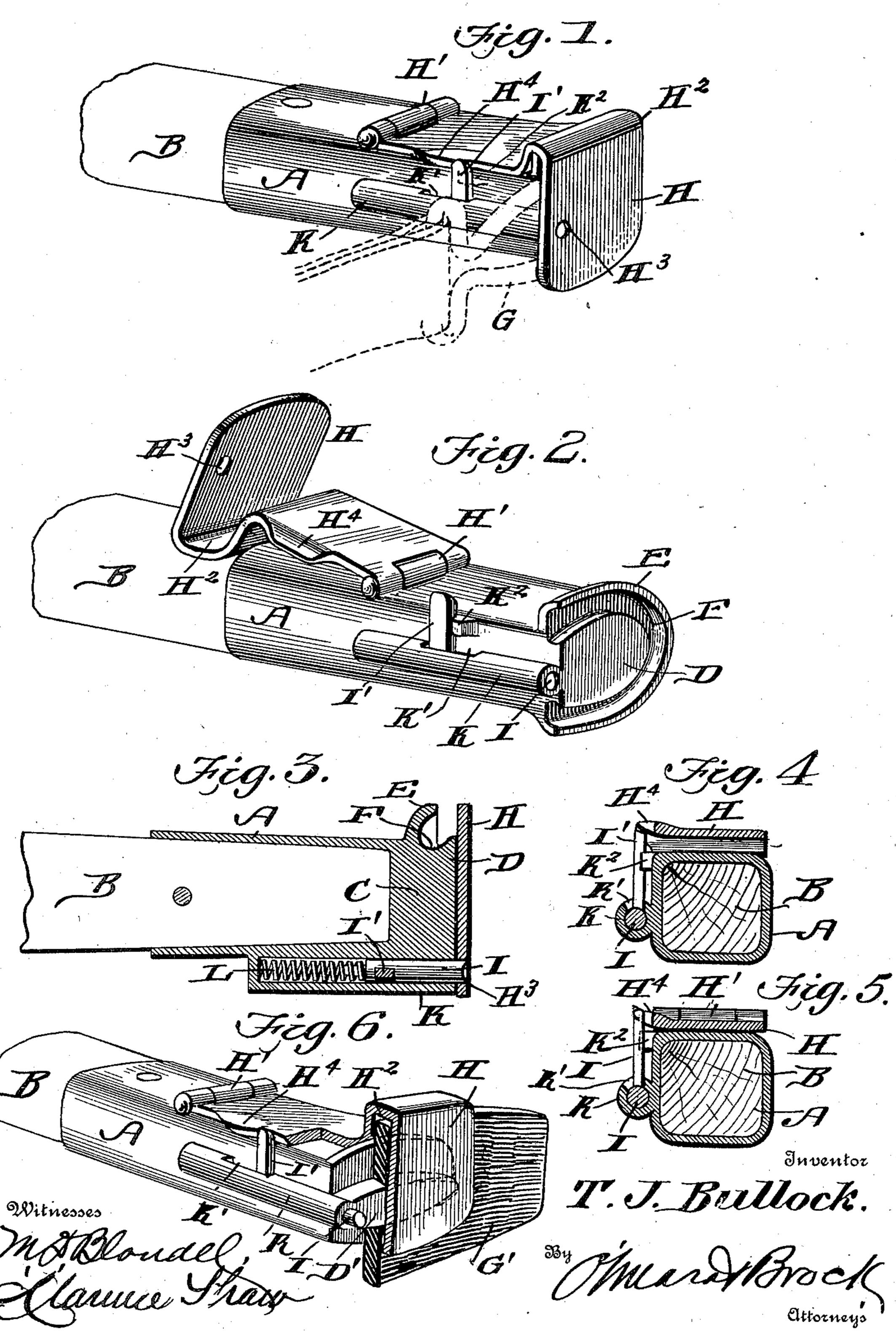
## T. J. BULLOCK. WHIFFLETREE CLIP. APPLICATION FILED OUT. 4, 1902.

NO MODEL.



## United States Patent Office.

THOMAS JEFFERSON BULLOCK, OF FREEDOM, KENTUCKY.

## WHIFFLETREE-CLIP.

SPECIFICATION forming part of Letters Patent No. 719,431, dated February 3, 1903.

Application filed October 4, 1902. Serial No. 125,952. (No model.)

To all whom it may concern:

Be it known that I, Thomas Jefferson Bullock, a citizen of the United States, residing at Freedom, in the county of Barren and State of Kentucky, have invented a new and useful Whiffletree-Clip, of which the following is a specification.

This invention is an improved construction of whiffletree-clip, the object being to provide a device by means of which the tug or trace can be quickly and easily attached to or detached from the end of the whiffletree; and with this object in view the invention consists in the novel features of construction and arrangement, all of which will be fully described hereinafter, and pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a perspective view showing the clip closed, the tug or trace being shown attached thereto and in dotted lines. Fig. 2 is a perspective view illustrating the clip, the locking-plate being shown thrown back and the tug or trace disengaged therefrom. Fig. 3 is a horizontal sectional view. Figs. 4 and 5 are transverse sectional views. Fig. 6 is a detail perspective view, partly in section, showing a slightly-modified form of construction.

In carrying out my invention I employ a metallic ferrule A, into which the end B of the whiffletree fits, the outer end of the ferrule being closed and thickened, as indicated at C, and upon the exterior of said closed or thickened end is a boss D, which is of such size and shape that the cockeye of the trace will fit snugly thereover. The end of the ferrule is provided with a flange E, which, in connection with the boss D, provides a groove of the trace.

In order to hold the trace in engagement with the boss and flange, I employ a locking-plate H, which is hinged at H' to the top of the ferrule and is bent or grooved, as shown at H<sup>2</sup>, in order to accommodate the flange E, the end of the plate extending down parallel with the face of the boss, and thereby holding the cockeye end of the trace in engagement with the so end of the ferrule, and in order to hold the having a box

plate in this position I employ a spring-bolt I, which is located in a tubular extension K, formed upon the ferrule A, the outer end of said bolt being adapted to engage an aperture H<sup>3</sup>, formed in the depending portion of 55 the locking-plate. The bolt has an upwardlyextending finger I', which extends through a slot K', formed in the tubular extension and by means of which the bolt can be withdrawn so as to disengage the locking-plate, and when 60 the bolt is so withdrawn it is held in that position by means of a lug K2, back of which the said finger is placed, as most clearly shown in Fig. 2. After the cockeye has been placed over the boss the plate is turned down and 65 the bolt engages the opening, being forced into engagement by means of a spring L, which is arranged within the tubular extension at the rear of the bolt, and as the plate is turned down the laterally-projecting lip H<sup>4</sup> 70 engages the upper end of the finger I' and throws it out of engagement with the lug K2, and the spring will then act to throw the bolt forwardly.

In Fig. 6 I have shown the clip constructed 75 and arranged to hold a trace G', which has the ordinary hole or opening and is devoid of the cockeye connection, and in such construction the boss D' is made narrower, so that it will fit into the elongated opening in the trace. 80 The other features of construction, however, are exactly the same as those already described.

Having thus fully described my invention, what I claim as new, and desire to secure by 85 Letters Patent, is—

1. A whiffletree-clip comprising a ferrule having an outer flanged end, a boss and a U-shaped groove between the boss and flange, a movable plate adapted to cover the said end 90 of the ferrule and means for locking the plate in position.

2. A whiffletree-clip comprising a ferrule flanged at its outer end, a boss within the flange, a hinged locking-plate perforated ad- 95 jacent one side and adapted to cover the flange and boss, and a spring-bolt adapted to engage the locking-plate.

3. A whiffletree-clip comprising a ferrule having a boss at the end, and a flange par- 100

tially surrounding said boss, a tubular extension, a spring-actuated bolt arranged in said extension and provided with an upwardly-projecting finger, a lug carried by the ferrule, and a hinged locking-plate attached to the ferrule and adapted to overlap the flange and boss, said locking-plate having a lip adapted

to engage the upwardly-projecting finger of the spring-actuated bolt, substantially as and for the purpose described.

THOMAS JEFFERSON BULLOCK.

Witnesses:

WALTER T. DAVIS, JOSEPH S. JONES.