W. B. PARSONS.

CRUTCH.

APPLICATION FILED DEC. 8, 1910.

**1,004,899.** Patented Oct. 3, 1911.

*Fig. 1*

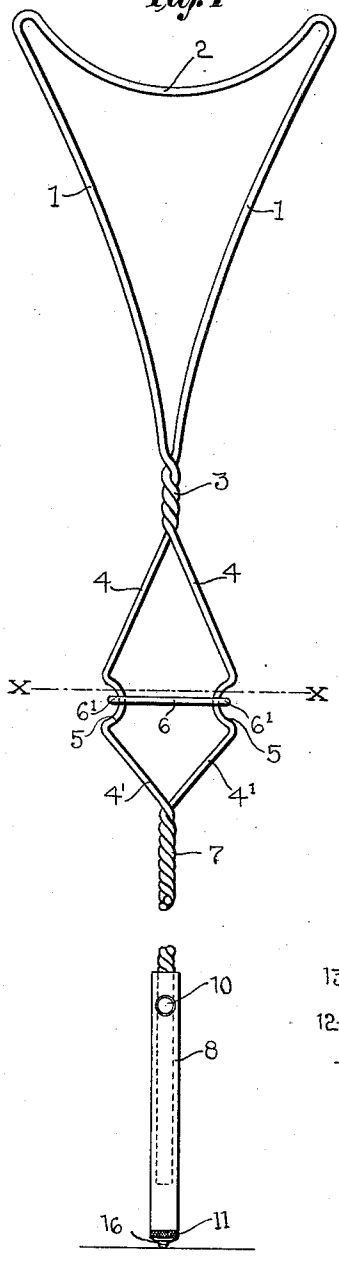



*Fig. 4*

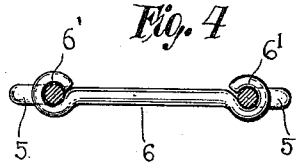



*Fig. 6*

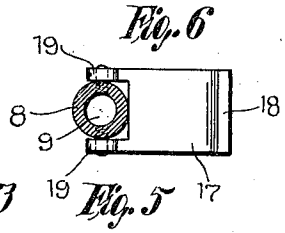



*Fig. 2*

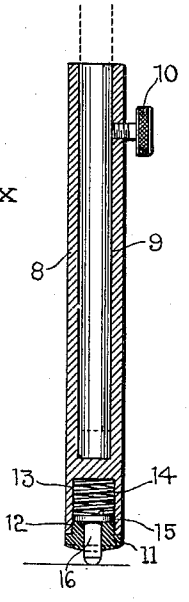



*Fig. 3*

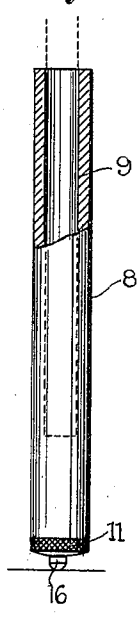
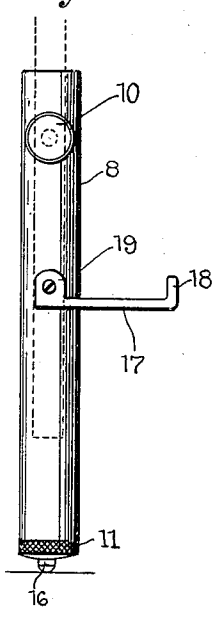



*Fig. 5*




Witnesses

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# UNITED STATES PATENT OFFICE.

W BUCHANAN PARSONS, OF MISSOULA, MONTANA.

## CRUTCH.

1,004,899. Specification of Letters Patent. Patented Oct. 3, 1911.

Application filed December 8, 1910. Serial No. 596,324.

*To all whom it may concern:*

Be it known that I, W BUCHANAN PARSONS, a citizen of the United States, residing at Missoula, in the county of Missoula and State of Montana, have invented certain new and useful Improvements in Crutches, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to crutches and has for its object to provide a strong, durable crutch which will be simple in construction and economical to manufacture.

Referring to the accompanying drawings: Figure 1 is a view in elevation partly broken away of a crutch constructed in accordance with this invention. Fig. 2 is an enlarged detail view in vertical section of an adjustable support adapted to be adjustably mounted on the lower end of a crutch. Fig. 3 is a detail view showing the support for the crutch partly broken away. Fig. 4 is an enlarged detail view in horizontal section on the line X—X of Fig. 1. Fig. 5 is another detail view of the crutch support showing a foldable foot rest hinged thereto. Fig. 6 is a plan view of the device shown in Fig. 5 looking downward thereon.

In the construction of this invention, the crutch is formed of a single piece of wire which is bent to form the upper V-shaped portion of a crutch having the diagonal arms 1 and the upper curved portion 2 serving as an arm rest connecting the upper ends of said arms 1 and forming the socket which is located under the arm of the user. The crutch is further formed with the twisted portion 3 extending from the lower ends of the arms 1 and with the diagonal portions 4 extending downward from the twisted portion 3, and with the curved portions 5 connected together by a piece of wire 6 serving as a hand brace rest, and having its ends 6′ clamped around the curved portions 5. The curved portions 5 connect the upper diagonal portions 4 and the diagonal portions 4′, which connect at their lower ends with the twisted portion 7 of the crutch extending downward a suitable distance, and forming the lower end of the crutch proper. In order to provide a support for the lower end of the crutch a short cylindrical rod 8 is provided which serves as the lower or foot portion of the crutch and has an elongated socket 9 into which projects the lower twisted end 7 of the crutch which is held therein in any suitable manner, as for example, by means of a set screw 10 projecting from the side of the support 8 and bearing against the twisted portion 7 of the crutch. It will be seen that by means of this construction the length of the crutch may be changed by raising or lowering the twisted portion 7 thereof in the socket 9 of the support 8, the twisted portion 7 either resting on the bottom of the socket 9 or being held in different elevated positions therein by means of the set screw 10, thereby providing a crutch of any desired length.

In order that the lower end of the crutch may not bear hard against the ground or floor, a cushioning device is provided and as here shown preferably consisting of a shouldered disk 11 having a threaded portion 12 screwing into the lower end of the socket 13 in the lower end of the support 8. Located in the socket 13 is a coil spring 14 which rests on top of the disk-shaped head 15 of a pin 16 projecting through and vertically movable in a hole in the disk 11.

It will be seen that by means of this invention as the weight of the user is brought to bear on the crutch the spring 14 will be compressed by the pushing up of the pin 16, thereby giving a cushioning effect to the lower end of the crutch. The pin 16 may be roughened or pointed so as to prevent slipping and thereby provides in conjunction with the cushioning effect aforesaid against slipping of the crutch.

In order that means may be provided for a person using the crutch with a shortened leg to support the foot, a foot rest is preferably provided, and as here shown consists of a plate 17 serving as a foot rest and having an upturned outer edge 18 and lugs 19 at its rear end overlapping and hinged to the rest 8 of the crutch. When not in use, the foot rest 17 may be folded up against the support 8.

Having thus described the invention, what I claim as new is:

1. In a crutch of the kind described, an arm rest portion at the upper end of the crutch, a spaced central portion, and a twisted lower portion all formed of a single piece of wire and a foot member projecting from said twisted lower portion.

2. In a crutch of the kind described, a V-shaped arm rest portion at the upper end of the crutch, a twisted portion at the lower

end of said V-shaped portions, outwardly diverging portions extending from said twisted portion, inwardly converging portions extending from the lower ends of said outwardly converging portions, a brace between said diverging and converging portions, and a twisted lower end extension projecting from the lower converging portions, said several parts being formed of one piece of wire, and a foot member projecting from the end of said twisted lower end extension.

3. In a crutch of the kind described, an upper arm rest portion at the upper end of the crutch, an outwardly extending braced portion connected with the lower end of said upper arm rest portion, said parts being formed of a single piece of wire and a floor member formed with a longitudinal socket open at its upper end into which projects the twisted member, and means for clamping said twisted member in said socket.

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

W BUCHANAN PARSONS.

Witnesses:
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