

(No Model.)

S. RYDER.
WHIFFLETREE HOOK.

No. 305,404.

Patented Sept. 16, 1884.

Fig. 1.

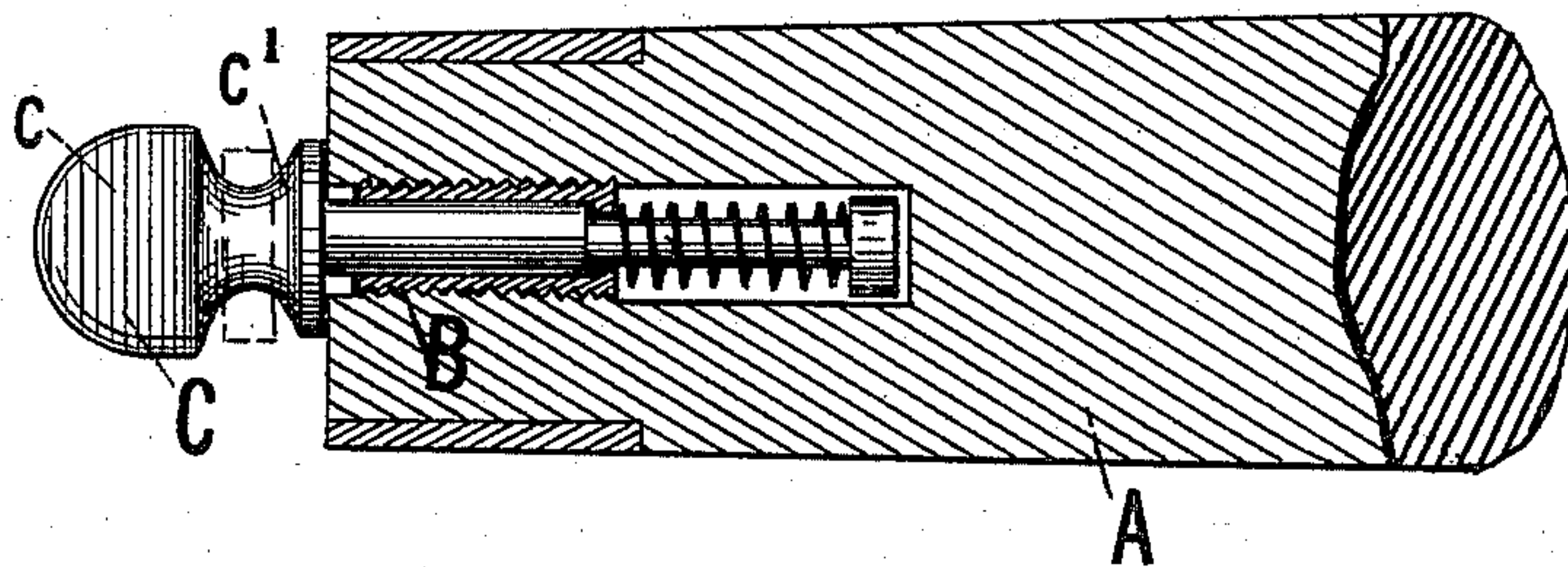


Fig. 2.

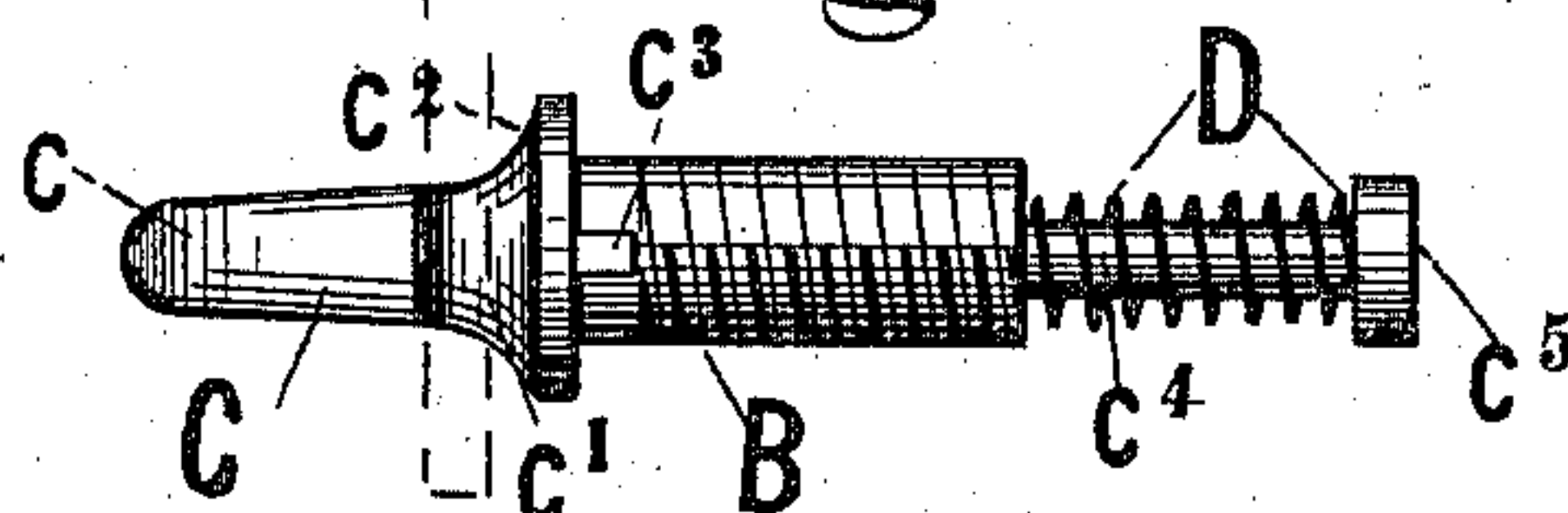


Fig. 3.

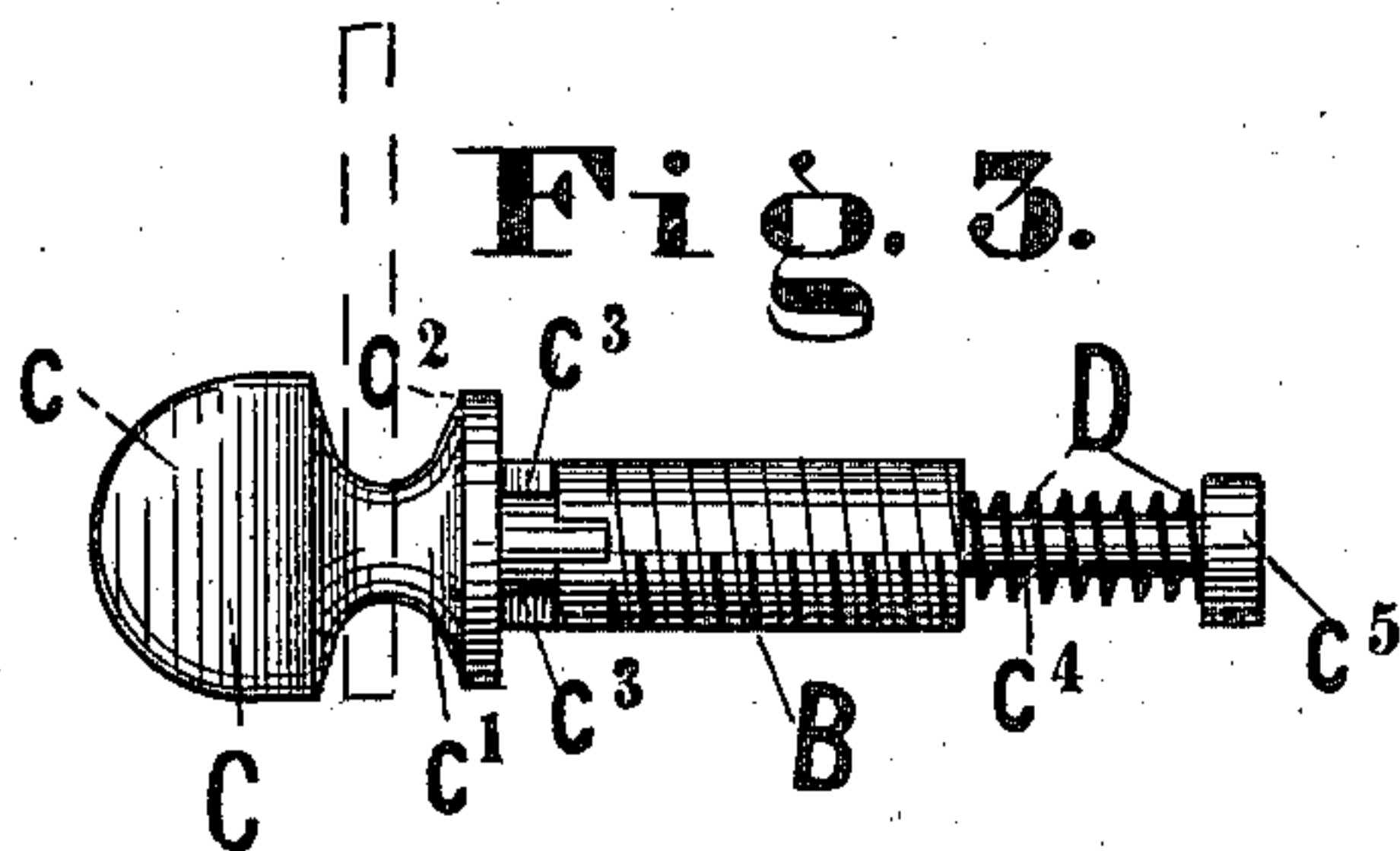
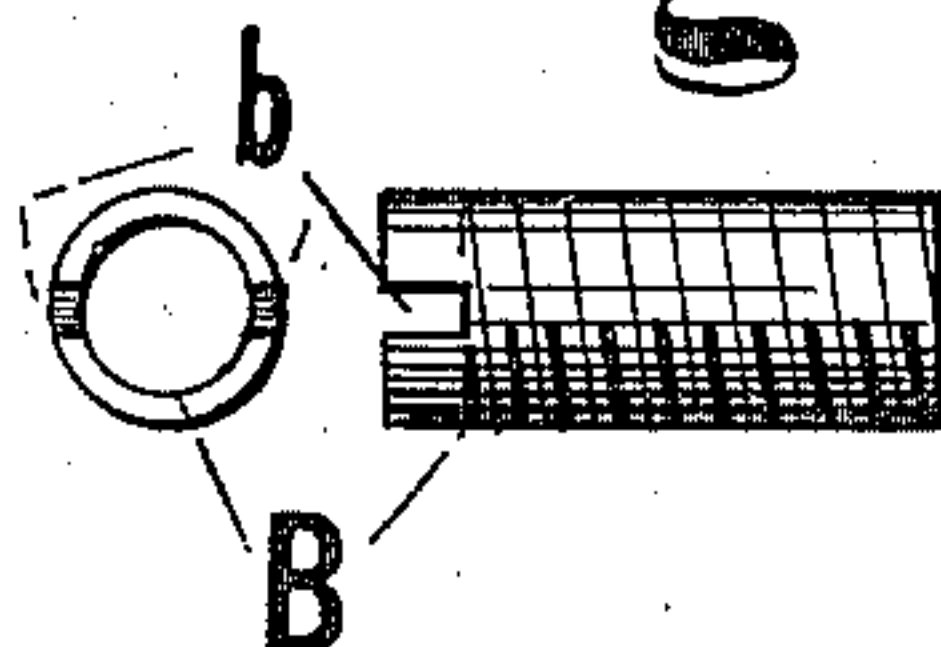


Fig. 4.



WITNESSES:

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STEPHEN RYDER, OF NORTH ATTLEBOROUGH, MASSACHUSETTS.

WHIFFLETREE-HOOK.

SPECIFICATION forming part of Letters Patent No. 305,404, dated September 16, 1884.

Application filed March 6, 1884. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN RYDER, of North Attleborough, county of Bristol, and State of Massachusetts, have invented new and useful Improvements in Whiffletree-Irons; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to that class of devices which are secured to the end of a whiffletree for the purpose of holding the traces; and it consists in certain peculiarities of construction, fully described hereinafter, by means of which simplicity of construction is obtained with the characteristics of safety and convenient use.

In the drawings, Figure 1 represents a sectional view of my improved whiffletree-iron as applied to the end of a whiffletree; Figs. 2 and 3 views of the iron, sleeve, and spring, detached; and Fig. 4, a view of the sleeve detached.

To enable others skilled in the art to make my improved whiffletree-iron, I will proceed to describe fully the construction of the same.

A represents the whiffletree, provided at each end with a proper recess or opening for the iron, in the manner well understood.

B represents a sleeve of proper diameter and length, having threads upon its exterior surface, by means of which it is adapted to be secured into the end of the whiffletree, as shown.

$b\ b$ represent square notches or recesses in the edge of the sleeve at the outer end of the same, as shown.

C represents the iron adapted to hold the trace, which iron is provided with the flat head c , adapted to pass through the slot in the trace, and the neck c' , adapted to hold the trace after the head has been passed through the slot, in the manner well understood.

c^2 represents a flange or shoulder upon the iron, the inner face of which is provided with studs or pins $c^3\ c^3$, corresponding in size and shape with the square recesses $b\ b$, as shown.

c^4 represents the shank of the iron, and c^5 a head or button riveted to the end of the shank, as shown.

D represents a spring coiled about the shank c^4 , which spring has its bearing at one end against the button c^5 , and at the other against the inner end of the sleeve B, as shown, the tendency of the spring being to crowd the outer end of the sleeve against the bearing-face of the flange c^2 , and cause the recesses of the sleeve to engage with the studs of the flange, as shown.

The operation is substantially as follows: The whiffletree-iron, constructed as described, may be secured to the whiffletree by simply screwing the same into a proper opening in the end. When it is desired to attach the trace, the head c of the iron is grasped and pulled outward in a longitudinal direction far enough to disengage its studs $c^3\ c^3$ from the recesses $b\ b$ of the sleeve. The flat head of the iron is then revolved from a vertical to a horizontal position, to permit the same to enter conveniently the slot of the trace. When the head has passed through the slot, it is returned to its normal position and released. By the action of the spring the recesses of the sleeve and the studs of the iron are caused to engage with each other, and hence the parts are securely locked against accidental displacement.

Some of the advantages of the described construction are as follows: The parts are few in number and simple in construction. The iron may be readily applied to the whiffletree. The trace may be conveniently attached to the iron, and when attached it is securely held against accidental displacement.

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

The whiffletree-iron described, having the threaded sleeve B, made in one piece, and provided with the recesses $b\ b$, the trace-iron C, having the head c , neck c' , flange c^2 , studs $c^3\ c^3$, shank c^4 , and button c^5 , and the spring D.

This specification signed and witnessed this 18th day of December, 1883.

STEPHEN RYDER.

Witnesses:

D. F. CHAPMAN,
FRED B. BYRAM.