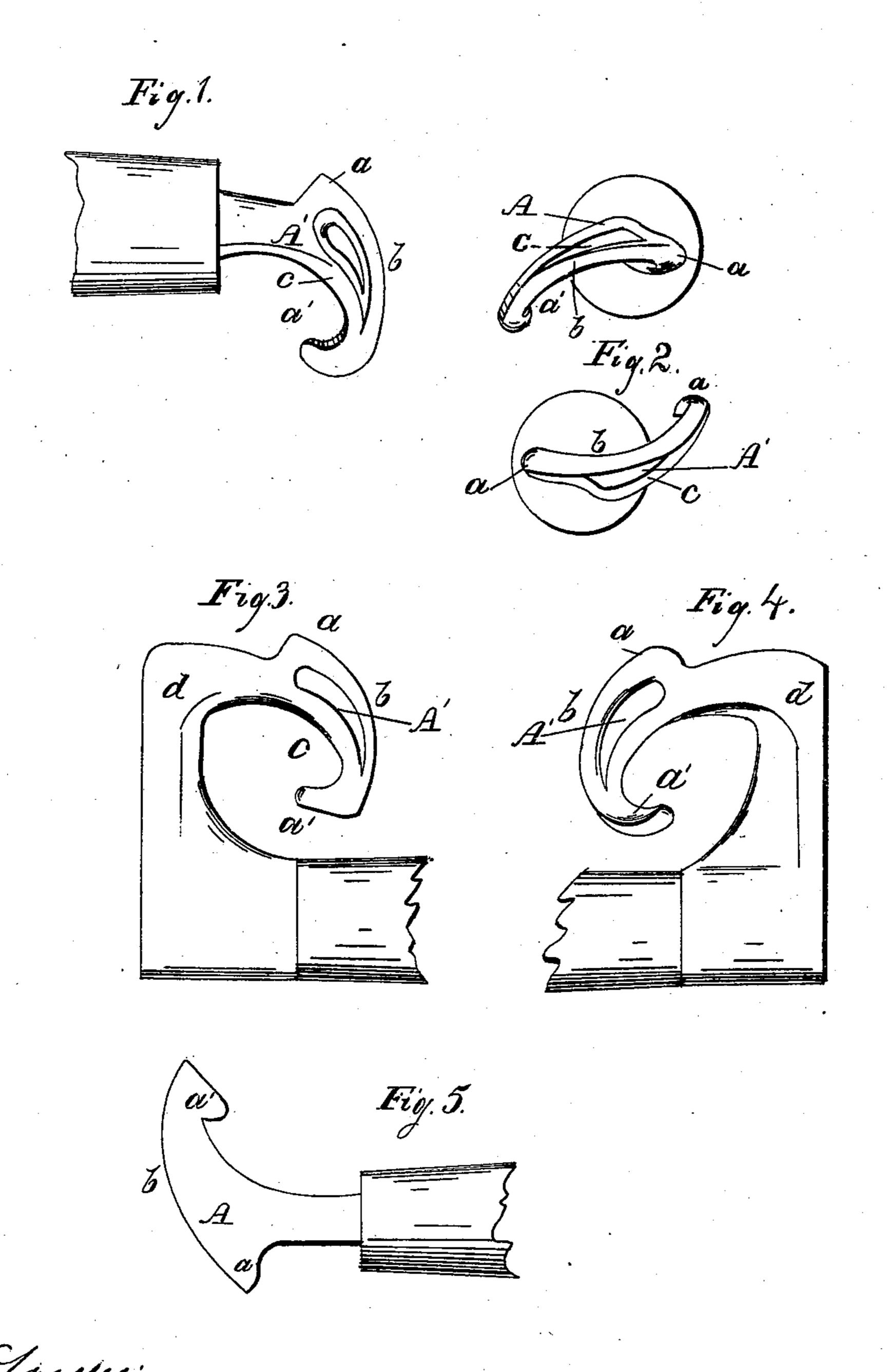
F. M. WELLER.

Whiffletree Hook.

No. 82,906.

Patented Oct. 6, 1868.



N. PETERS, Photo-Lithographer, Washington, D. C.

Anited States Patent Pffice.

FAYETTE M. WELLER, OF CHICAGO, ILLINOIS

Letters Patent No. 82,906, dated October 6, 1868; antedated September 24, 1868.

IMPROVEMENT IN TRACE-FASTENER.

The Schedule referred to in these Netters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, FAYETTE M. WELLER, of the city of Chicago, in the State of Illinois, have invented a new and useful Improvement in Trace-Fasteners; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, and the letters marked thereon, making a part of this specification.

Figure 5 represents the original hook, invented and patented by me January 19, 1864, A being the hook, with its anterior projection or shoulder, a, its posterior projection provided with the barb or guard a' and its convex border b.

Figure 1 shows my improvement thereon, and consists of the same hook, curved on its flat surface, and marked A', its convex surface, c, being upward.

Figure 2 presents an end view of the same curved hook, in the same position as in fig. 1.

Figure 2' is the same as fig. 2, with its concave surface upward.

Figure 3 shows the same curved hook, its convex surface, c, upward, and, by means of the bent shaft d, its position on the whiffle-tree reversed, so that the convex border, b, is turned inwards, to face its fellow on the opposite end of the whiffle-tree.

Figure 4 shows the same with its concave surface turned upward.

Thus the nature of my invention consists in a hook, which, by its peculiarity of form, without the aid of springs, keys, or other additional contrivance, enables the traces of a harness to be readily securely attached to a whiffle-tree, for any purpose of light or heavy draught, in a manner superior to what has heretofore been effected.

To enable others skilled in the art to make and use my invention, I will further describe its operation.

First. The hook applied to the whiffle-tree, with the convex surface, c, upward, as in figs. 1, 2, and 3, the whiffle-tree being attached loosely, as by a clevis, to the evener or cross-bar. When the trace slackens, the whiffle-tree will roll forward, bringing the shoulder a below the lower border of the trace-eye, thus securely holding the trace in its place. But if, by any accident, the trace-eye should be thrown over the shoulder a, before the whiffle-tree rolls forward, still the form of the hook is such, that it cannot be accidentally detached, and, on again being tightened, the eye will glide smoothly beneath the inferior or concave surface of the convex border b back to its proper position, while the whiffle-tree is again brought horizontal to the line of draught.

Second. The hook applied with the concave surface upward, either direct or reversed, the whiffle-tree being allowed to roll, or fixed so that it cannot, the elevation of the posterior part of the hook, with its barb or guard a', affords the most perfect immunity to the accidental detachment of the trace.

Third. The elevation of the posterior part of the hook, with its barb a', as shown in fig. 2', affords greater facility for hooking and unhooking the trace, besides the point will not "ride" the shaft, as is the case sometimes with the original hook.

Fourth. In the hook reversed, as in figs. 3 and 4, the curvature throws the point above or below the whiffletree, and renders it more convenient for hooking and unhooking, and enables the shaft d to be made shorter than it otherwise could be.

Thus, by the curvature, the hook is adapted to all kinds of whiffle-tree, and for all uses, and is convenient for traces provided with iron eye, or only a slot.

I do not claim the hook A, as shown in fig. 5, for that is a previous invention, and the subject of my patent of January 19, 1864; nor do I claim merely a curved hook, for other curved hooks may have been made before; but—

The curved hook A', to be placed on the whiffle-tree, in the manner as represented by figs. 1, 2, 3, and 4, is the improvement which I desire to secure by Letters Patent; hence,

I also claim the curved hook A', constructed and arranged substantially as and for the purposes herein set forth and described.

FAYETTE M. WELLER.

Witnesses:

- J. B. Turchin,
- L. H. LANE.