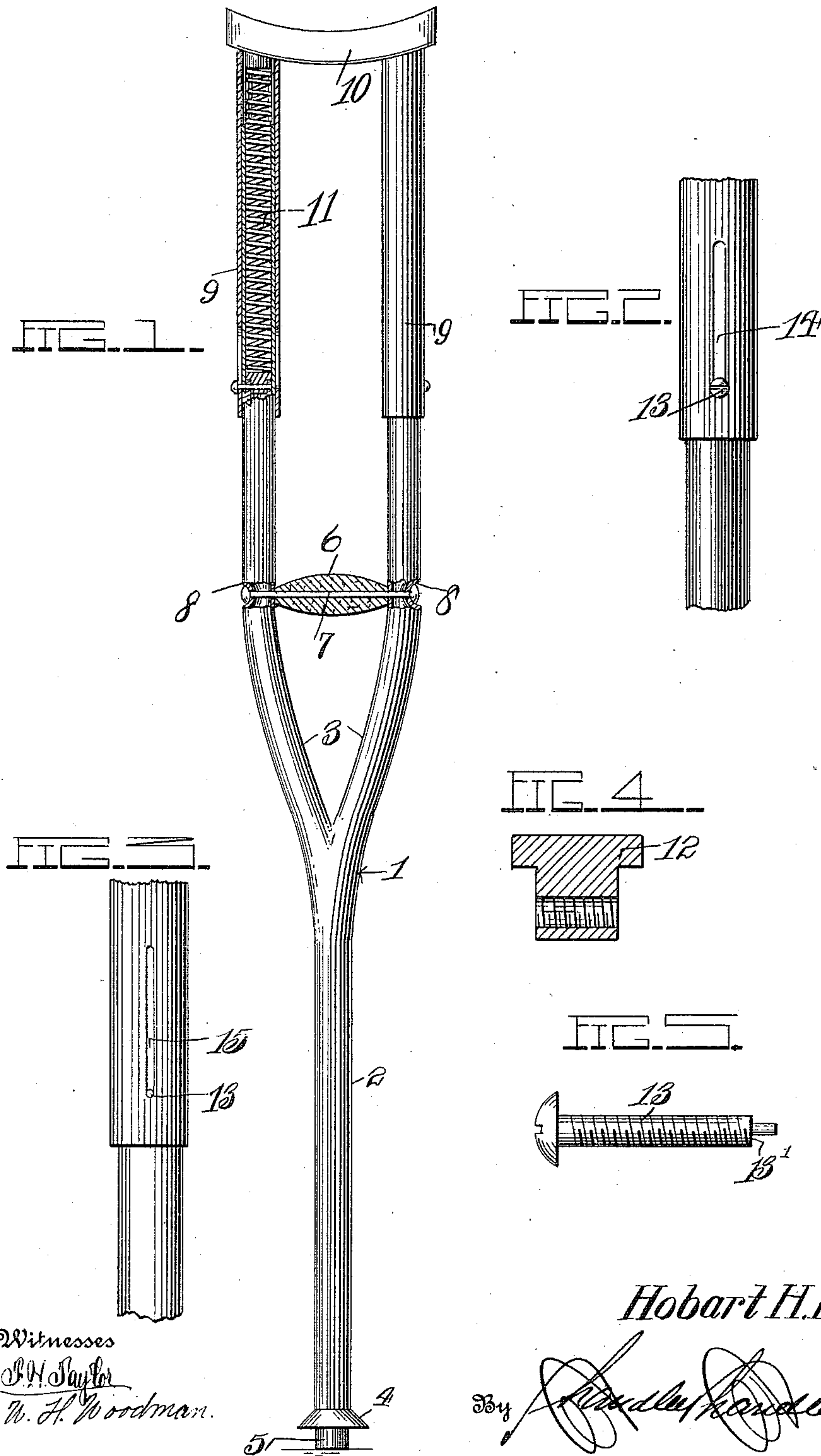


H. H. FLYNN.  
CUSHION CRUTCH.  
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994,584.

Patented June 6, 1911.



Witnesses  
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# UNITED STATES PATENT OFFICE.

HOBART H. FLYNN, OF BELLEVUE, WASHINGTON.

CUSHION-CRUTCH.

994,584.

Specification of Letters Patent.

Patented June 6, 1911.

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*To all whom it may concern:*

Be it known that I, HOBART H. FLYNN, a citizen of the United States, residing at Bellevue, in the county of King, State of Washington, have invented certain new and useful Improvements in Cushion-Crutches; and I do hereby 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.

My invention relates to crutches and my object is to improve the construction and increase the comfort of devices of this character.

A further object is to provide a form of crutch in which the shoulder plate is secured to the stock by a resilient connection.

It will also be understood that a primary object which governs to some extent every other consideration is to reduce the cost of devices of this character to the lowest limit possible, consistent with efficiency, durability and sightliness.

With the above and other objects in view, the invention consists in a certain construction and arrangement of parts and details as is hereinafter more fully described, specifically pointed out in the appended claims, and illustrated in the accompanying drawings which show a preferred embodiment of the invention.

In these drawings which are attached to and form a part of this application, Figure 1 is a front elevation of the crutch shown in part section. Fig. 2 is a fragmentary side elevation of one of the arms from the outside. Fig. 3 is a side elevation of the same arm as viewed from the inside. Fig. 4 is a sectional detail view of the retaining-washer. Fig. 5 is a detail view of the screw and slide member.

Referring more specifically to these views, in which similar reference numerals designate corresponding parts throughout, 1 indicates in general the stock which as shown is formed of tubular metal, preferably steel and comprises a lower portion 2 formed integrally with which are the bifurcated upper portions 3. The base of the stock 2 is preferably flared outwardly as shown at 4, and in the end of the tube is a rubber contact plug 5.

Intermediate the length of the bifurcated upper portion a hand grip 6 of cork or any other suitable material is secured trans-

versely of the bifurcations by means of a bolt 7 which also serves as a tie-rod to more firmly unite the structure. As shown in the drawings the head and nut portions of the bolt are set in in-struck portions 8 in the tubular arms in order to render the crutch more sightly and decrease the liability of tearing the clothes by catching in the outstanding portions. The upper stock portion of the crutch is formed by a pair of sleeves 9 the internal diameter of which is approximately equal to the external diameter of the bifurcated portions 3, and an arm or shoulder piece 10 will usually be constructed of wood and padded with leather. It is the particular purpose of the present invention to provide a simple, efficient and sightly method of rendering the crutch stock resilient and with this in view the telescoping upper and lower stock members are normally held in an extended position by coiled helical compression springs one of which is shown in Fig. 1 and designated by the numeral 11. As is clearly shown in the drawings the upper end of this spring abuts against the arm piece 10. In order to secure the lower end of the spring I provide the novel construction illustrated by the detail views of Figs. 4 and 5.

In Fig. 4 there is seen a sectional view of my spring retaining plug. This plug is in the form of a thickened disk having a lower reduced portion through which is formed a horizontal tapped opening. Adapted to thread into this opening is a peculiar form of screw or bolt shown in Fig. 5. This bolt comprises a head portion, a plain cylindrical portion, a threaded portion of equal diameter, and an outer plain cylindrical portion of smaller diameter. Referring to the plug and bolt by the numerals 12 and 13 respectively it will be seen that the former is seated some distance down in the tubular member 3 and that the latter is then introduced through a slot designated 14 in the outer face of the tubular member 9. The bolt or screw 13 is then threaded through the tapped aperture of the plug 12 and the outer reduced extremity of the bolt passes through the wall of the tubular member 3 and projects outwardly about the thickness of the metal of the tube 9. This point acts in a slot 15 directly opposite and of the same length as the slot 14 but of somewhat less width. It will be seen that the shoulder here designated 13' which is formed at the



junction of the reduced bolt extremity and the threaded portion of the bolt will abut against the inner surface of the tubular member 3 and will form means whereby the screw may be set up tightly without drawing the same through so that the head would give undue pressure upon the outer face of the member 9.

In assembling the crutch it is preferred that the stock should be assembled complete, including the positioning of the spring retaining plug, before the springs themselves are inserted. If this is done there will be no difficulty in securing the plug, and the springs may then be dropped into place, and depressed from the top sufficiently to permit the wooden arm piece 10 to be secured.

From the above description it will be apparent that I have provided a simple and inexpensive construction of resilient crutch stock, containing few parts and these so combined as to facilitate the operation of fitting and assembling.

What I claim is:

1. A crutch, comprising an extensible resilient stock, formed of a pair of telescoping tubular members, the outer of said members being formed with oppositely disposed longitudinal slots therein and the inner member formed with oppositely disposed openings alining with each other and with the slots, a stop member positioned within the bore of the inside telescoping member, said stop member being formed with a transverse opening alining with said tube openings, a

securing pin passing through said tube openings and through said stop member opening, said pin having extensions co-acting with said slot, means for securing said pin in place, and a helical compression spring positioned within the alining bores of said tubular members and seated at one end upon said stop member.

2. In a crutch, an extensible resilient stock formed of a pair of telescoping tubular members, the outer of said members being formed with oppositely disposed longitudinal slots therein, an inner member formed with oppositely disposed openings alining with each other and with the slots, a stop member positioned in the bore of the inside telescoping member, said stop member being formed with a transverse opening, a securing pin threaded to co-act with said opening, the pin being reduced at one extremity to provide a shoulder for bearing against the inner face of said inside tubular member, said reduced extremity extending outwardly to co-act with one of said slots, the head portion of said securing pin being extended outwardly to co-act with the other of said slots, and a helical compression spring seated in the bore of said stock and bearing at one end on said stop member.

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

HOBART H. FLYNN.

Witnesses:

ROY HUGHES,  
AVA IVEY.