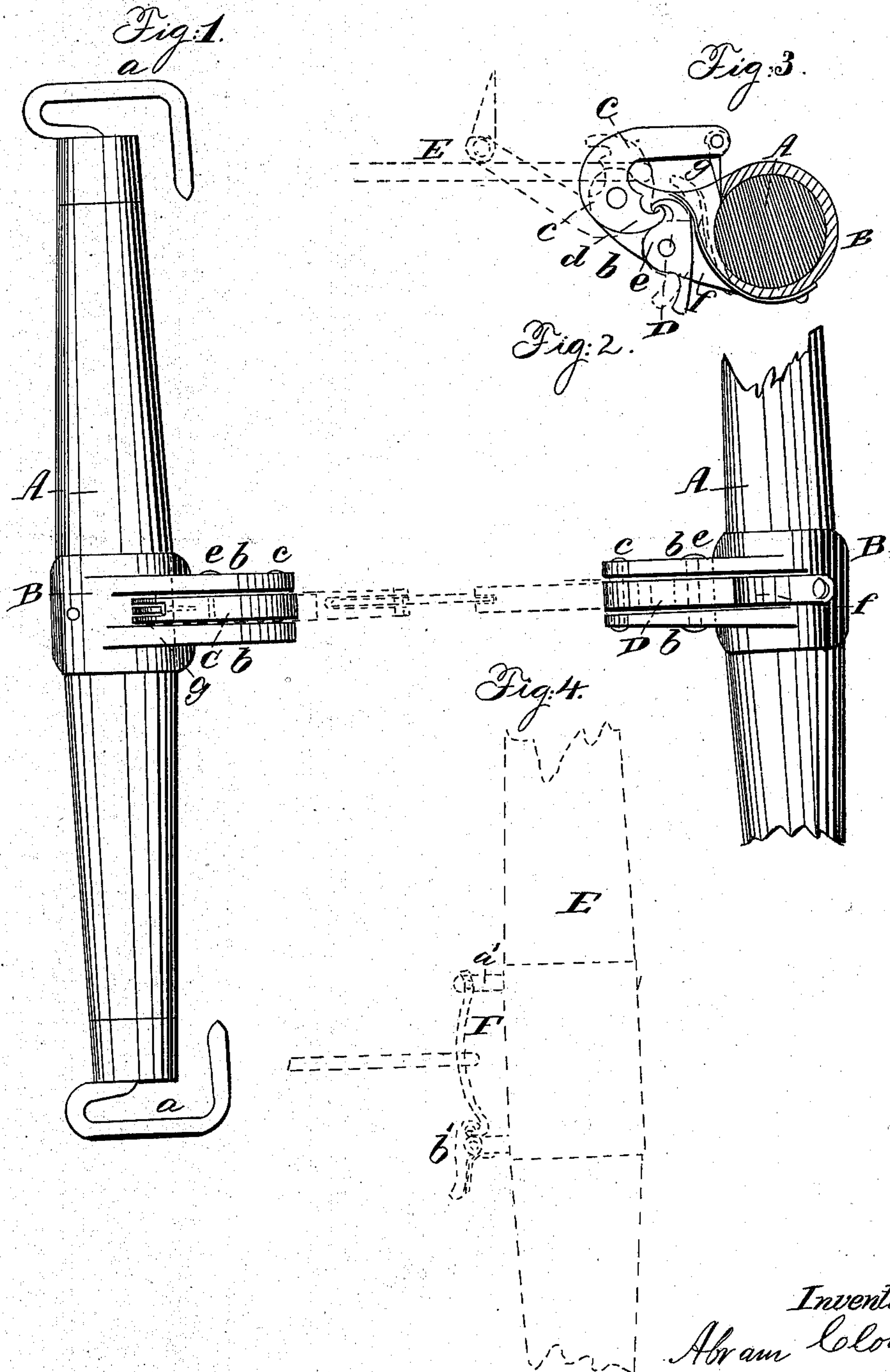


A. CLOW.
Whiffletree.

No. 35,300.

Patented May 20, 1862.



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UNITED STATES PATENT OFFICE.

ABRAM CLOW, OF PORT BYRON, NEW YORK.

IMPROVED ATTACHMENT OF WHIFFLETREES TO THE TOW-LINES OF CANAL-BOATS.

Specification forming part of Letters Patent No. 35,300, dated May 20, 1862.

To all whom it may concern:

Be it known that I, ABRAM CLOW, of Port Byron, in the county of Cayuga and State of New York, have invented a new and Improved Mode of Attaching Whiffletrees to the Tow-Lines of Canal-Boats; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a plan or top view of my invention; Fig. 2, an inverted plan of the same; Fig. 3, a transverse section of the same, taken on the line *x x*, Fig. 2; Fig. 4, a sketch of an attachment now in use to some extent, drawn with a view of showing the difference between it and my invention.

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

This invention relates to a mode of attaching whiffletrees to the tow-lines of canal-boats, whereby the whiffletree may be instantly detached from the tow-line when the latter is drawn taut—as, for instance, when a boat in passing another one has its tow-lines catch against it—a contingency which frequently occurs, and which causes the horse to be thrown into the canal.

The object of the invention is to obtain a catch or fastening which will not only admit of the whiffletree being readily and quickly detached from the taut tow-line when necessary, but which will also admit of being used as an ordinary hook attachment when the tow-line is not drawn taut, the invention also serving to secure the portion of the tow-line which is connected to it in case of the sudden parting of the tow-line under tension.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a whiffletree, which may be constructed in the usual way, and having hooks *a a* at its ends to receive the traces. On the whiffletree at its center there is placed and firmly secured a metallic collar, B, the back part of which has two parallel lugs or projections, *b b*, which extend from it a suitable distance and between which there is placed a hook, C. The hook C is allowed to work freely on a pin or pivot, *c*, which secures it at its outer or back part between the lugs or projections *b b*, and the outer or back part

of said hook is curved, as shown at *d*, to form a hook-shaped projection, over which a catch, D, passes to retain the hook C in proper position to receive and hold the tow-line E, as shown clearly in Fig. 3. The catch D is secured between the lugs or projections *b b* by a fulcrum-pin, *e*, and the lower end of said catch projects beyond the lugs *b b*, so that it may be readily operated upon by the rider, and the catch disengaged or thrown off from the hook projection *d* of the hook C, when it is necessary to detach the whiffletree from the tow-line. The catch D is retained or held over the projection *d*, at the outer or back end of the hook C by means of a spring, *f*, as shown clearly in Fig. 3. The front end of the hook C has a drop or guard, *g*, fitted in it, which prevents the tow-line being casually detached from the hook. By this arrangement it will be seen that the pull of the tow-line is on the hook C near its pivot *c*, and consequently there will not be a great strain on the catch D, and the latter may therefore be readily disengaged from the projection *d* of the hook C when necessary, even when the tow-line is under its greatest tension.

When it is necessary to detach the whiffletree from the tow-line, and the latter is slack or not under tension, the tow-line may be adjusted on hook C and removed therefrom without releasing the hook from its catch.

Whiffletrees have been provided with adjustable or releasing hooks to admit of the tow-line being detached under tension, and the kind that has found most favor with boatmen is shown in Fig. 4, in which E is the whiffletree, and F a lever pivoted at one end in a projection, *a'*, and having its opposite end secured by a catch, *b'*. In this arrangement it will be seen that the pull of the tow-line is at the center of lever F, and that there will be a considerable pressure exerted against the catch *b'*, so much as to render the releasing of the lever F a matter of some difficulty when the tow-line is taut; and it will also be seen that the tow-line cannot be attached to or detached from the whiffletree without adjusting the lever F, whereas in my improvement the tow-line when slack or not under tension may be readily adjusted on hook C in the same way as if it were rigidly attached to the whiffletree.

The guard or drop *g* rests against the back side of the collar B, as shown clearly in Fig. 3.

This guard or drop prevents, as before stated, the tow-line being casually detached from the hook C—a contingency very liable to occur in case the tow-line parts or breaks under tension; for when the tow-line thus parts or breaks, the spring of the portion of the line connected to the whiffletree is liable to pass off the hook and drop into the canal. In detaching a slack tow-line from the whiffletree, the guard or drop is of course shoved back to admit of the loop of the line passing off the hook.

I am aware that safety or pivoted hooks have been used upon the whiffletrees that

carry the tow-lines, and I do not claim, broadly, the invention thereof; but,

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

The combination of the guard *g* with the hook C, collar B, and catch D, all of said parts being constructed and operating as set forth.

ABRAM CLOW.

Witnesses:

EGBERT PADDOCK,

PETER YATES.