

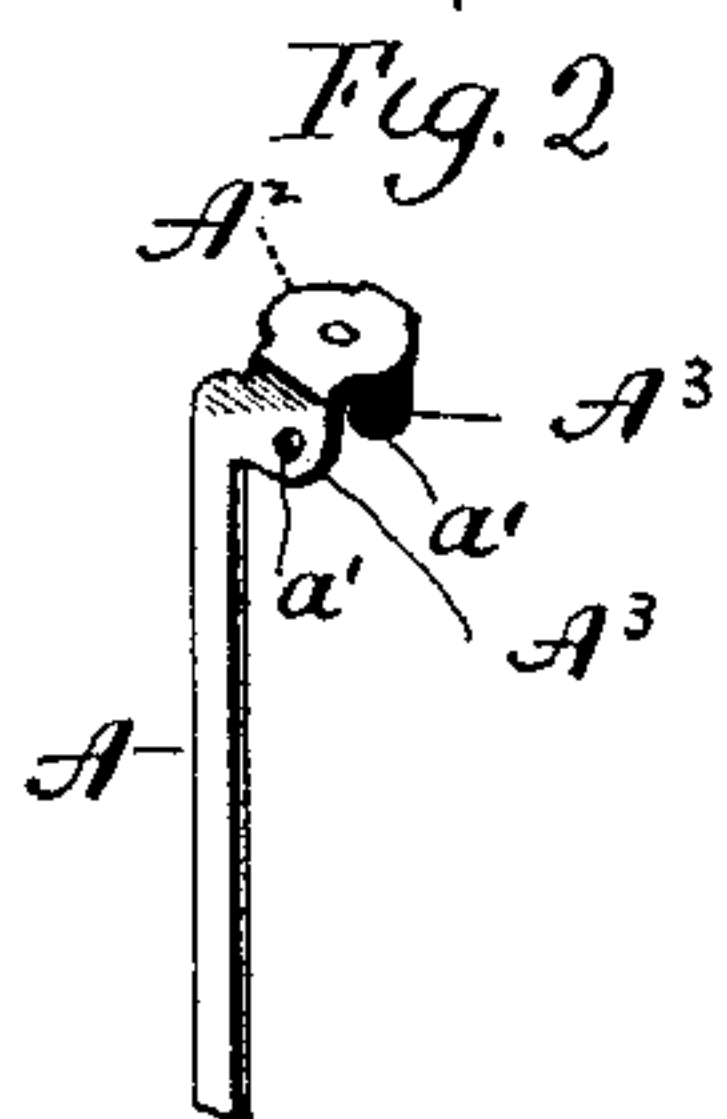
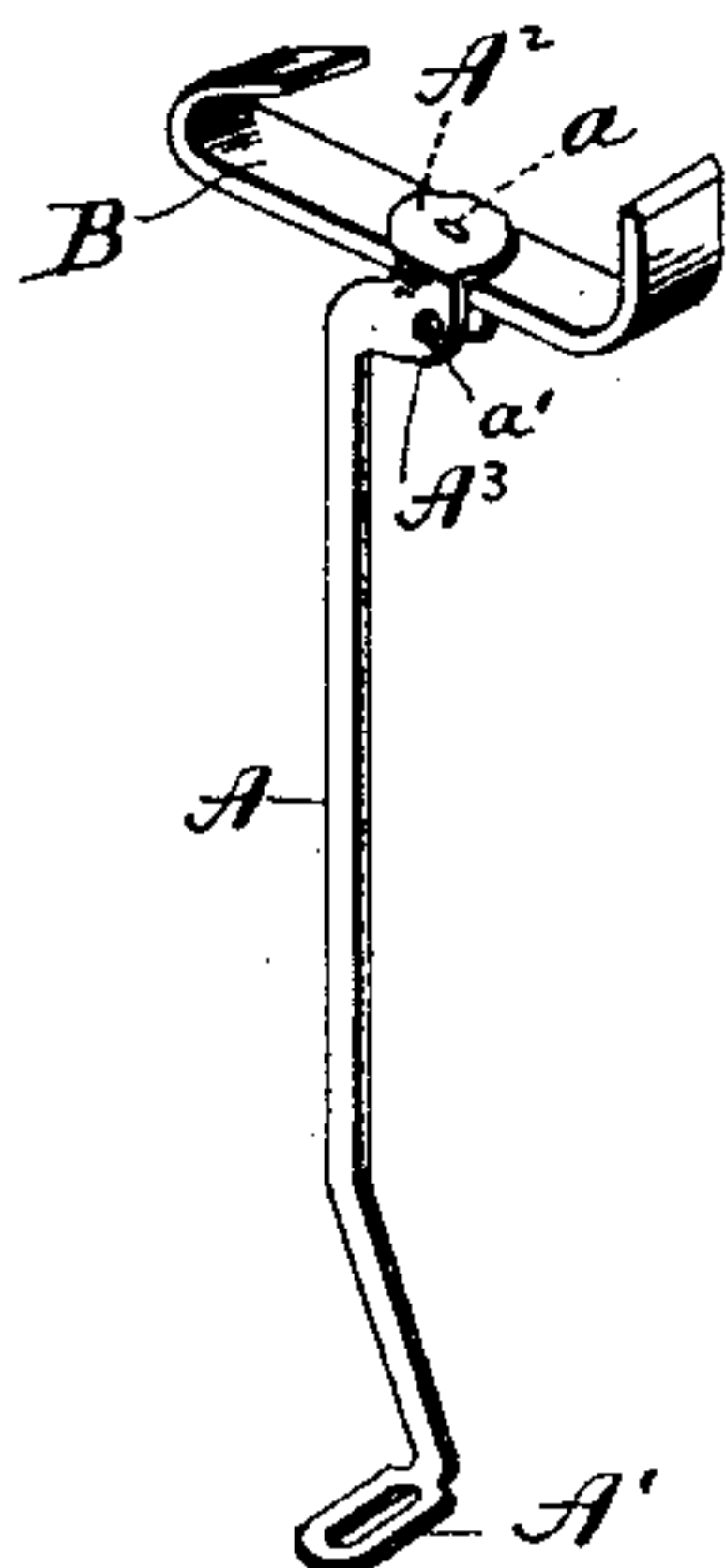
(No Model.)

W. E. PORTER.  
ESCAPEMENT CRUTCH FOR CLOCKS.

No. 542,863.

Patented July 16, 1895.

*Fig. 1.*



Witnesses.

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# UNITED STATES PATENT OFFICE.

WILSON E. PORTER, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO THE  
NEW HAVEN CLOCK COMPANY, OF SAME PLACE.

## ESCAPEMENT-CRUTCH FOR CLOCKS.

SPECIFICATION forming part of Letters Patent No. 542,863, dated July 16, 1895.

Application filed May 13, 1895. Serial No. 549,129. (No model.)

*To all whom it may concern:*

Be it known that I, WILSON E. PORTER, of New Haven, in the county of New Haven and State of Connecticut, have invented a new  
5 Improvement in Escapement-Crutches for Clocks; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and  
10 exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of a crutch containing my invention and having a verge  
15 applied to it; Fig. 2, a detached perspective view of the upper end of my improved crutch with the verge removed and showing the integral yoke.

My invention relates to an improvement in  
20 escapement-crutches for clocks, the object being to simplify the connection of the crutch and verge and their pivotal suspension from the clock-movement.

With these ends in view my invention consists in a crutch made from a single piece of  
25 sheet metal and comprising a reach or body portion and a yoke located at the upper end thereof, adapted to have the verge directly connected with it and containing two perforations for the reception of the pin or stud  
30 upon which the crutch, and hence the verge, oscillates.

My invention further consists in a crutch having certain details of construction, as will  
35 be hereinafter described, and pointed out in the claims.

In carrying out my invention, as herein shown, I construct from a single piece of sheet metal a crutch, consisting of a long reach or  
40 body portion A, a forwardly-projecting eye A', located at the lower end thereof and adapted to receive the pendulum-rod, and a yoke located at the upper end of the said reach, offsetting to the right therefrom, and  
45 comprising a central horizontal portion A<sup>2</sup>, to which the verge B is secured by a vertical rivet *a*, and two parallel vertically-arranged arms A<sup>3</sup> A<sup>3</sup>, each of which has a horizontal perforation *a'*, which are located in line with  
50 each other and adapted to receive the forwardly-projecting horizontal pin or stud, which is not shown, but which is ordinarily employed for the support of the verge and crutch. It is not essential that the lower end

of the crutch should be provided with an integral eye, but that is my preferred construction.

By making the crutch of sheet metal and providing it at its upper end with a yoke to receive the pin or stud upon which the verge  
60 and crutch swing I simplify the escapement mechanism of a clock and secure a more reliable construction than any before known, for heretofore it has been customary to rivet the upper end of the crutch directly into the  
65 verge and provide the same with an independently-attached yoke for receiving the said pin or stud.

It is apparent that the particular form of my improved crutch may vary, and I would  
70 therefore have it understood that I do not limit myself to the exact form herein shown and described, but hold myself at liberty to make such changes as fairly fall within the spirit and scope of my invention.

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

1. A crutch for the escapement mechanism of clocks, formed from a single piece of sheet-  
80 metal, and comprising a reach or body-portion, and a yoke located at the upper end thereof, and comprising a central portion adapted to have a verge connected with it, and two perforated arms, the perforations of which  
85 are located in line for the reception of the pin or stud upon which the crutch oscillates, substantially as and for the purpose set forth.

2. A crutch for the escapement mechanism of clocks, formed from a single piece of sheet-  
90 metal and comprising a reach or body-portion, a forwardly projecting integral eye located at the lower end thereof, and a yoke located at the upper end thereof, and comprising a central portion adapted to have a verge  
95 connected with it, and two perforated vertically arranged arms, the perforations of which are located in line for the reception of the pin or stud upon which the crutch oscillates, substantially as and for the purpose set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILSON E. PORTER.

Witnesses:

EUGENE CARTIER,  
GEO. H. RHYNEDANCE.