears, the guide F, formed on the opposite end of the bar and 80 consisting of the lateral arms f and cross-piece f', the end of said bar being cut away adjacent to the guide to form a space through which the trace-hook passes, and the hook B on the end of the trace, having projection b 85 and plate b^3 on the same, substantially as described.

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

CHARLES H. SCHICK.

Witnesses:

W. B. Culbertson, F. W. Chamberlin.