

W. W. Knowles,

Body-Loop. PATENTED JUL 18 1871

117179

Fig. 1.

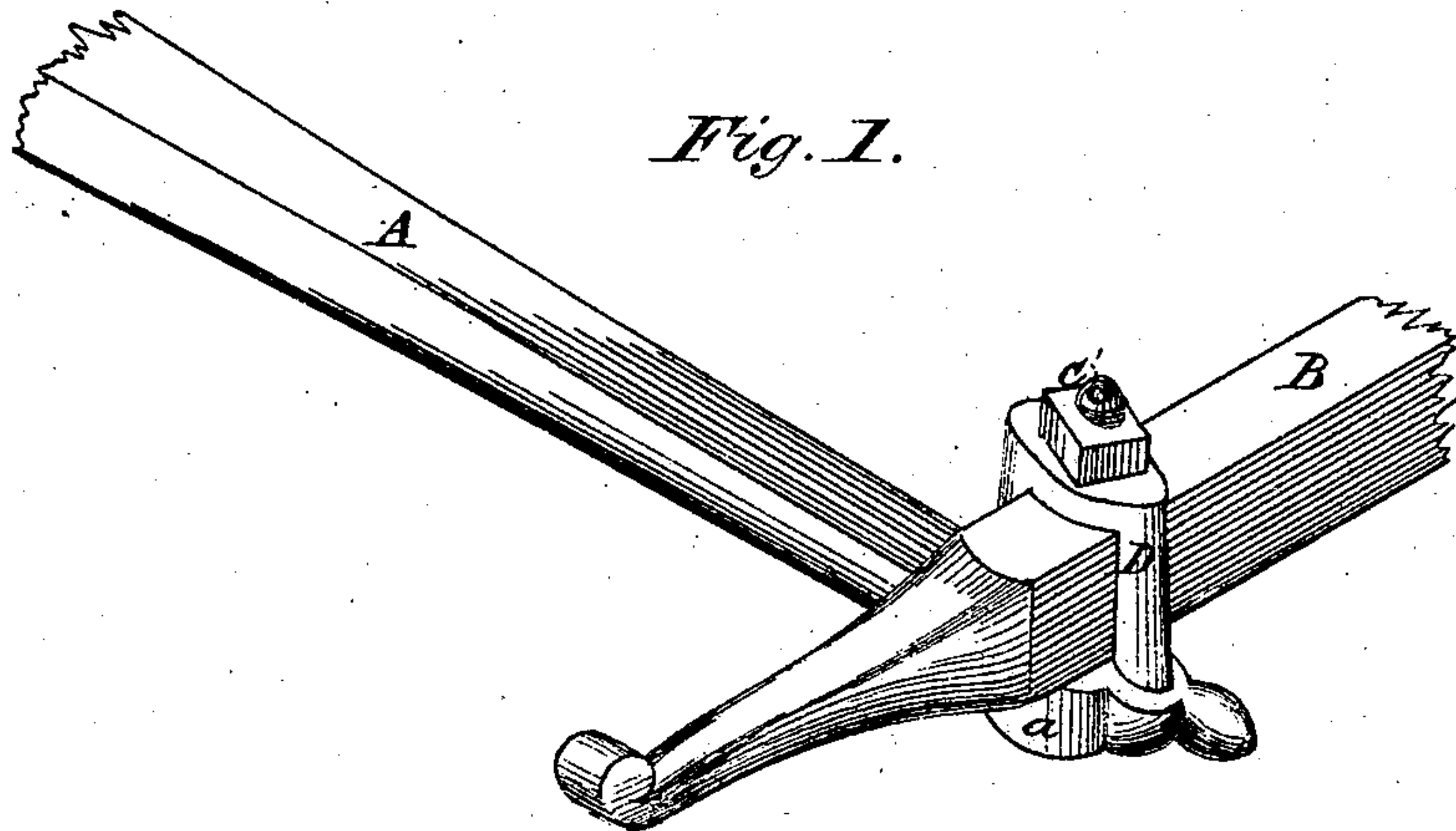


Fig. 2.

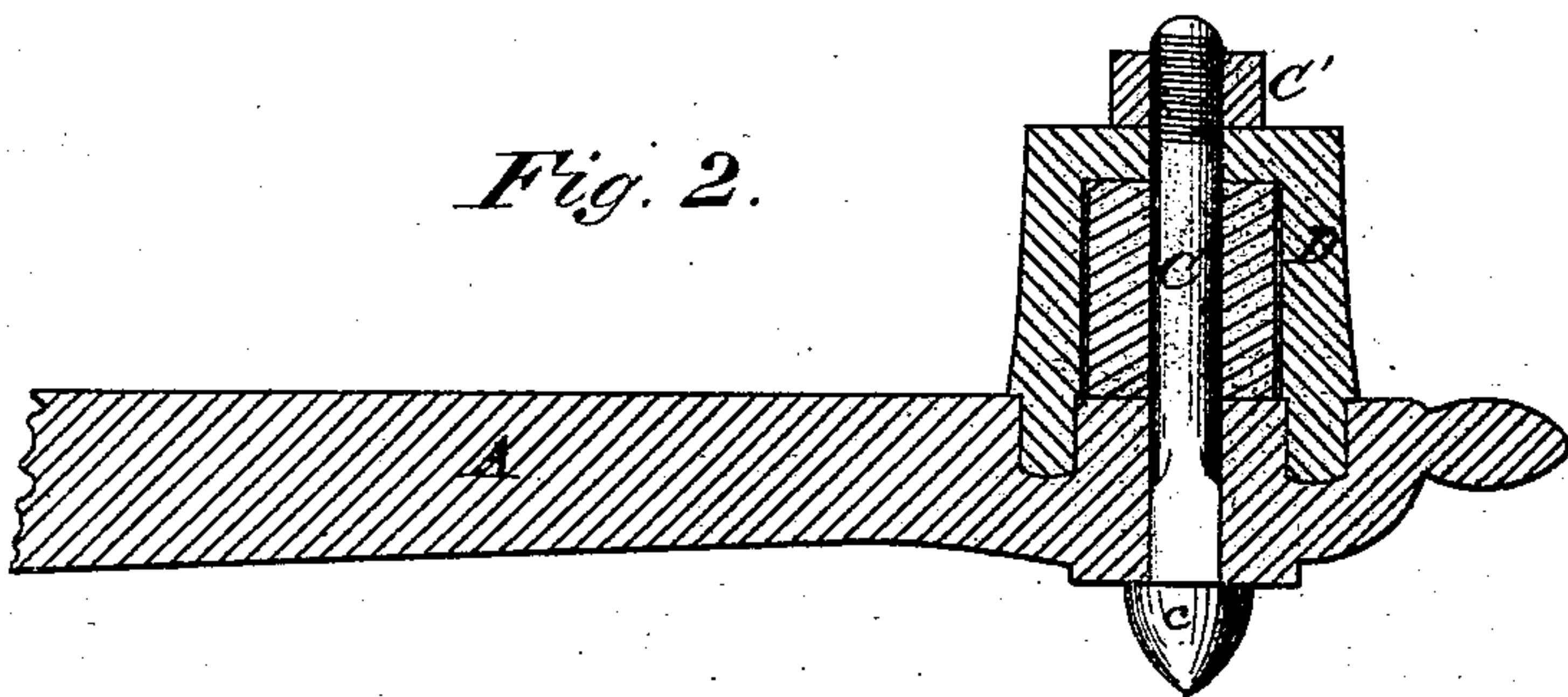
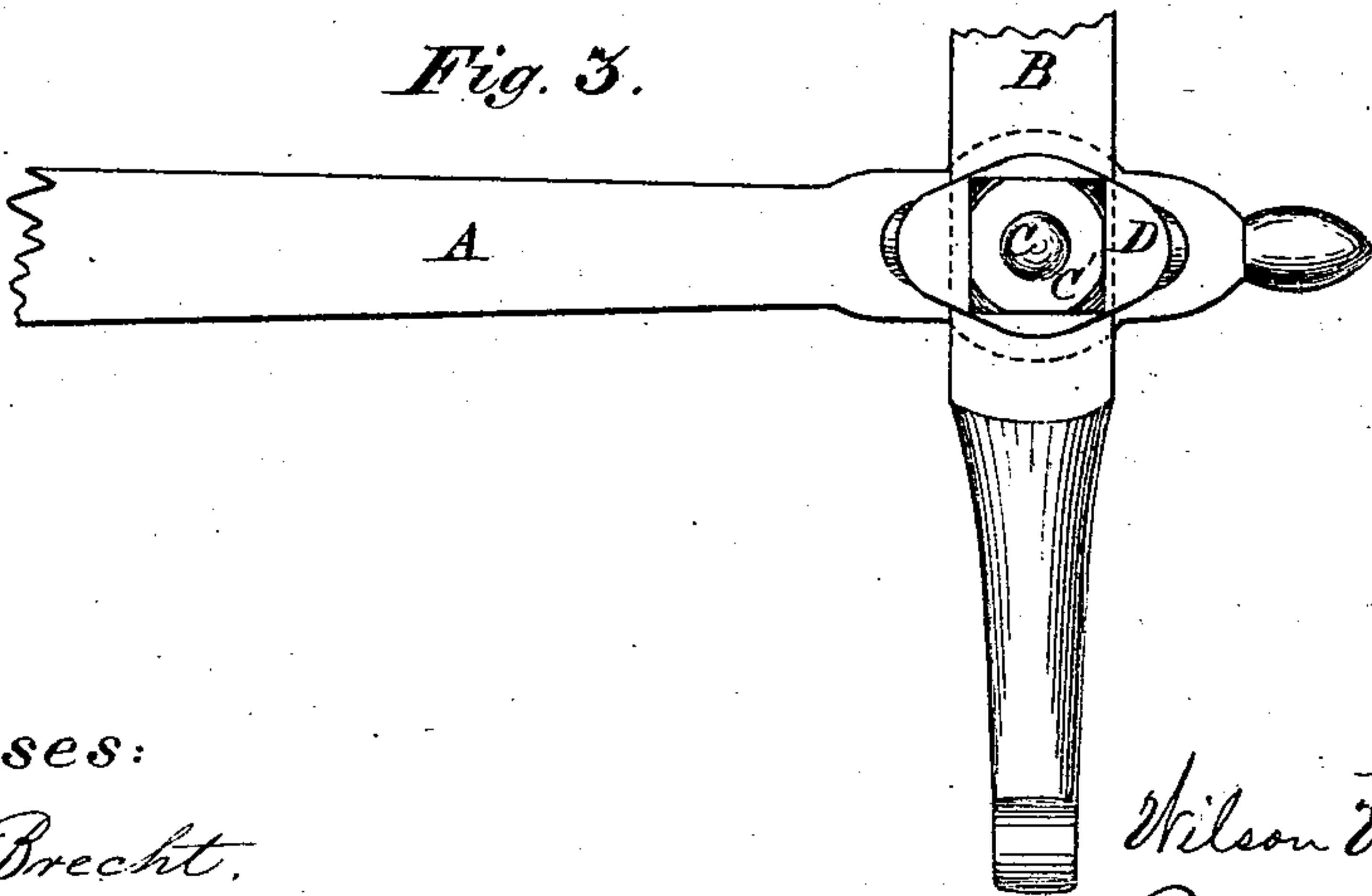


Fig. 3.



Witnesses:

F. C. Brecht.

John B. Young

Inventor:

Wilson W. Knowles,
Grindle and Gyer, his
Attorneys.

UNITED STATES PATENT OFFICE.

WILSON W. KNOWLES, OF PLANTSVILLE, CONNECTICUT.

IMPROVEMENT IN BODY-LOOPS FOR CARRIAGES.

Specification forming part of Letters Patent No. 117,179, dated July 18, 1871.

To all whom it may concern:

Be it known that I, WILSON W. KNOWLES, of Plantsville, in the county of Hartford and in the State of Connecticut, have invented certain new and useful Improvements in Body-Loops for Carriages; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a perspective view of the lower side of my device as applied to a spring-bar. Fig. 2 is a vertical longitudinal section of the same, and Fig. 3 is a plan view of its lower side.

Letters of like name and kind refer to like parts in each of the figures.

The object of my invention is the production of a body-loop that, while possessing equal strength and durability, shall be more easily constructed and applied, and shall cost less than those commonly used; and it consists in the peculiar construction and combination of the various parts of the device, substantially as and for the purpose hereinafter specified.

In the annexed drawing, A represents the body-loop constructed with a plain or straight lower surface, and having a circular boss, *a*, immediately over the spring-bar B, which boss receives the usual bolt C, made square immediately below its head, *c*. Extending upward from beneath the spring-bar B and embracing the same is a clip, D, having the general exterior form shown in Figs. 1 and 3, its lower horizontal end being constructed with a sufficient breadth to receive the lower end of the bolt C, while its upper ends are

rounded and fit into corresponding openings within the lower side of the body-loop. As thus constructed the clip is firmly attached to the body-loop and the spring-bar clamped between the same by means of the bolt C, which passes through each of said parts, with its head resting upon said body-loop, while its lower end is threaded and provided with a nut, C', that bears against the lower side of said clip.

The advantages possessed by this device are: First, it can be attached more firmly to the spring-bar than is possible with those commonly used, and by making the clip portion separate from the upper bar less time and labor are required to place it in position. Second, by making the clip and spring-bar separate the cost of dies and amount of stock, time, and labor required in its production are materially reduced, while the finished article is more certain to be sound and without flaw than where said parts are constructed in one piece.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

As a new article of manufacture, the hereinbefore-described body-loop, consisting of the bar A, the clip D, and the bolt C, constructed and combined in the manner and for the purpose substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of June, 1871.

WILSON W. KNOWLES.

Witnesses:

JAMES K. ELLIOTT,
SIMEON H. NORTON.