R. M. Ware,

Crutch.

No. 57,416. Patented Aug. 21, 1866.

Fig. 1

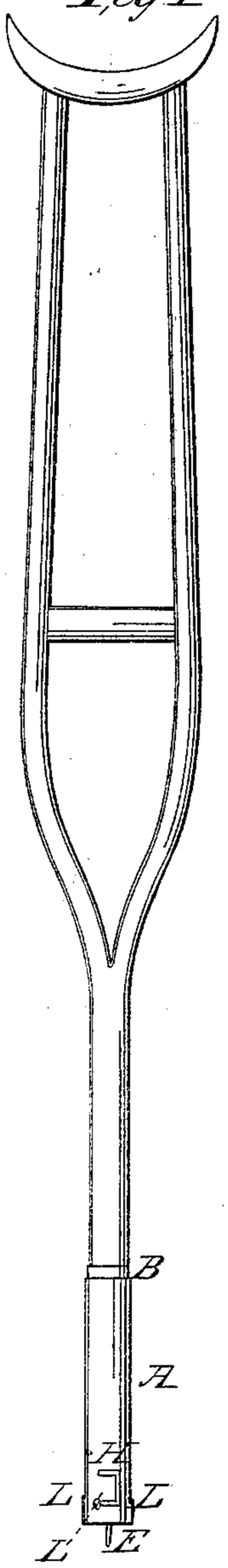


Fig. 2

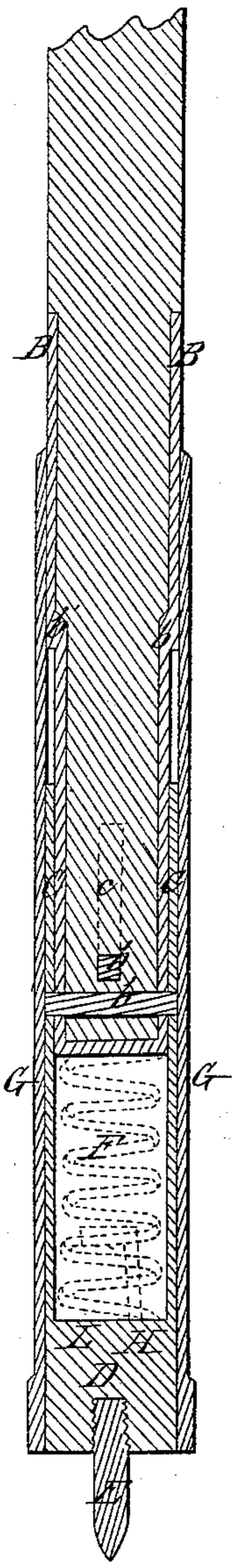
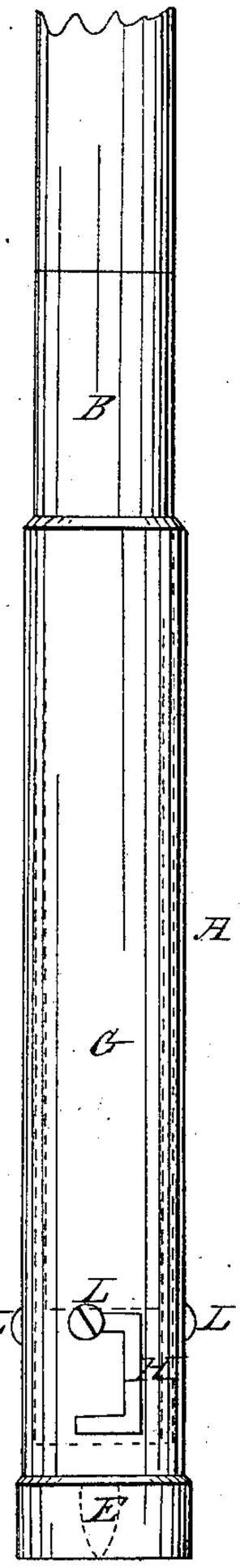


Fig. 3



Witnesses
G. W. Bonham
J. B. Turchin

Inventor
R. M. Ware

UNITED STATES PATENT OFFICE.

R. W. WARE, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN CRUTCHES.

Specification forming part of Letters Patent No. **57,416,** dated August 21, 1866.

To all whom it may concern:

Be it known that I, R. W. WARE, of the city of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Crutches and Walking-Sticks; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 represents a crutch. Fig. 2 is a vertical section of the improved part of the crutch, and Fig. 3 is a side elevation of that part.

The object of my invention is to produce an improved crutch or walking-stick constructed in such a way as to make it elastic or springy, thereby rendering it easy for shoulder or arm to lean upon, as also to attach to it an adjustment of such a kind as to provide the crutch or stick with a sharp point for the safe outdoor walk, and a smooth point for walking in the room, and to substitute one for another easily and conveniently.

To enable others skilled in the art to make and use my invention, I will describe its construction and operation.

The lower part of my crutch consists of a metallic tube, A, which in itself is nothing but a combination of several metallic cylinders arranged in the following way: There is an inside cylinder, B, which is firmly attached to the wood of the crutch, and has two or more pins or screws, *b b*, and a shoulder, *b'*. A cylinder, C, is put over cylinder B, and by means of slots *c*, into which enter the pins *b b*, it can slide up and down, and it terminates at the bottom with a solid piece, D, into which the pin E is screwed. The space between this solid piece D and the bottom of the cylinder B contains a spiral spring, F. A cylinder, G, comes over other two cylinders, or only over cylinder C. It turns around partially and slides up and down by means of slots H and pins or screws L, fastened to the cylinder C and playing in the slot.

The operation consists in the following: When cylinder G is up the pin L is in the lower arm of the slot H and the pin E is protruded. The crutch then is adjusted for an outside walk. By turning the cylinder G, sliding it down, and turning again the pin L is placed into the upper arm of the slot H and the pin E is concealed. The crutch then is adjusted for walking in the rooms.

It may be perceived from the above description that the outside cylinder, G, may be used alone independently from the spring and its appendages, or the spring and its appendages may be used independently from the outside cylinder, G, on crutches or walking-sticks.

I claim—

The combination of the sliding tube C, provided with the spur E, the spiral spring F, and the adjustable tube A, when said parts are arranged to operate as herein shown and described.

R. W. WARE.

Witnesses:

G. W. BONHAM,

J. B. TURCHIN.