No. 619,235. Patented Feb. 7, 1899.

R. SCHWARTING.

CRUTCH.

(Application filed Oct. 18, 1898.)

(No Model.)

Fig. 1.

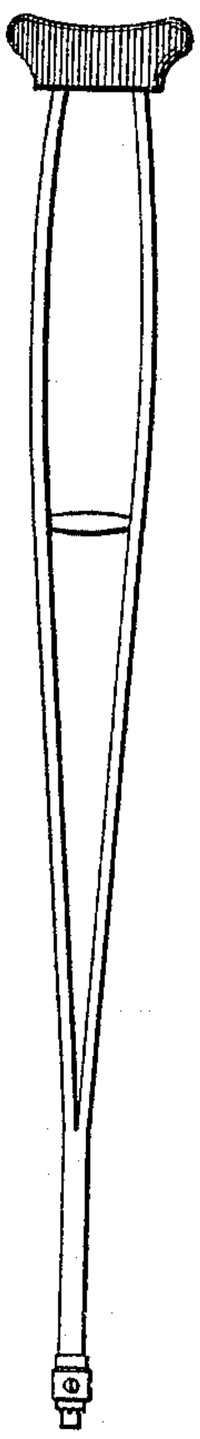


Fig. 2.

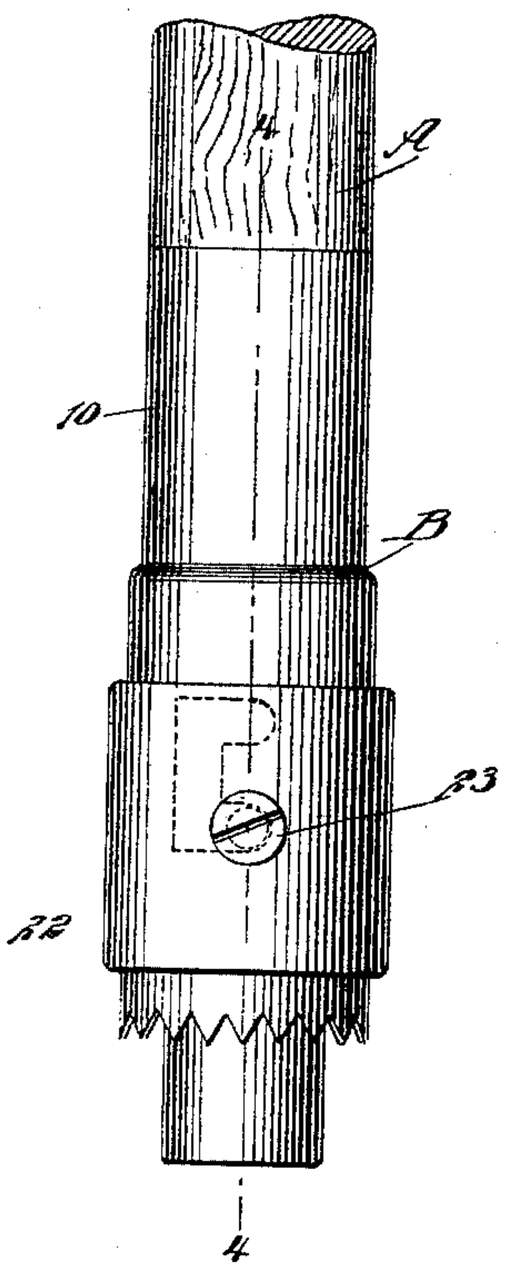


Fig. 3.

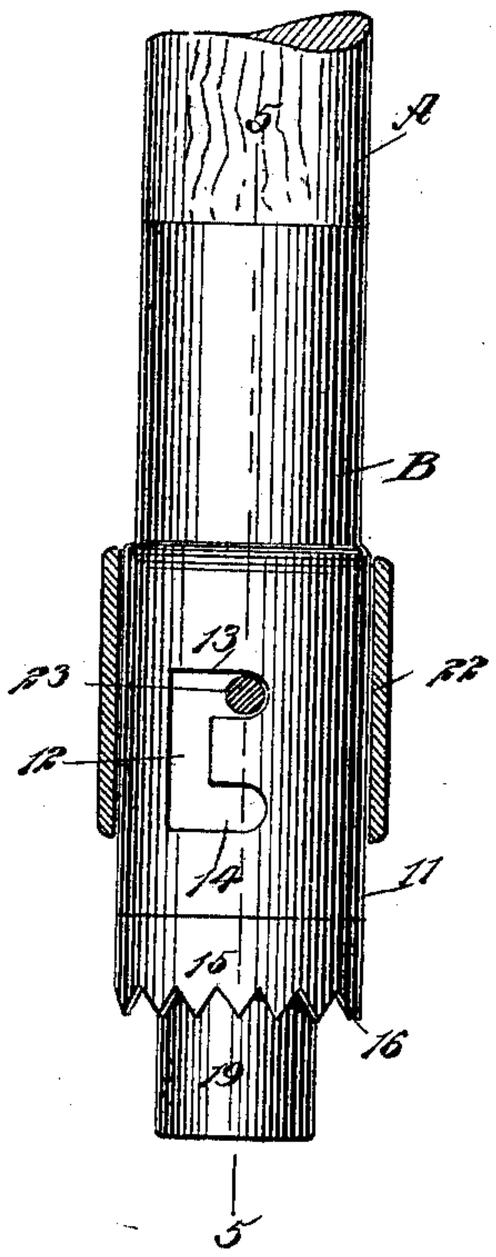


Fig. 4.

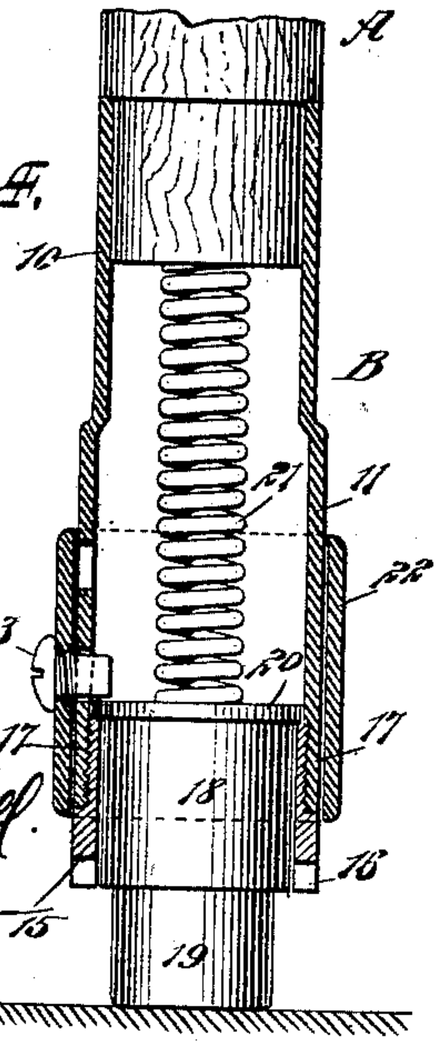
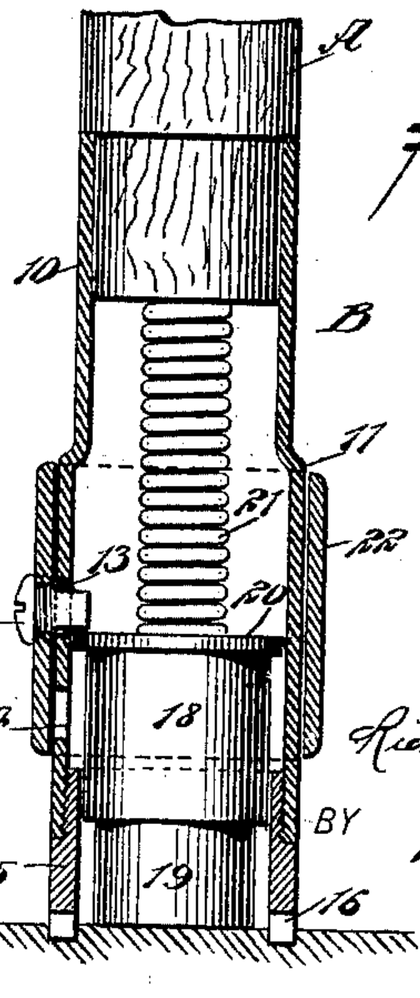


Fig. 5.



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RICHARD SCHWARTING, OF NEW YORK, N. Y.

CRUTCH.

SPECIFICATION forming part of Letters Patent No. 619,235, dated February 7, 1899.

Application filed October 18, 1898. Serial No. 693,890. (No model.)

To all whom it may concern:

Be it known that I, RICHARD SCHWARTING, of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Crutches, of which the following is a full, clear, and exact description.

My invention relates to an improvement in crutches, and especially to an improvement upon the construction set forth in my application in the United States for a similar device filed March 14, 1898, Serial No. 673,780, and allowed July 29, 1898.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a crutch and the improved foot applied thereto. Fig. 2 is an enlarged side elevation of the improved foot. Fig. 3 is also a side elevation of the improved foot, parts being in section. Fig. 4 is a longitudinal section taken practically on the line 4 4 of Fig. 2, the spur-tip being locked out of action; and Fig. 5 is a section taken longitudinally on the line 5 5 of Fig. 3, illustrating the spur-tip in action.

A represents the bottom portion of a crutch, and B the foot thereof. The foot comprises, preferably, a sleeve 10, secured to the stick or body portion of the crutch in any suitable or approved manner, and a hollow ferrule-section 11, which is open at its lower end and provided at said lower end with an interior thread. A slot 12 is longitudinally made in the ferrule-section of the foot, and the slot is provided with an upper and a lower lateral branch, the two branches extending in the same direction, and said branches are designated, respectively, as 13 and 14.

A tip in the form of a ring 15 is located at the lower portion of the ferrule-section of the foot. This tip is provided at its lower end with teeth or spurs 16 and with an upper reduced section 17, exteriorly threaded to engage with the interiorly-threaded surface of the ferrule portion of the foot, as shown in Figs. 4 and 5. A plug 18, preferably made of metal, is held to slide in the ring-tip 15, and a tip 19, of rubber or other yielding material, is screwed in the bottom portion of the aforesaid plug, while the upper portion of the plug 18 is provided with a marginal flange 20, and when the parts of the foot are in their normal position the flange 20 is held in engagement with the upper end of the ring-tip by means of a spring 21, that bears upon the upper surface of the plug and against the lower end of the stick A of the crutch.

A sleeve 22 is held to slide and likewise turn upon the ferrule-section 11 of the foot B, and the sleeve 22 is provided with a screw 23, that extends through it, or with an interior pin or other form of projection, and the said screw or pin 23 extends within the slot 12 and is adapted to enter either one or the other of the branches of the slot. When the screw is in the upper branch 13 of the slot 12, as shown in Fig. 3, when pressure is brought to bear on the arm of the crutch the yielding tip and accompanying plug 18 will be forced up within the ferrule-section of the foot, as shown in Fig. 5, and the spur-tip carried by said ferrule-section will engage with the ground. When the foot of the crutch is removed from the ground, the spring 21 restores the plug and attached yielding tip to their normal position, (shown in Fig. 4,) and it is obvious that when said plug reaches its normal position it will have cleaned the teeth or spurs 16 from any matter that may have adhered thereto.

When the weather and traveling are fine and the spur-tip is not needed or when the user of the crutch is in the house, the spur-tip may be locked out of action by causing the pin or screw 23 to enter the lower branch 14 of the slot 12, as shown in Fig. 4, whereupon the screw or pin 23 will bear upon the upper end of the plug 18 while said plug is in its normal position and will prevent the plug from moving upward in the ferrule-section of the foot, consequently not permitting the spur-tip to engage with the ground or other surface being traveled.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A foot for crutches, provided with a roughened tip which is a fixture to the foot,

and a yielding tip arranged to have sliding movement within the roughened surface of the foot and likewise within the body of said foot, and a locking device capable of preventing the movement of said yielding tip within the roughened tip and within the ferrule of the foot, substantially as described.

2. A foot for crutches provided with teeth at its lower end and a longitudinal slot above the teeth, having lateral branches, a sleeve mounted to turn and slide on the foot, having a projection to enter said slot, and a spring-controlled yielding tip, having sliding movement within the foot and arranged to extend normally beyond the toothed surface of the foot, for the purpose set forth.

3. A crutch, having a rigid foot-section adapted to engage the ground and having a longitudinally-movable elastic foot-section movable relatively to the rigid foot-section, and means for limiting the movement of said elastic foot-section to render the same operative or inoperative, as desired.

RICHARD SCHWARTING.

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