

(No Model.)

W. H. GIBBS.
WHIFFLETREE HOOK.

No. 429,615.

Patented June 10, 1890.

Fig. 1.

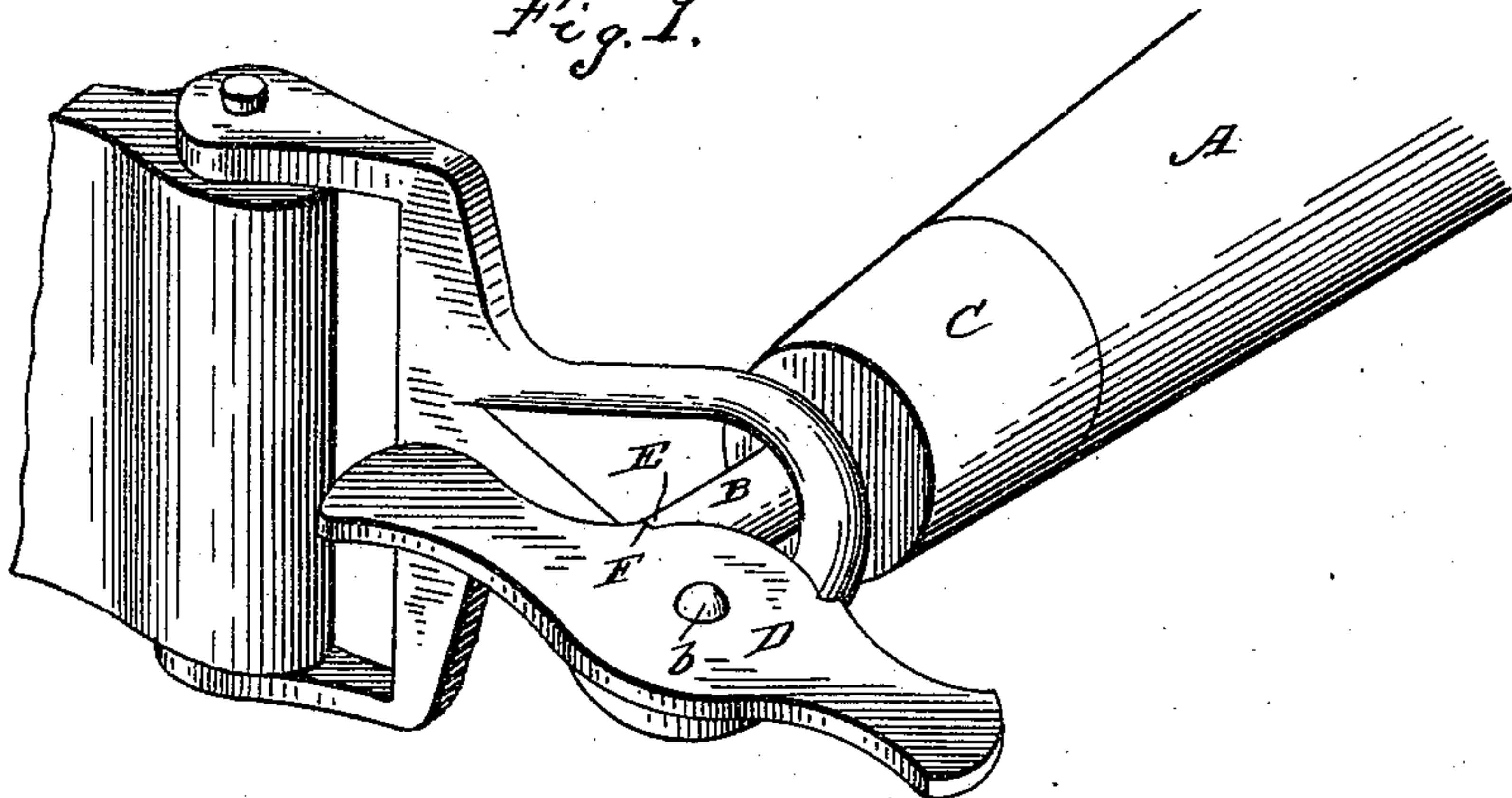


Fig. 2.

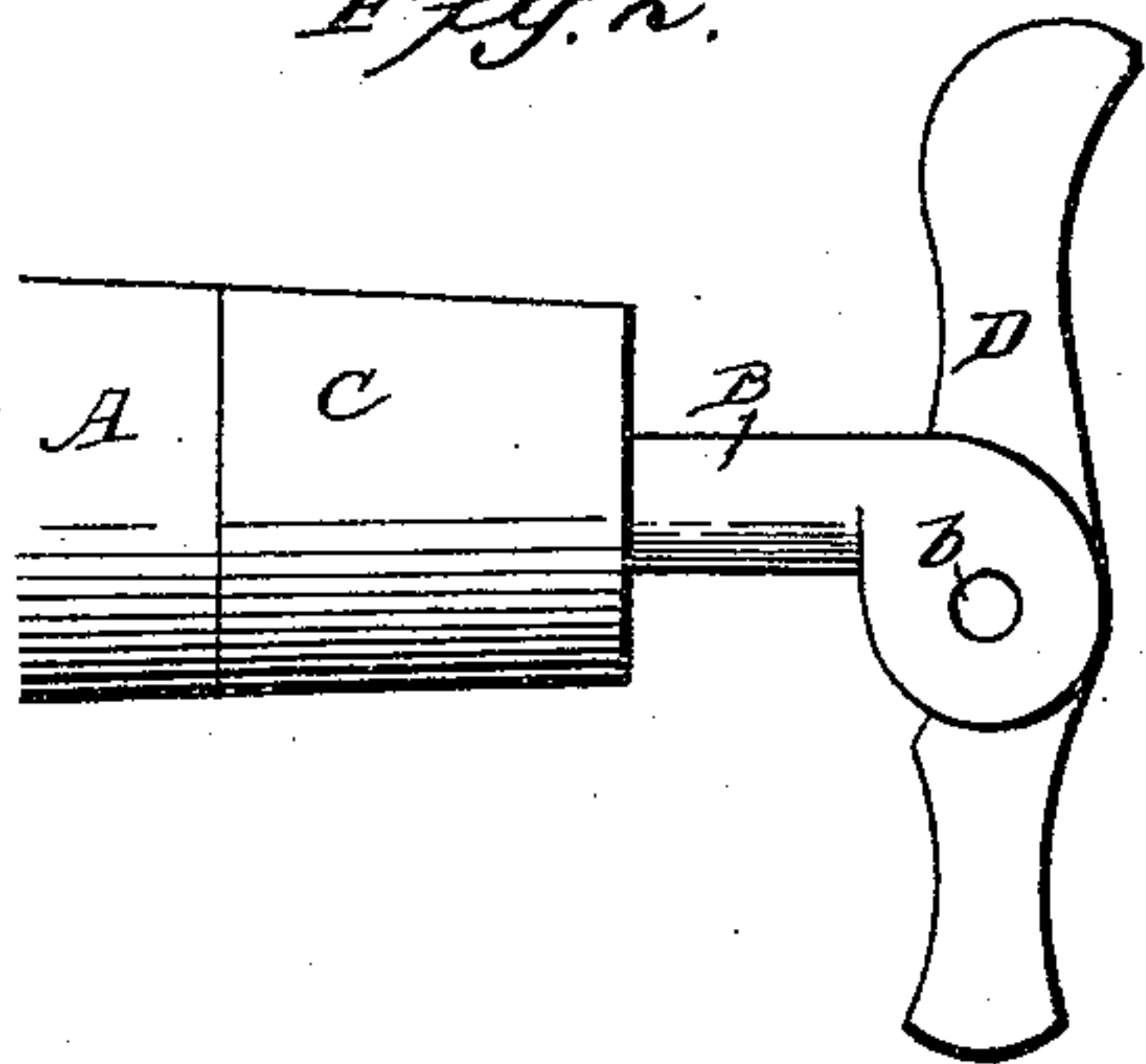


Fig. 3.

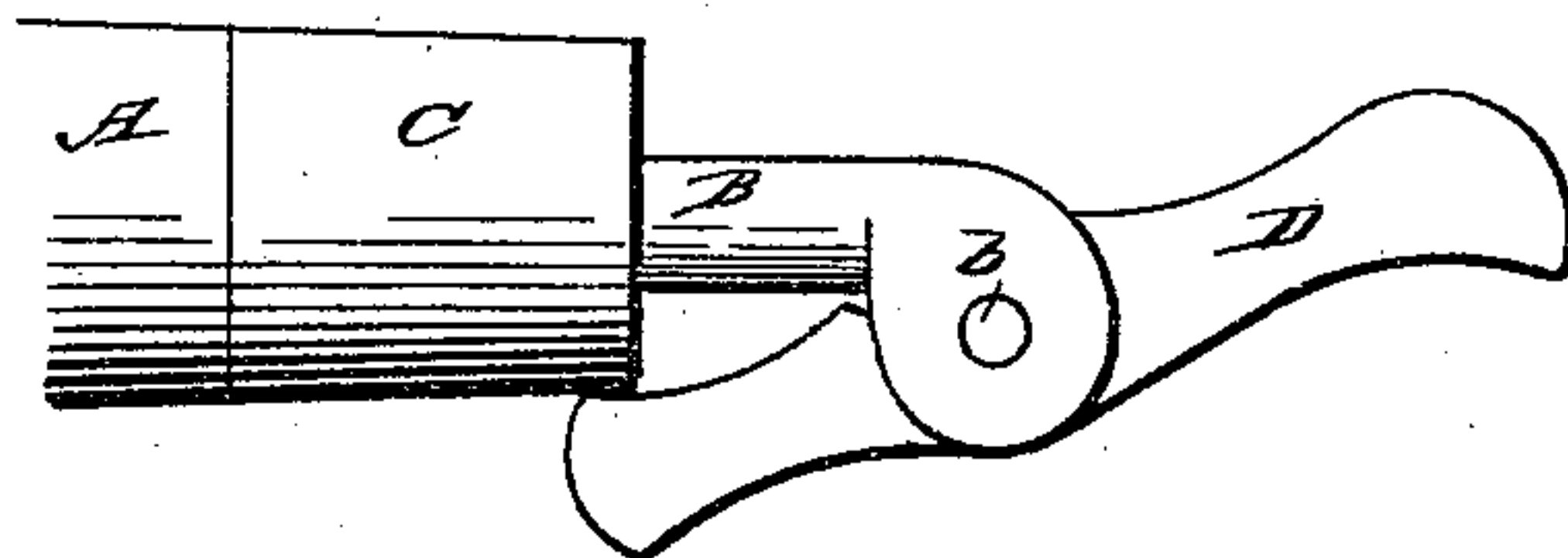
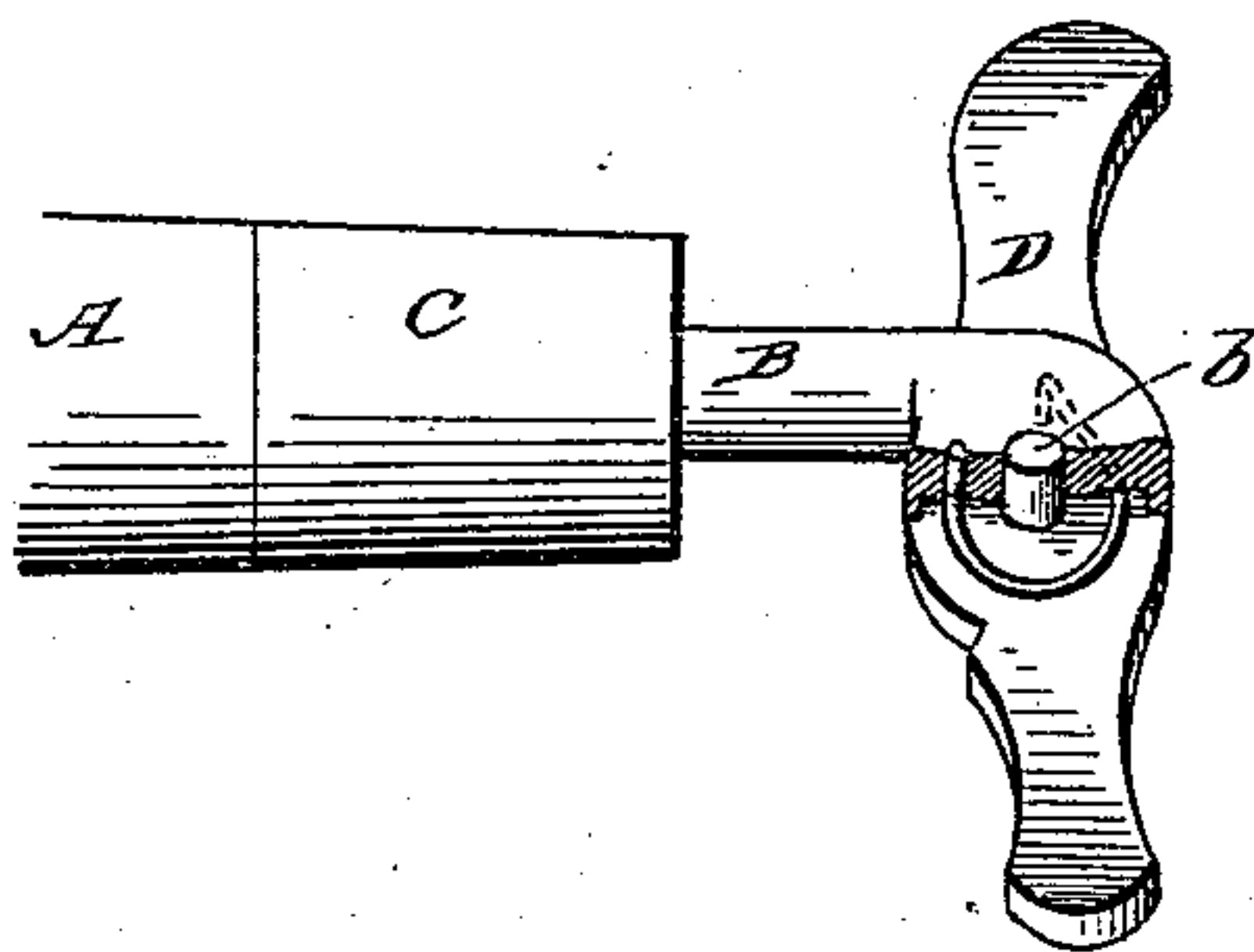


Fig. 4.



Witnesses

E. H. Smith

Alfred Stewart

Inventor

William H. Gibbs

By *his* Attorneys

Chambers & Chambers

UNITED STATES PATENT OFFICE.

WILLIAM H. GIBBS, OF MENDON, ILLINOIS.

WHIFFLETREE-HOOK.

SPECIFICATION forming part of Letters Patent No. 429,615, dated June 10, 1890.

Application filed March 6, 1890. Serial No. 342,869. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. GIBBS, of Mendon, in the county of Adams and State of Illinois, have invented certain new and useful
5 Improvements in Whiffletree-Hooks; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to
10 the letters of reference marked thereon.

This invention relates to improvements in devices employed to retain the end of the trace or draft chain in connection with the whiffletree of a vehicle, farm implement, ma-
15 chine, or other body adapted to be drawn by horse-power, the invention being particularly applicable where a cockeye is employed, as the end of the trace or chain, as is common in all styles of heavy or farm harness.

20 The object is to provide a simple hook or retaining device which may be easily driven into position, and when in position and the trace engaged therewith will retain the same with the greatest security and at the same
25 time enable the same to be easily engaged or disengaged when desired.

Referring to the accompanying drawings, Figure 1 is a perspective view of an end of a whiffletree having my invention applied
30 thereto. Fig. 2 is a bottom plan view. Fig. 3 is a similar view with the retainer thrown back into position for receiving the cockeye. Fig. 4 is a similar view with a portion of the retainer broken away to show an internal
35 spring, which may be employed, if desired.

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

In the drawings, A indicates the whiffletree proper, which may be attached to the
40 vehicle or other body in the ordinary manner.

The hook for the cockeye or end of the draft-chain at each end of the whiffletree consists of a bolt or pin B driven or screwed into the end of the whiffletree and prevented from
45 splitting the same by means of a ferrule or ring C. The end of the pin B is flattened, as shown, and through this flattened portion passes a rivet or bolt b, which serves as the pivot for the retainer D, the latter being
50 thereby united to the bolt and permitted to swing horizontally, so as to assume the position indicated in Fig. 3, and permit the cock-

eye or hole in the trace to pass over the same. The rear end of the retainer is prevented from swinging beyond normal position at right an- 55 gles to the whiffletree by a shoulder E on the bolt and a co-operating shoulder F on the retainer itself. Thus when the cockeye or opening in the trace is put in position and the retainer turned back to normal position 60 it is impossible to turn the retainer back into position to release the cockeye so long as the draft or strain on the trace is maintained. The end of the bolt, in addition to being flat- 65 tened, is turned backward, and the pivot of the retainer is located back of the center line of the bolt. Thus when the retainer is turned to admit the cockeye it swings down nearly parallel with the bolt; but a very slight move- 70 ment outward throws the said end so far away from the bolt that the cockeye could not pass over the same unless the aperture should be of abnormal size.

It will be noted that the forward end of the retainer is made long and curved slightly out- 75 ward, so as to prevent any possibility of the front end of the aperture in the cockeye passing over the same when in locked position, and also to afford a convenient point against which the operator's hand may rest when 80 turning the retainer back to normal or locked position.

When desired, a convolute spring H may be located within a concavity in the retainer and bolt end, with one end engaging each, 85 whereby the retainer will be held at right angles to the whiffletree at all times, although under ordinary circumstances a spring would be superfluous.

With the whiffletree-hook just described 90 it will be seen that there is no chance for the cockeye to escape when in use, and it can only be removed by moving the same back as far as possible, and while it is so held turning the retainer until the end passes through 95 the eye. Any outward movement of the cockeye before the end of the retainer passes through the same only tends to turn the retainer back to normal position, and experi- 100 ment demonstrates that the parts cannot be made to assume such a position that the outward movement of the front portion of the cockeye will cause the rear end of the re- tainer to pass through the same. Any out-

ward movement of the rear portion of the cockeye is of course checked by the retainer itself, which is itself arrested by the shoulders before mentioned.

5 Having thus described my invention, what I claim as new is—

1. The combination, with a whiffletree and a pin or hook inserted therein, of the retainer
10 pivoted on the end of said pin to swing toward and from the end of the whiffletree, and having the ends on both sides of the pivotal point of greater length than the projecting end of the pin, whereby the accidental escape
15 of the cockeye is prevented, substantially as described.

2. The combination, with a whiffletree and a pin or hook inserted therein and having the outer end turned rearward, of the retainer

pivoted on said rearwardly-turned end, with the ends on both sides of the pivotal point of
20 greater length than the projecting end of the pin, substantially as and for the purpose set forth.

3. The combination, with the whiffletree and a pin or hook thereon having a rear-
25 wardly-turned and flattened end, of a retainer pivoted on said end out of line with the center of the pin and having the forward end longer than the rear end, and the shoulders
30 for limiting the outward movement of the rear end of the retainer, substantially as described.

WILLIAM H. GIBBS.

Witnesses:

L. E. EMMONS, Jr.,
L. E. EMMONS.