Allamby & Bugbee,

Crutch,

No. 47,265. Patented Apr. 18, 1865.

Fig 1.

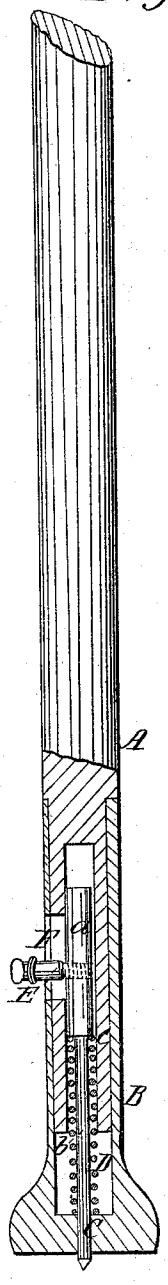
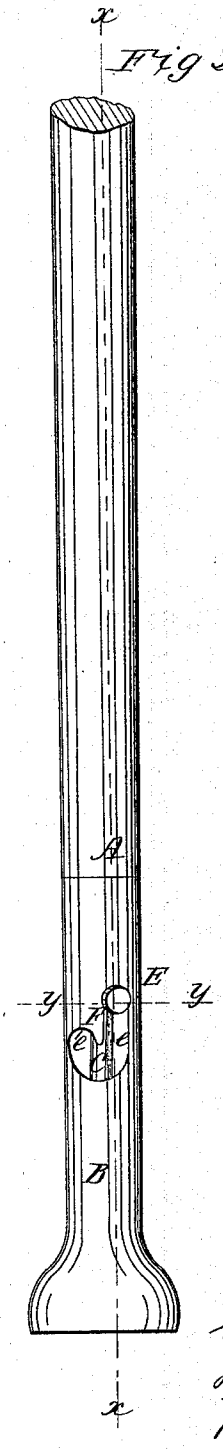




Fig 2.



Witnesses

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A.M. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

GEORGE T. ALLAMBY AND JOHN G. BUGBEE, OF BANGOR, MAINE.

IMPROVEMENT IN CRUTCHES.

Specification forming part of Letters Patent No. **47,265**, dated April 18, 1865.

To all whom it may concern:

Be it known that we, GEO. T. ALLAMBY and JOHN G. BUGBEE, of Bangor, in the county of Penobscot and State of Maine, have invented a new and useful Improvement in Crutches and Canes; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal section of the lower part of a crutch or cane having our improvement applied to it. *x x*, Fig. 2, show the line of section. Fig. 2, an external view of the same; Fig. 3, a transverse section of the same, taken in the line *y y*, Fig. 2.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved manner of applying a spike to a crutch or cane, whereby the spike may, by a very simple adjustment, be made to protrude from the lower end of the crutch or cane, and prevent the latter from slipping on ice or other smooth or slippery surfaces, and the spike, when not required for use, be by an equally simple adjustment withdrawn into the crutch or cane.

A represents the lower part of a crutch or cane, and B is a metal socket, into which the lower end of the crutch or cane is fitted and firmly secured. The lower end of the socket B is larger in diameter than its upper part, to form a head or good bearing-surface, as shown in Figs. 1 and 2, said head projecting down below the lower end of the crutch or cane, as shown in Fig. 1.

C is a spike, which is of cylindrical form, its upper part, *a*, being rather larger in diameter than its lower part, *b*, as shown in Fig. 1. The lower part, *b*, passes through a hole made centrally in the head or lower end of the socket B, and the upper part, *a*, is fitted and works in an opening, *c*, made longitudinally in the lower end of the crutch or cane.

On the smaller part, *b*, of the spike C there is placed a spiral spring, D, the lower end of which bears on the inner surface of the head of the socket B and the upper end against the lower edge of the larger upper part, *a*, of the spike. This spring has a tendency to keep the lower end of the spike up within the socket. The upper part, *a*, of the spike has an arm, E, projecting from it at right angles, said arm extending through a U-shaped slot, F, in the side of the socket. The shape of this slot is shown clearly in Fig. 2, and it will be seen that it is longer at one side, *e*, than at the other side, *e'*.

In order to make the spike C project through the lower end of the socket B, the arm E is pressed down and fitted in the short part *e* of the slot F, and when the spike C is thus adjusted the crutch or cane is prevented from slipping on the ice or any smooth surface. When the spike is not required for use, the arm E is passed down out of the part *e'* of slot F, and the arm or crutch or cane D may throw the spike into the socket, the arm E passing into the long part *e* of the slot F. This arm E may be moved or actuated by the foot or by placing it against any projecting object or surface and then pulling the crutch or cane. It is not necessary to invert the crutch or cane and move the arm E by hand.

The arrangement is extremely simple and may be applied at a small cost.

We claim as new and desire to secure by Letters Patent—

A spike, C, inserted in a metal socket, B, placed on the lower end of a crutch or cane, and provided with a spring, D, and an arm, E, the latter extending through a slot, F, in the socket, all arranged to operate substantially as and for the purpose set forth.

GEO. T. ALLAMBY.
JOHN G. BUGBEE.

Witnesses:
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H. E. LOVEJOY.