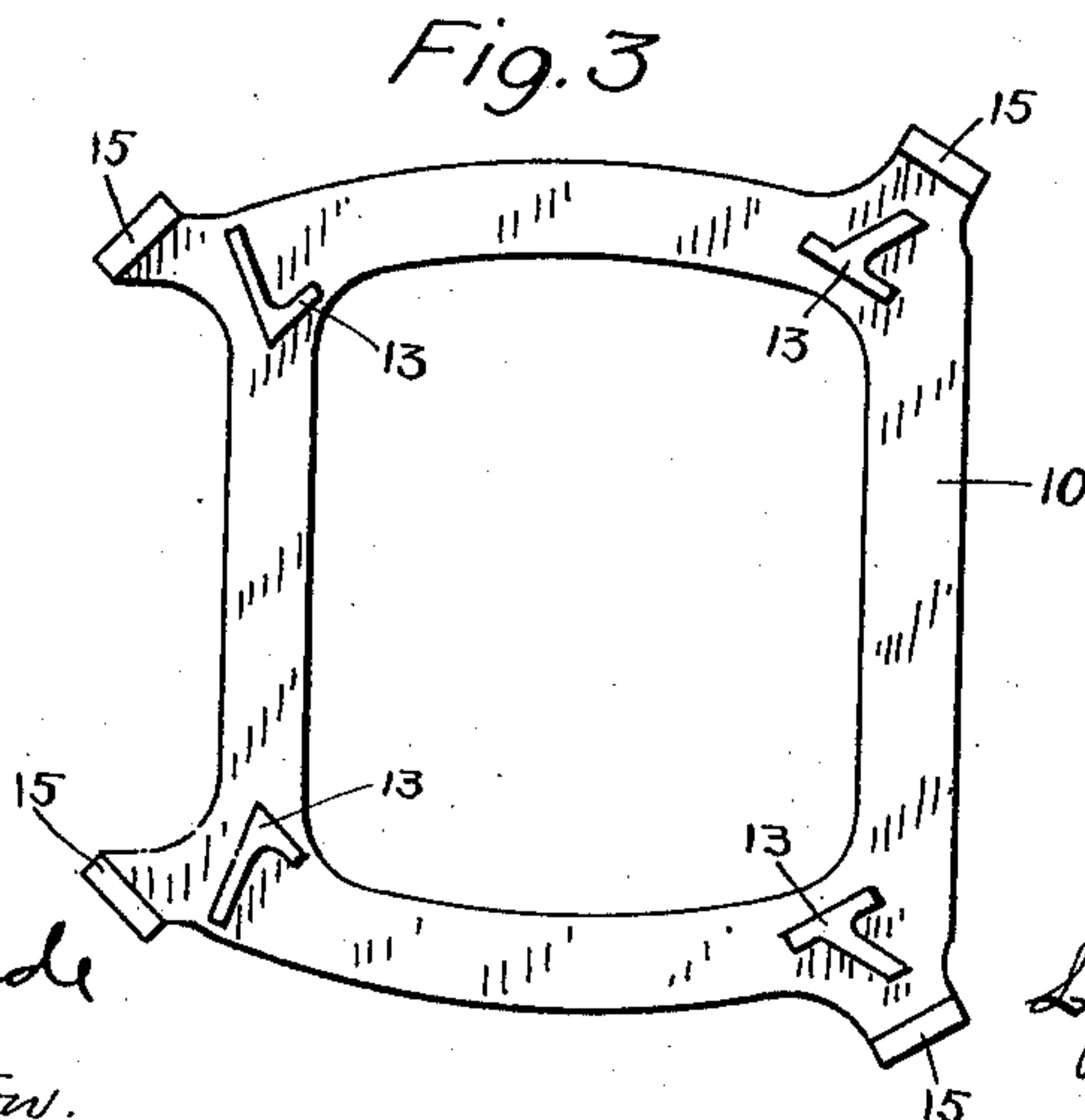
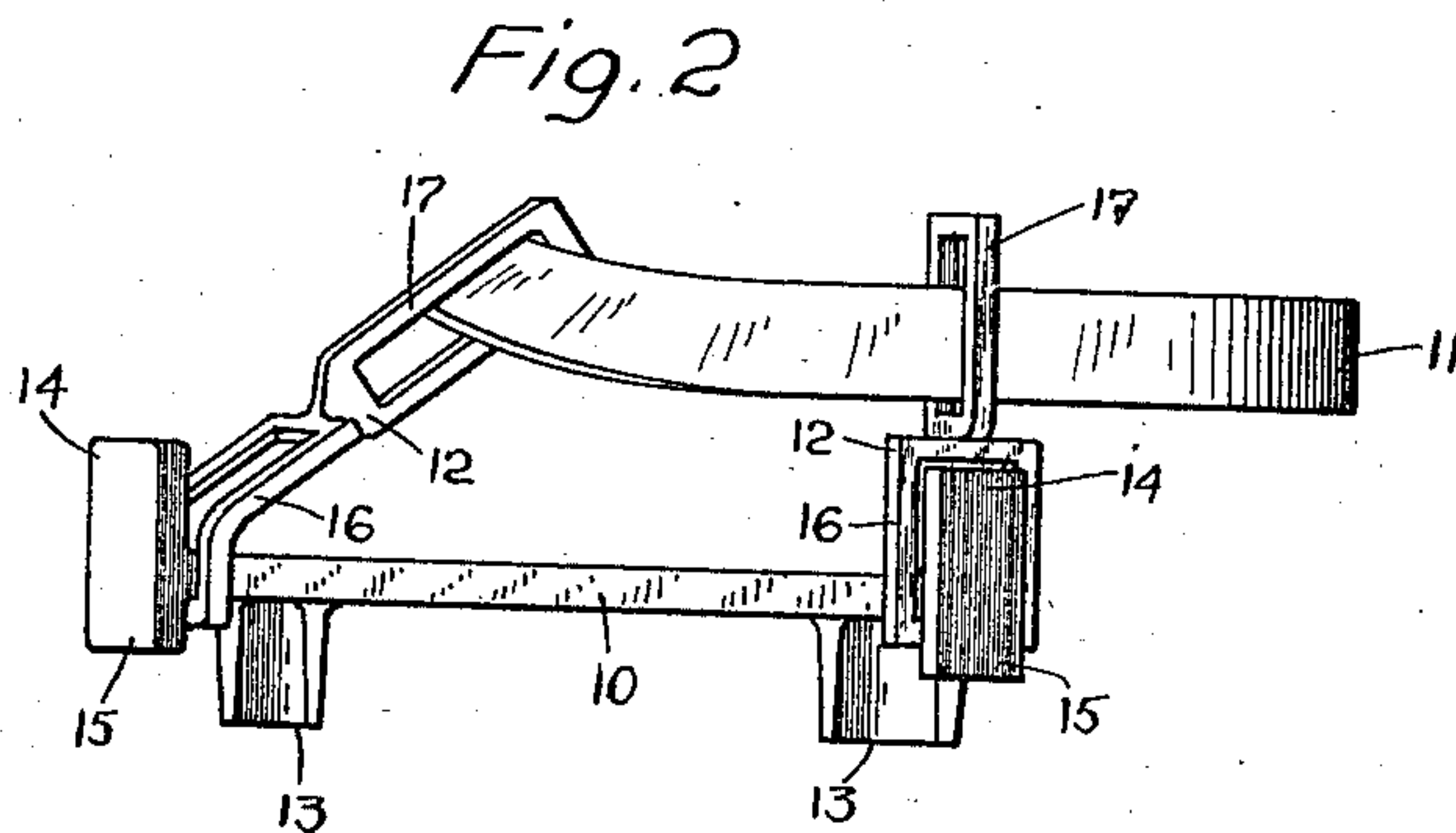
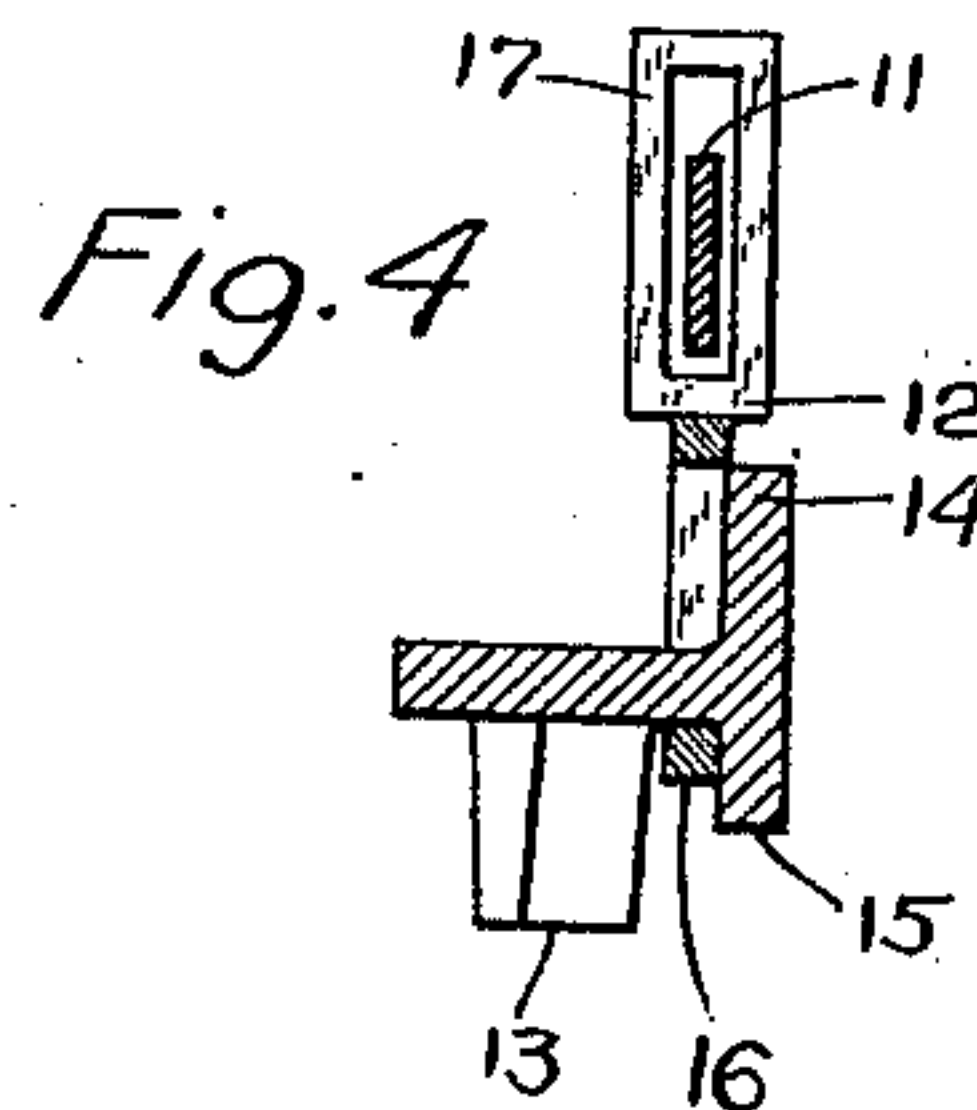
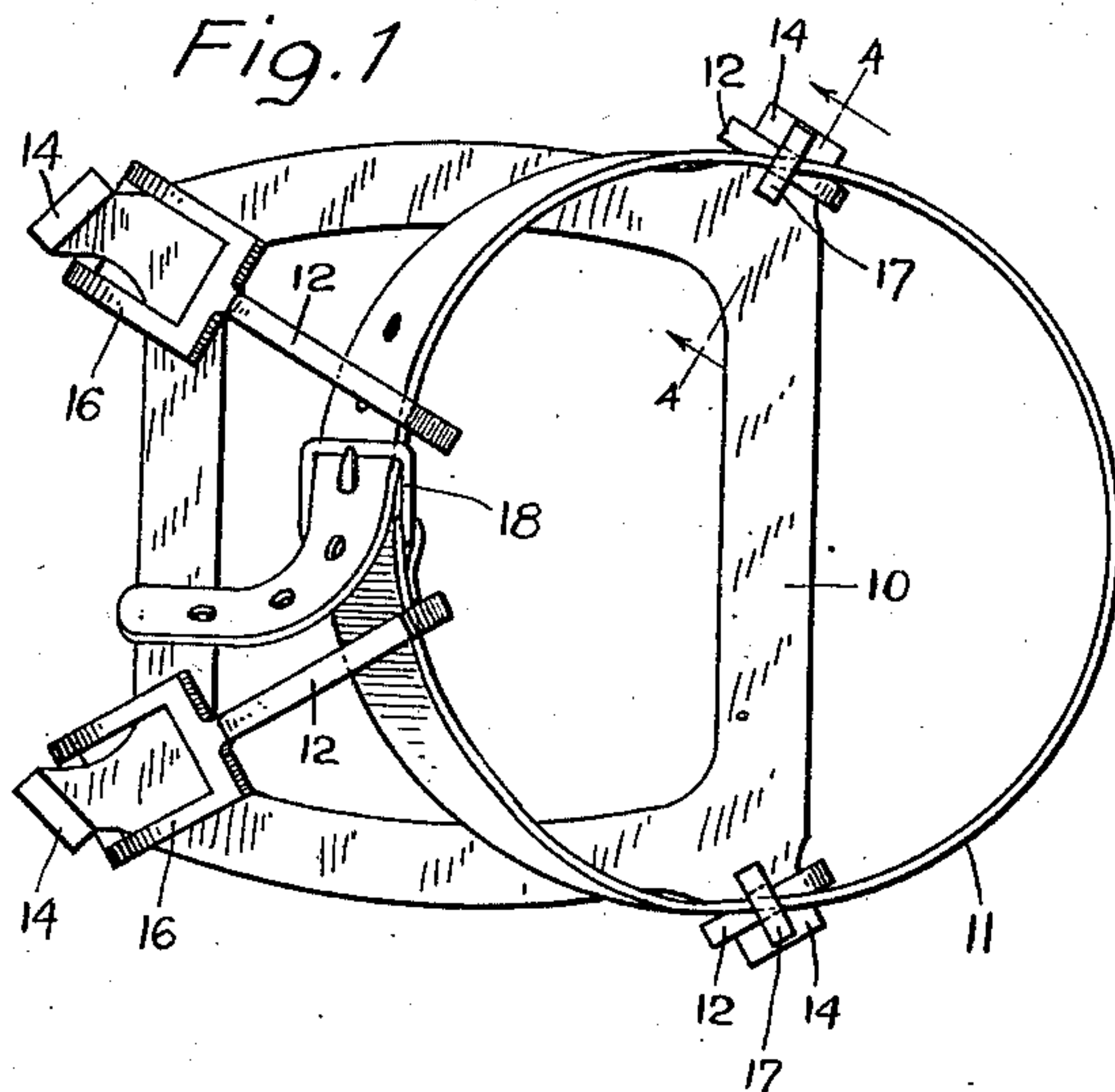


L. D. JONES.  
DETACHABLE CALK FOR HORSES.  
APPLICATION FILED FEB. 11, 1911.

996,720.

Patented July 4, 1911.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

LYMAN D. JONES, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO ETTA E. BRANDEAU,  
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## DETACHABLE CALK FOR HORSES.

996,720.

Specification of Letters Patent.

Patented July 4, 1911.

Application filed February 11, 1911. Serial No. 608,043.

*To all whom it may concern:*

Be it known that I, LYMAN D. JONES, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented an Improvement in Detachable Calks for Horses, of which the following is a specification.

This invention has for its object to provide detachable calks for horses for use upon icy roads or pavements in lieu of sharp shoeing, the first cost of which shall be relatively low, which shall be durable, the wearing parts of which may be renewed at slight expense and which may be easily and quickly attached and detached without the use of tools and by any person who need not be a skilled mechanic.

With these and other objects in view I have devised the novel detachable calks which I will now describe, referring to the accompanying drawing forming a part of this specification and using reference characters to indicate the several parts.

Figure 1 is a plan view of my novel invention complete as in use; Fig. 2 a side elevation corresponding therewith; Fig. 3 an inverted plan view of the calk plate; and Fig. 4 is a section on the line 4—4 in Fig. 1, looking in the direction of the arrows.

The device comprises essentially a calk plate 10, an attaching strap 11 and links 12 which connect the calk plate with the attaching strap. The calk plate is provided on its under side with angular calks 13, two of which are shown as substantially L-shaped and the other two as substantially T-shaped, this formation being adopted in order to give the greatest possible hold upon smooth, icy pavements. At the corners of the calk plate are upwardly extending lugs 14 which receive between them the shoe (not shown) and prevent the plate from slipping off from the shoe laterally, and downwardly extending lugs 15 (said upwardly and downwardly extending lugs being shown as made integral) which prevent the links from slipping off when attached, as clearly shown in Fig. 2. I have shown links consisting of eyes 16 and 17 lying in planes at right angles to each other, eyes 16 being adapted to hook over the downwardly extending lugs on the calk plate and eyes 17 being adapted to receive the strap, as clearly shown in Fig. 2.

The eyes 16 which are intended to engage the downwardly extending lugs at the front of the calk plate are preferably bent at more or less of an angle to adapt them to lie closely to the inclination of the front of the hoof. In use, the strap is drawn tightly about the hoof above the calk plate and secured in any suitable manner as by a buckle 18.

The mode of attachment will be obvious from the drawing. The foot is lifted, the calk plate placed under the shoe and then the foot is allowed to rest on the ground. The links may remain permanently on the strap which passes through the eyes 17, as clearly shown, the strap may be buckled loosely, the eyes 16 of the links caught over the downwardly extending lugs on the calk plate and then the strap is raised as far as possible on the hoof and tightened up. The inclination of the hoof will prevent the strap from dropping down and the strap in connection with the upwardly extending lugs on the calk plate will retain the latter securely in place, it being immaterial if there is slight lateral movement of the calk plate relatively to the shoe (not shown) in either direction as the lugs will prevent detachment.

The straps and the links will last for an almost unlimited length of time, the wear being wholly upon the calks. As soon as the calks are worn sufficiently to impair their usefulness they may be thrown away and new ones substituted, the calk plates being cast integral and complete and costing but very little in comparison with sharp shoeing.

Having thus described my invention I claim:

1. A device of the character described comprising a calk plate having lugs extending downwardly below the plane of said plate, a retaining strap and links comprising eyes lying in planes at right angles to each other, the strap sliding freely through the upper eyes and the lower eyes being adapted to hook over the downwardly extending lugs.

2. A device of the character described comprising a calk plate having downwardly extending lugs, a retaining strap and links having eyes adapted to be engaged by the strap and to hook over the lugs upon the

calk plate, the eyes to engage the lugs at the front of the calk plate being bent at an angle, for the purpose set forth.

3. A device of the character described  
5 comprising a calk plate having lugs, extending downwardly below the plane of said plate, and additional lugs extending above the plane of said plate to prevent lateral displacement, an attaching strap and

links carried by said strap and adapted to 10 hook over the downwardly extending lugs on the calk plate.

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

LYMAN D. JONES.

Witnesses:

A. M. WOOSTER,  
S. W. ATHERTON.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

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