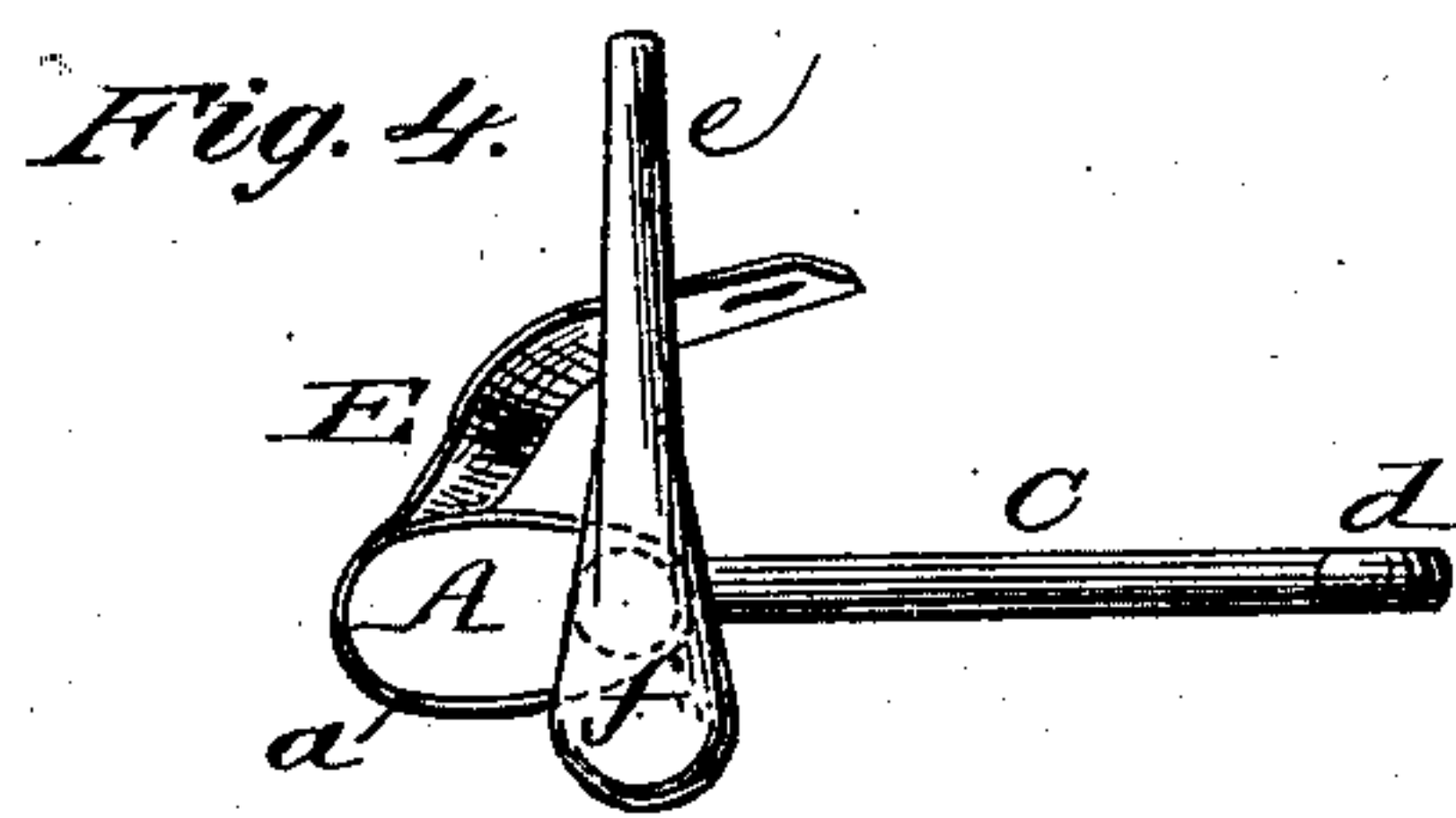
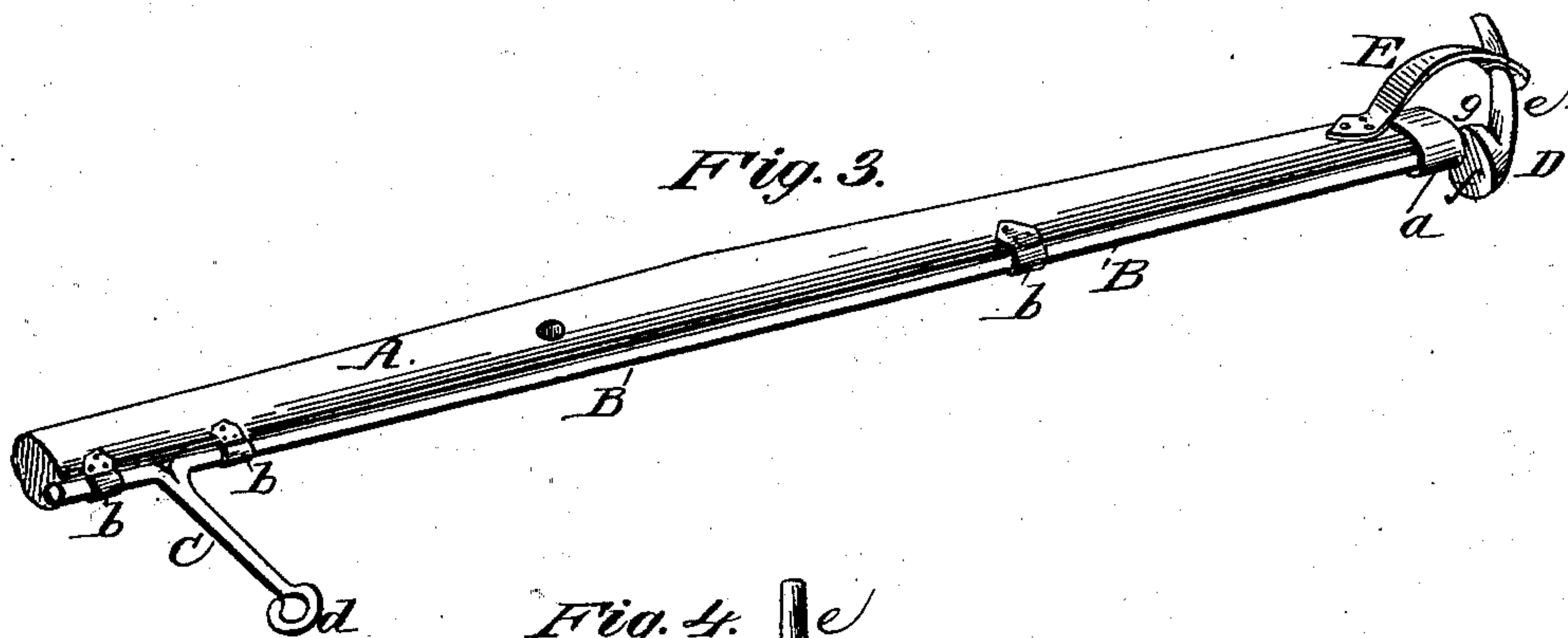
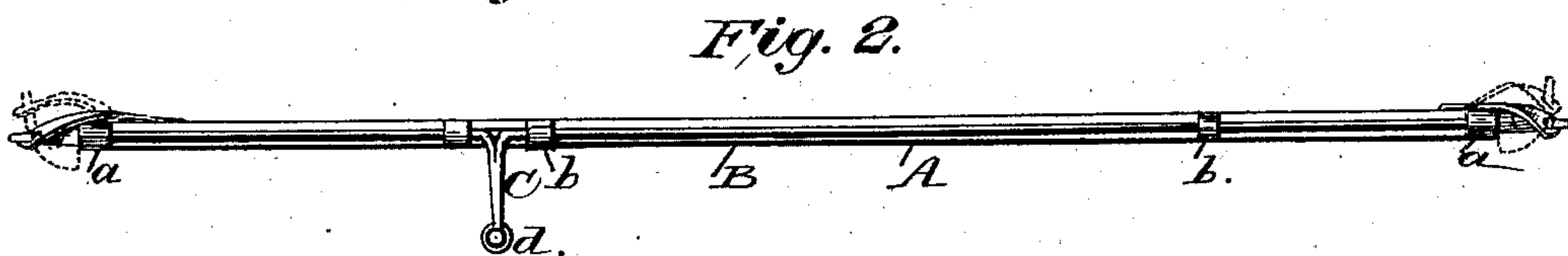
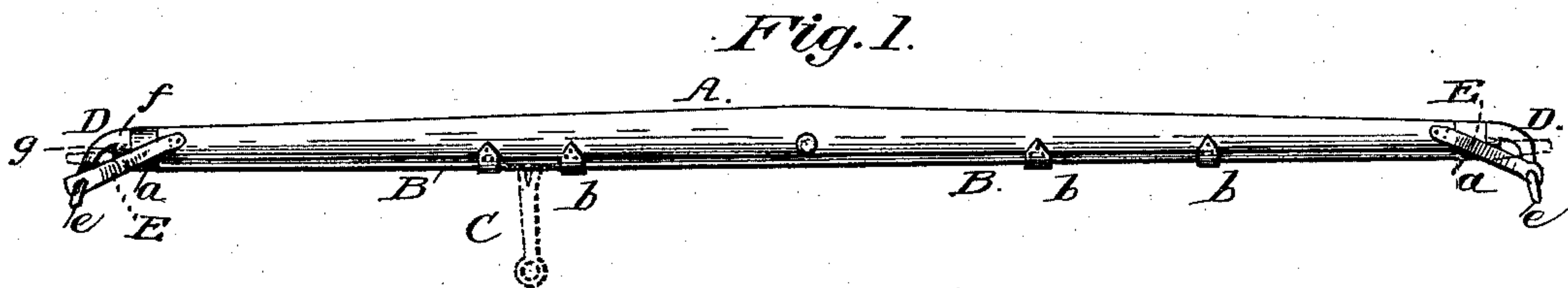


G. F. OUTTEN.
Horse-Detacher.

No. 219,648.

Patented Sept. 16, 1879.



Witnesses
And G. Dietrich
C. F. Petersen.

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UNITED STATES PATENT OFFICE.

GEORGE F. OUTTEN, OF NORFOLK, VIRGINIA.

IMPROVEMENT IN HORSE-DETACHERS.

Specification forming part of Letters Patent No. **219,648**, dated September 16, 1879; application filed August 11, 1879.

To all whom it may concern:

Be it known that I, GEORGE FRANKLIN OUTTEN, of Norfolk, in the county of Norfolk and State of Virginia, have invented certain new and useful Improvements in Horse-De-tachers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which 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, and in which—

Figure 1 is a plan or top view. Fig. 2 is a rear elevation. Fig. 3 is a perspective view of a whiffletree provided with my improvement, showing the hook turned up into the position for detaching the traces; and Fig. 4 is an end view.

Similar letters of reference indicate corresponding parts in all the figures.

This invention has relation to devices for detaching horses from carriages; and it consists in the construction and combination of parts, as hereinafter described, and particularly pointed out in the claim.

In the drawings, A is the whiffletree, which is made with a groove in its rear side to receive an iron rod, B, retained in place by keepers *b b b*. At each end of the tree is a collar, *a a*, through which the ends of the rod B are inserted.

C is a lever, secured upon rod B, and provided with a loop or eye, *d*, for the attachment of a leather strap or cord, by which the rod B may be reversed. Upon each end of rod B is secured a hook, D D, made with a curved point, *e*, and a broad base, *f*, forming a shoulder, *g*, at the point where the hook is attached to the end of the rod.

E E are leather straps, affixed, one at each end, upon the upper side of the tree, and made with a slot or loop in the opposite end, which is slipped over the curved point of the hooks D D after the traces have been inserted, to prevent these from slipping off accidentally.

To place the traces upon the hooks, lever C is turned up so as to partially rotate rod

B and bring the points of the hooks D D in a slanting upward direction, when the straps E E can be readily slipped off and the traces hooked on; after which the straps are again replaced and the lever turned down in a vertical position, which will prevent the straps E E from slipping off, and consequently also prevent the traces from becoming accidentally detached. When in this position, it will be seen that the broad base part *f* of each of the hooks D D abuts against the flat end piece of the whiffletree, which effectually prevents the bending of the hooks by the strain of the traces, the pull of which comes in the notch between the curved hook or point *e* and the shoulder *g*.

The taper of the hooks D enables the traces to slide off easily the moment rod B, with its hooks, is reversed, without the possibility of any hitch in the operation.

For ordinary purposes I make the rod B of three-eighths-inch rod-iron, about two feet long, with jagged ends, which are placed into the flask, where the brass or other metal hooks D D are cast upon them; after which the rod is inserted into its groove in the rear side of the whiffletree, and held in its place by the keepers *b b b* and collars *a a*.

I am aware that reversible trace-hooks, broadly considered, are not new in horse-detachers, nor do I claim such construction, broadly; but,

Having thus described my improvement, I claim and desire to secure by Letters Patent of the United States—

The combination of the whiffletree A, provided with the looped fastening-straps E E, rod B, and reversible hooks D D, consisting each of a broad body or base, *f*, shoulder *g*, and tapering curved point *e*, substantially as and for the purpose herein shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

GEORGE FRANKLIN OUTTEN.

Witnesses:

J. T. COLDWELL,

E. H. CATE.