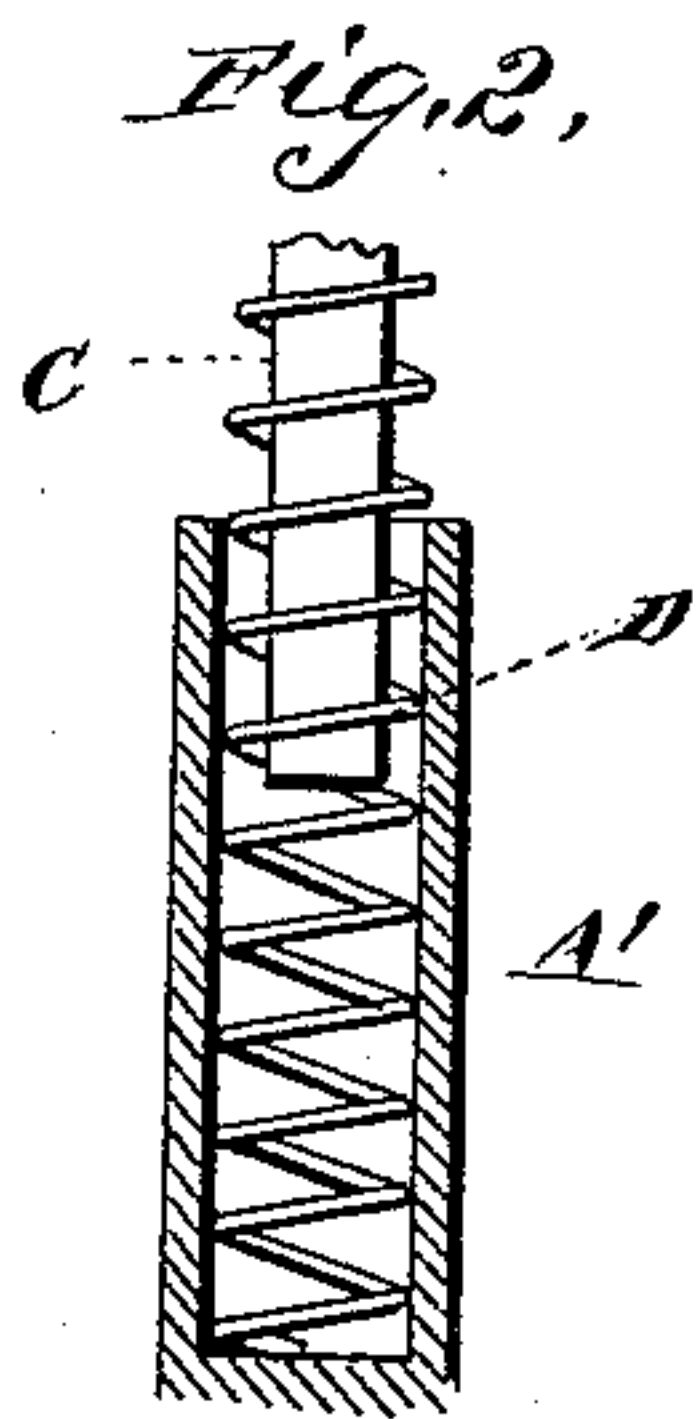
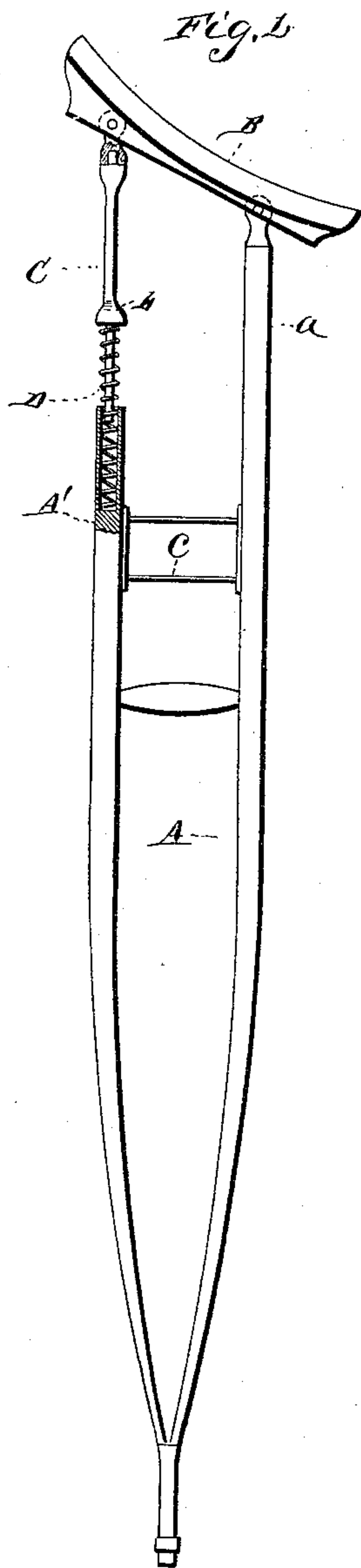


(No Model.)

G. W. DOE.
CRUTCH.

No. 437,024.

Patented Sept. 23, 1890.



WITNESSES
Chas. S. Taylor
Phil. Masi.

INVENTOR
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UNITED STATES PATENT OFFICE.

GEORGE W. DOE, OF NEW BEDFORD, MASSACHUSETTS.

CRUTCH.

SPECIFICATION forming part of Letters Patent No. 437,024, dated September 23, 1890.

Application filed June 7, 1890. Serial No. 354,614. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. DOE, a citizen of the United States, and a resident of New Bedford, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Crutches; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a side view partly in section, and Fig. 2 is a sectional detail view.

This invention relates to certain improvements in crutches, having for its object to not only serve the ordinary use of a crutch, but also to expedite the movement or gait, while no soreness or other injurious effect is experienced from the use of the crutch; and to these ends the invention consists in the construction and combination of the parts, as will hereinafter appear.

In the drawings, A refers to the crutch in its general outline of the usual skeleton form; but, unlike all others, it is provided with an arm-rest or head B, pivoted near its forward end to the upper end of the forward member or branch *a* of the crutch in any suitable manner.

The arm-rest or head B is pivoted near its rear end to the upper end of a plunger C, telescoping the hollow or chambered rear branch or member A' of the crutch and normally holding the rear end of said arm-rest or head elevated by the action of a spring D,

secured within said rear member or branch of the crutch and engaging at its upper end a circular shoulder *b* on said plunger some distance from its lower end.

The members or branches of the crutch A are strengthened by a suitable brace *c*, secured between and to said members or branches. It will therefore be seen that in the use of the crutch, as a forward step is taken, the action of the spring in lifting the rear end of the arm-rest or head, permitted by the raising of the arm, will in a measure have the effect to impel the body forward, and thus expedite the gait or movement of the user. It will also be seen that this spring-pressed plunger supporting the arm-rest or head will render the latter yielding under the pressure of the arm, thus preventing liability of making the arm sore, while ease and comfort are promoted. Friction under the arm and consequent wear of the clothing are materially lessened.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

The crutch having the inclined arm-rest or head pivoted near its lower forward end to the upper end of one branch or member of the crutch and pivoted or connected near its rear upper end to the upper end of a plunger acting upon a spring in the other member or branch of the crutch, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE W. DOE.

Witnesses:

DAVID A. SMITH,
A. EDWIN CLARKE.