

952,139.

L. RICE.  
ATTACHMENT FOR SPRING BOARDS.  
APPLICATION FILED NOV. 16, 1907.

Patented Mar. 15, 1910.

2 SHEETS—SHEET 1.

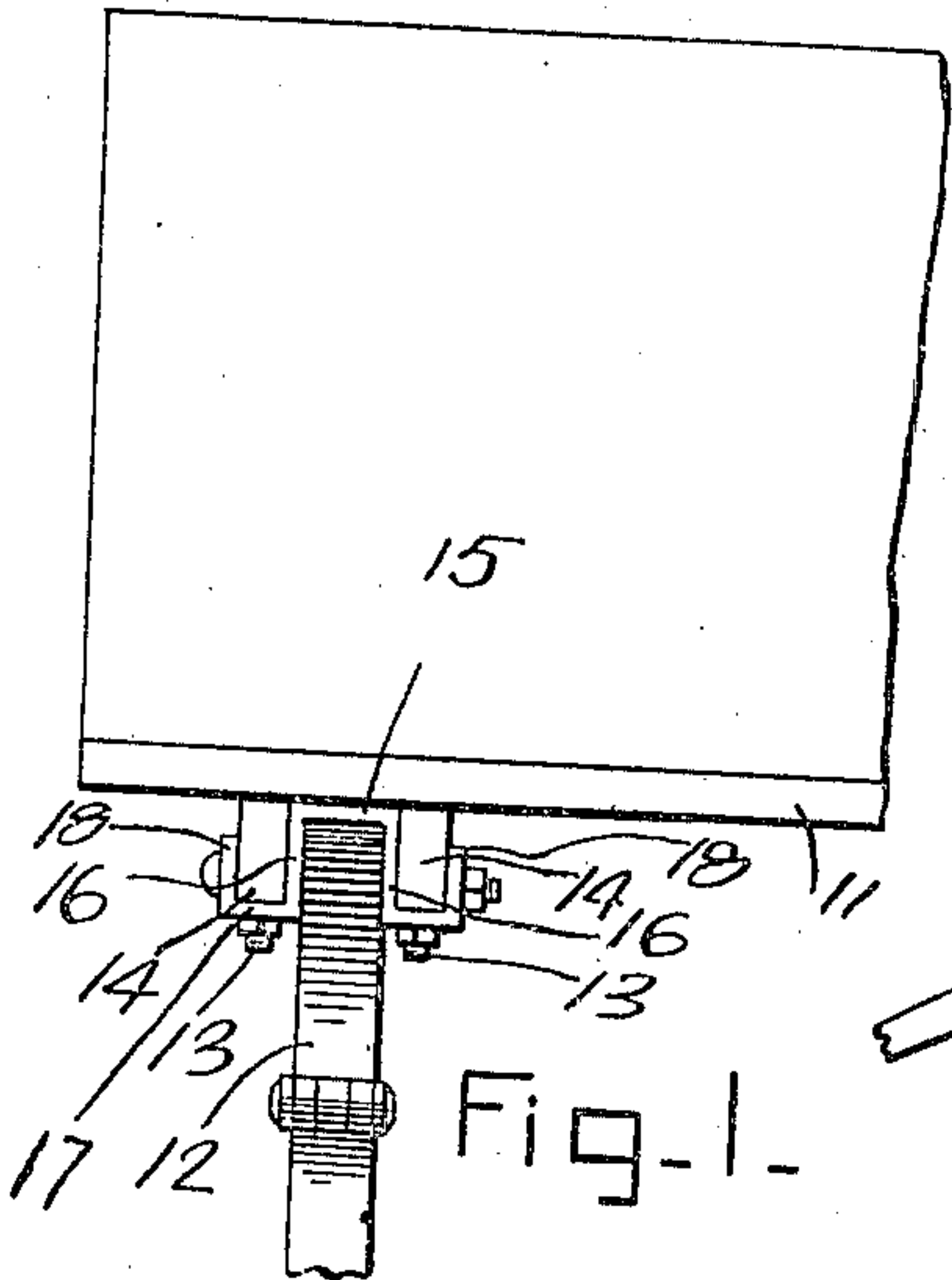


Fig. 1.

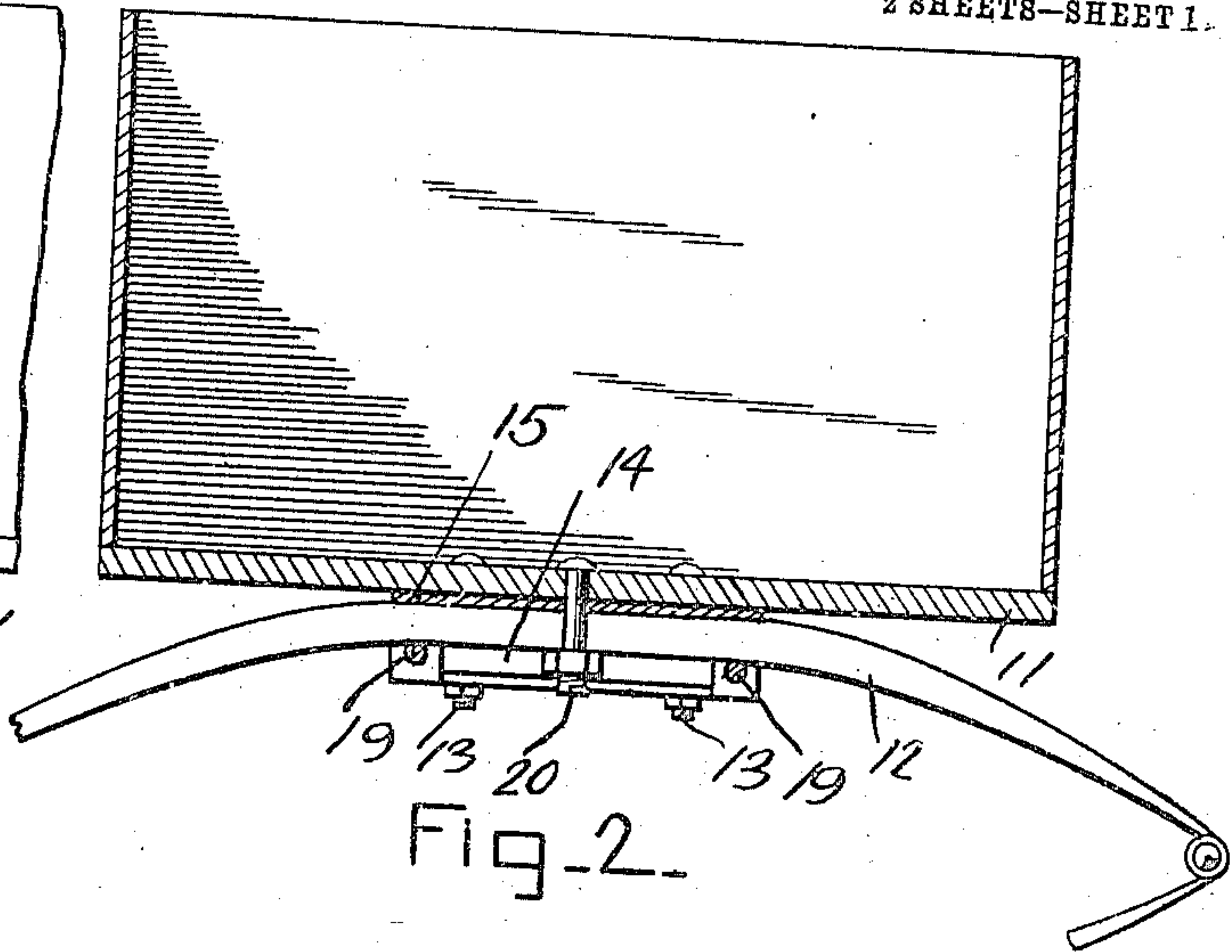


Fig. 2.

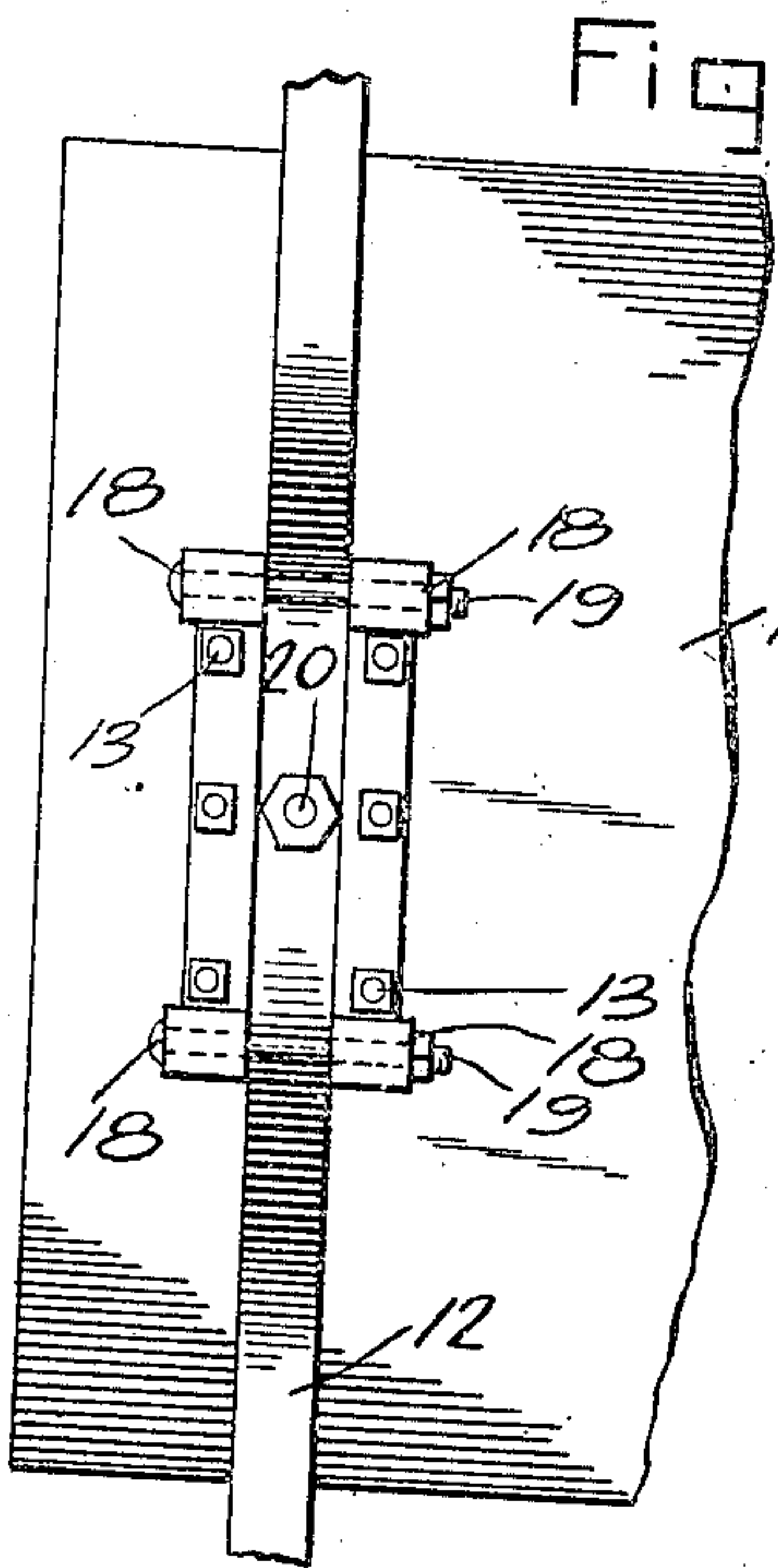


Fig. 3.

Fig. 4.

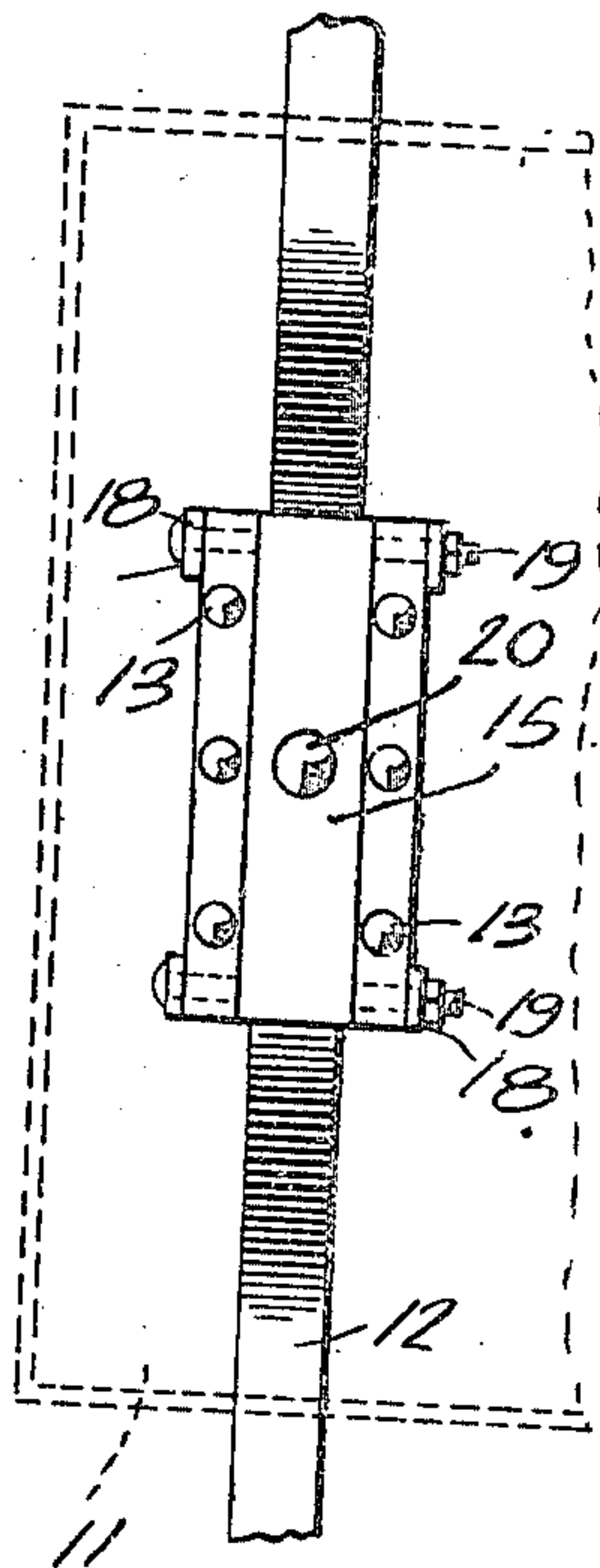
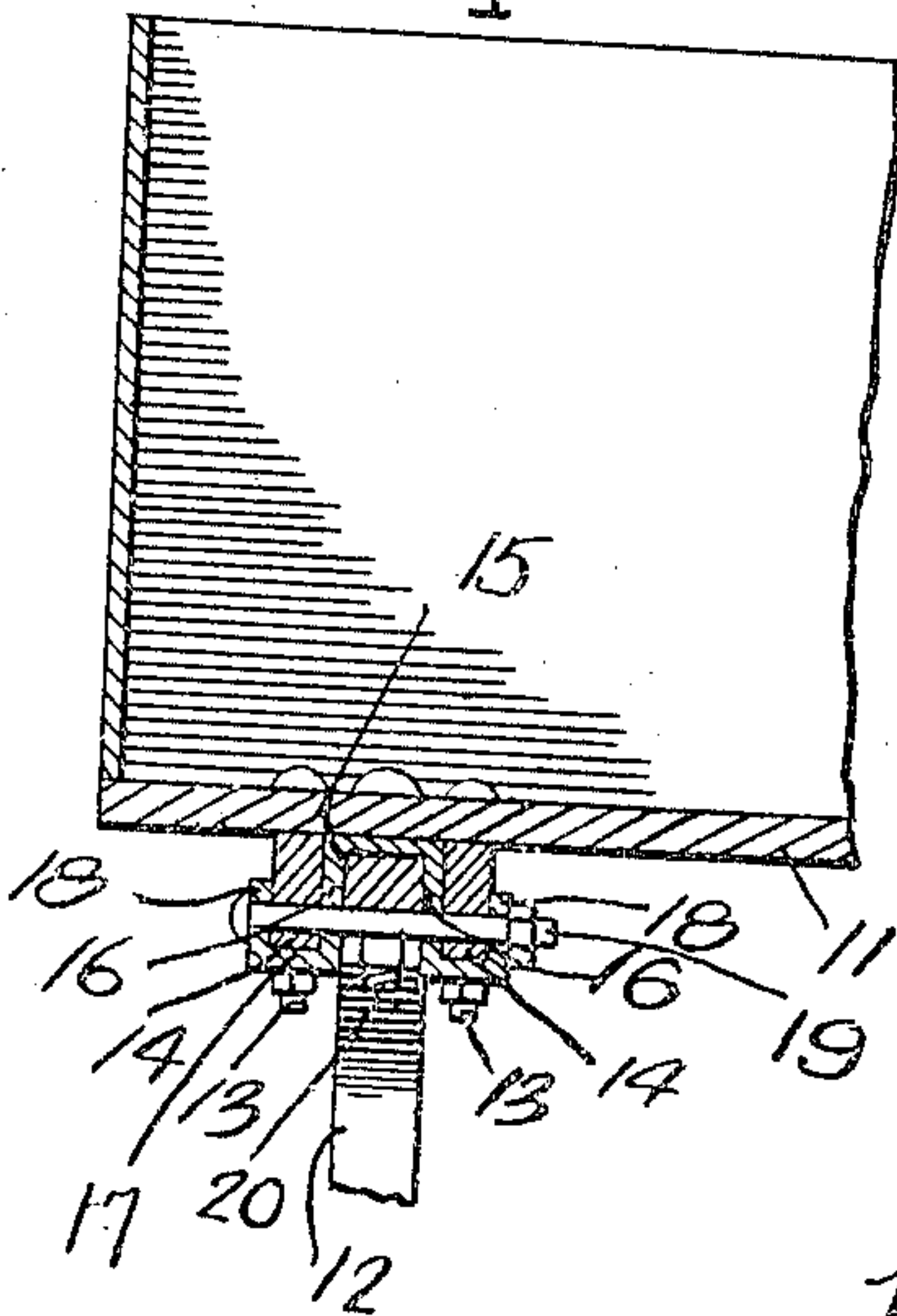


Fig. 5.



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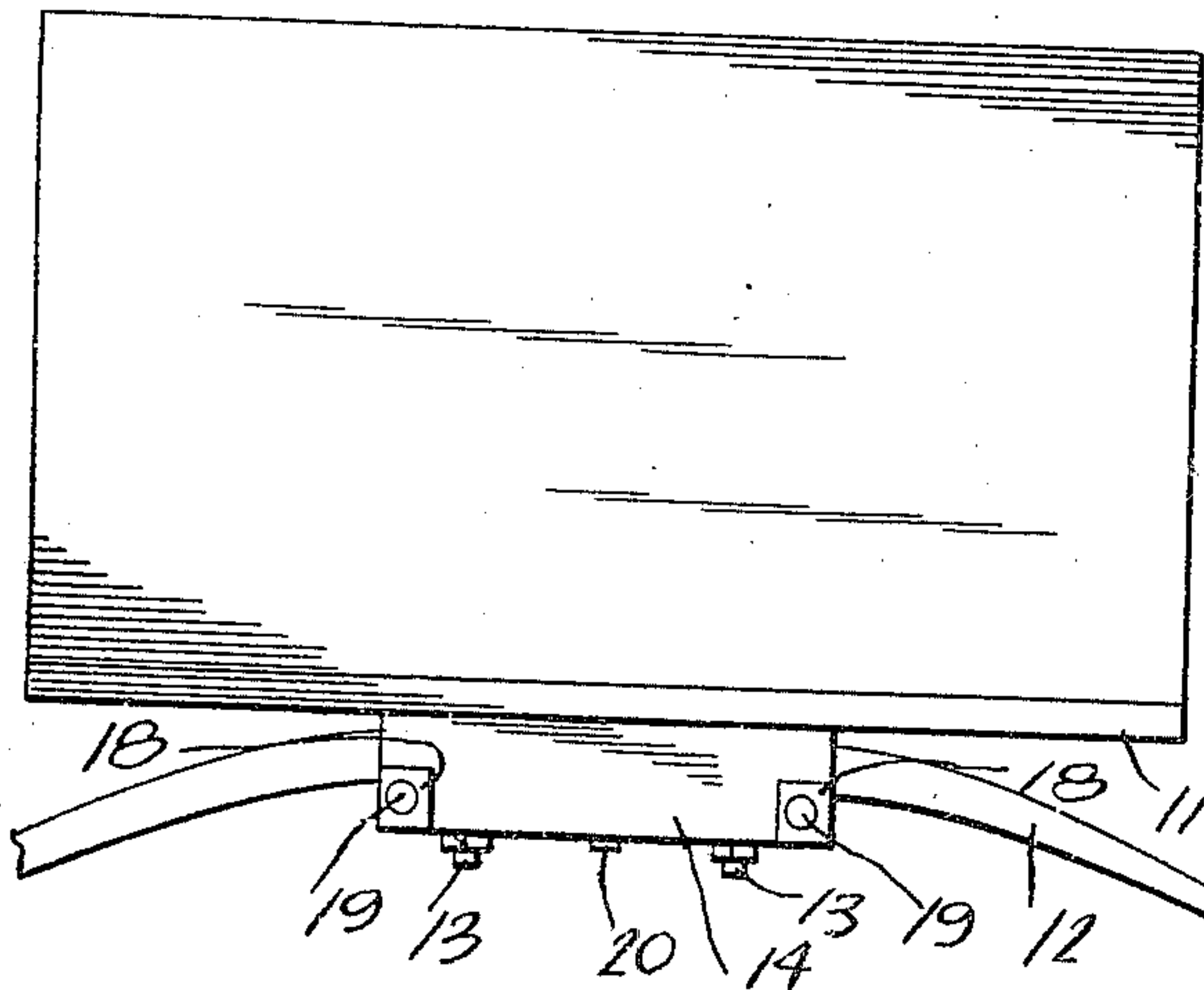


Fig. 6.

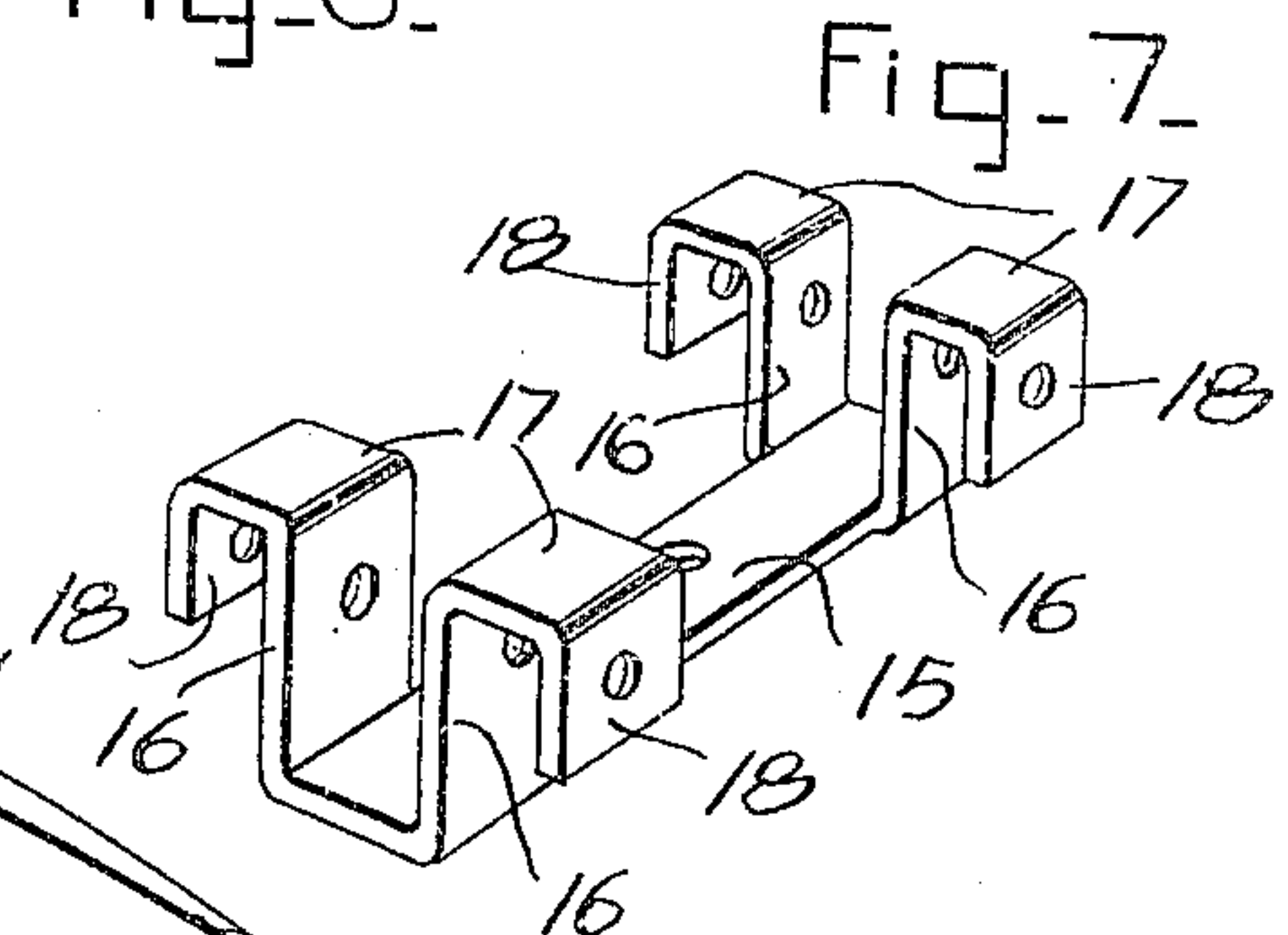


Fig. 7.

Fig. 9.

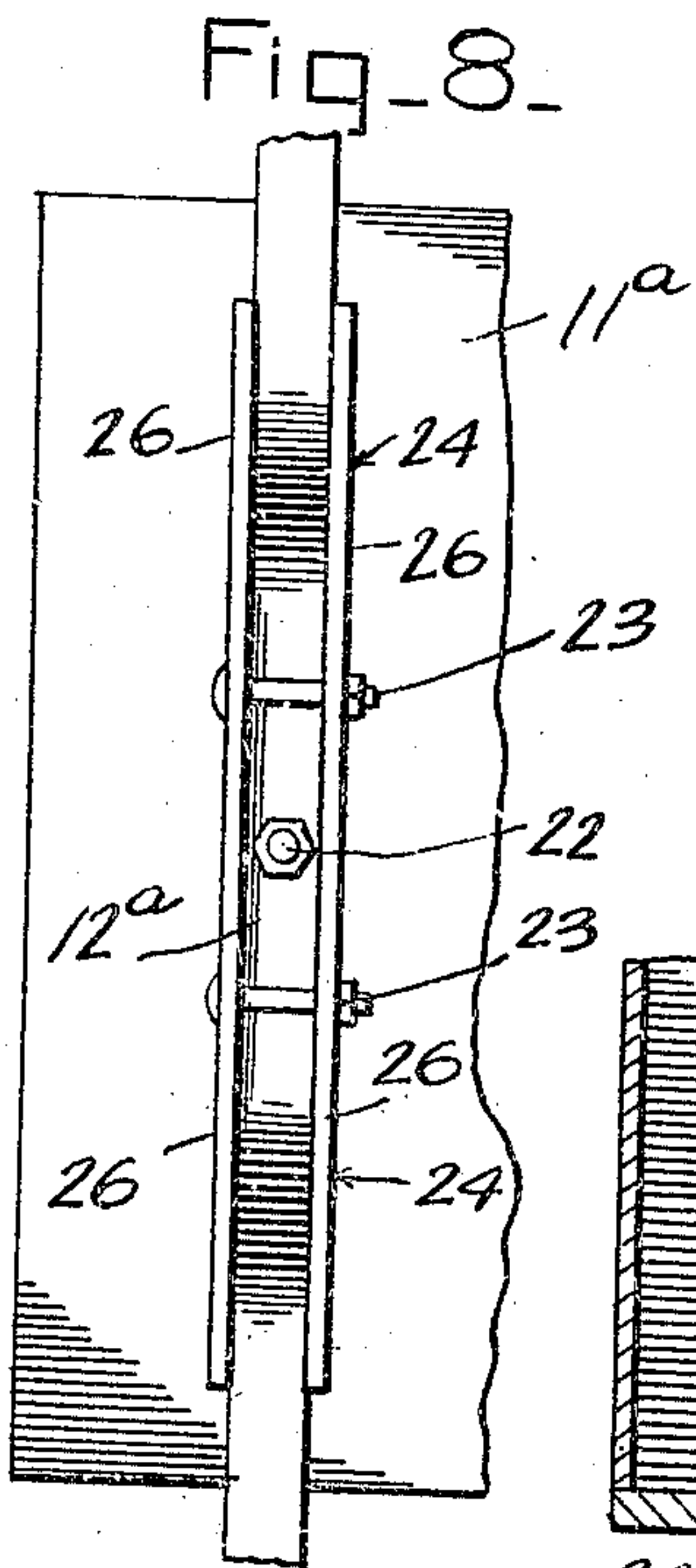


Fig. 8.

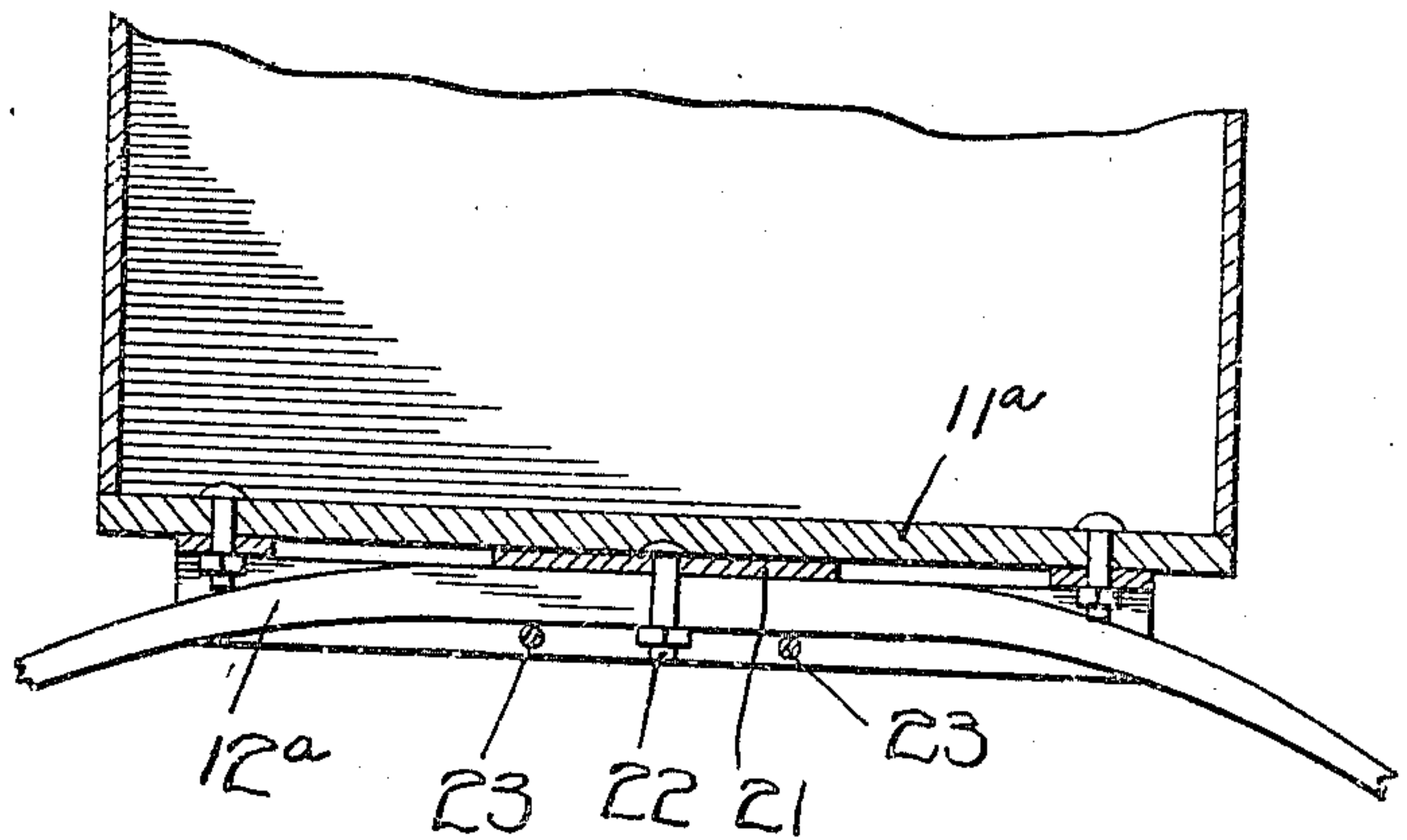


Fig. 10.

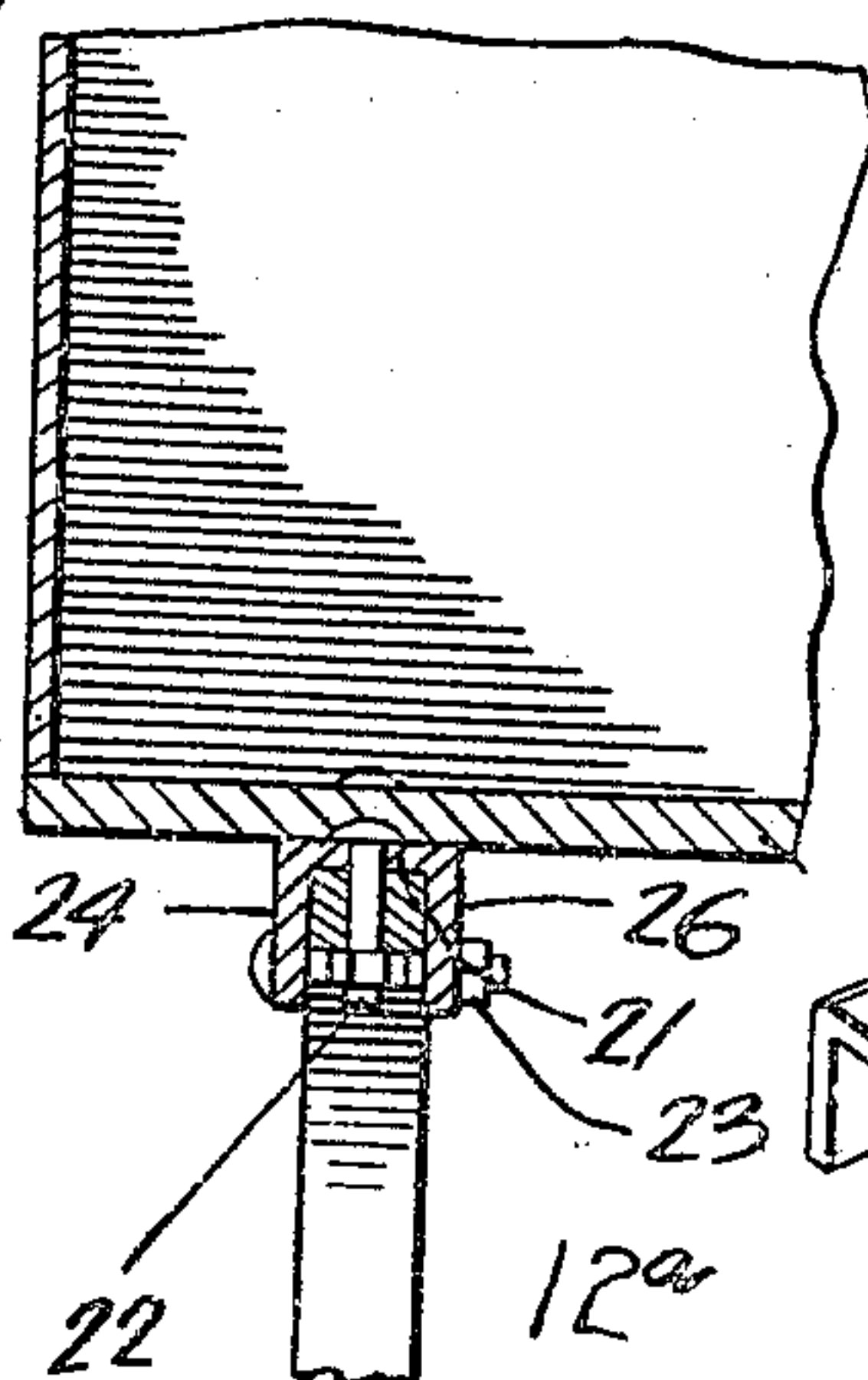
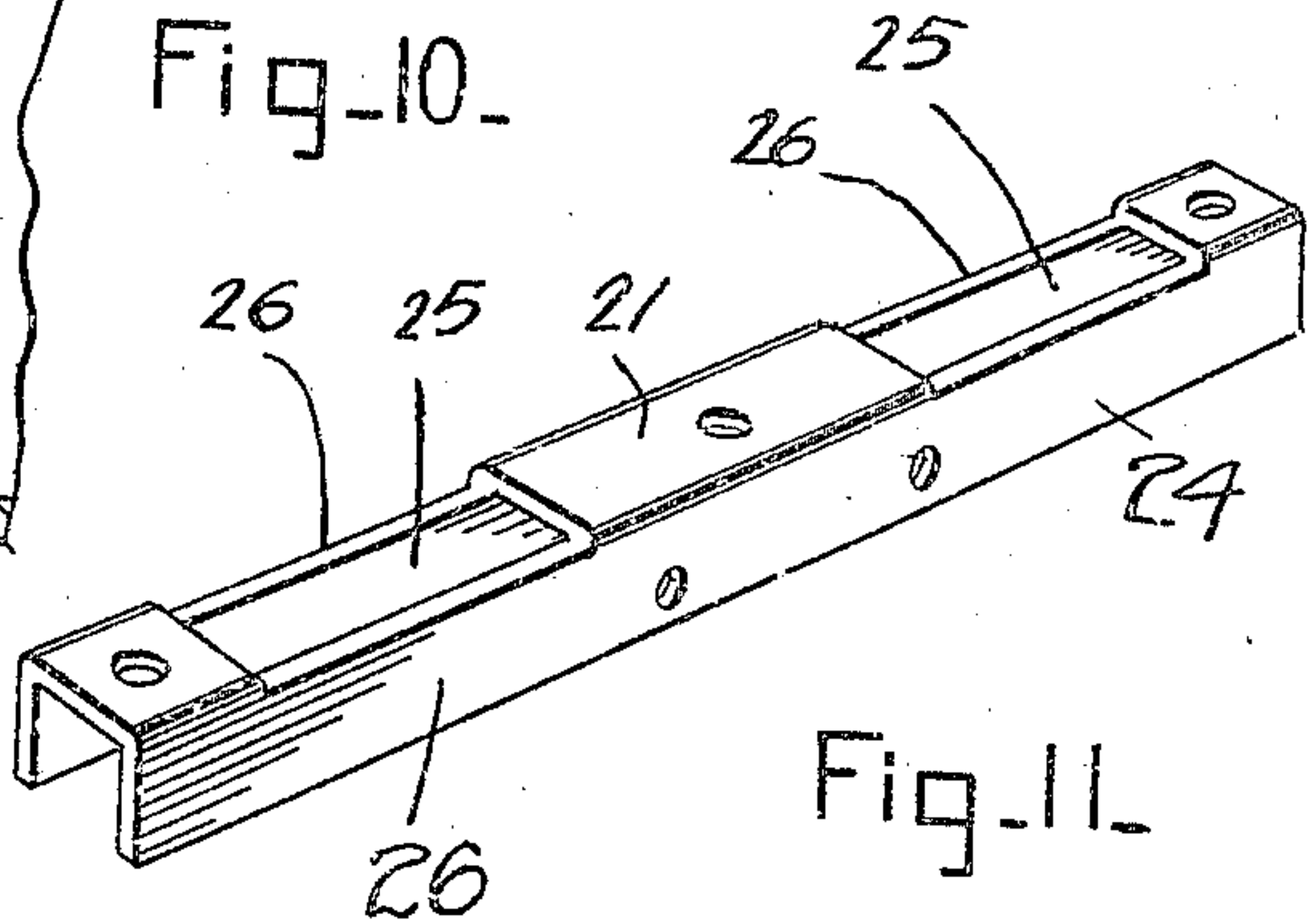


Fig. 11.



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# UNITED STATES PATENT OFFICE

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## ATTACHMENT FOR SPRING-BOARDS.

952,139.

Specification of Letters Patent. Patented Mar. 15, 1910.

Application filed November 16, 1907. Serial No. 402,548.

*To all whom it may concern:*

Be it known that I, LAWRENCE RICE, a subject of the King of Great Britain, residing at Cassel, in the Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Attachments for Spring-Boards; 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.

This invention relates to vehicle springs and more particularly to a novel manner of hanging or attaching them to the under side of the vehicle body.

At present, the upper bows of vehicle springs are attached to the under side of the vehicles by means of cleats and clips which latter bind the bows to the cleats but I have found that this method of attaching the springs is unsatisfactory for many reasons. In the first place, it necessitates hanging the wagon body higher than is contemplated in my invention and furthermore the present means is insecure and cannot withstand strain for any great length of time.

In the accompanying drawings, Figure 1 is a side elevation of the front end of a buggy showing the application of my invention. Fig. 2 is a vertical sectional view taken in a plane with the extent of the bow spring. Fig. 3 is a bottom plan view of the said end of the buggy bed. Fig. 4 is a top plan view, the buggy bed being shown in dotted lines. Fig. 5 is a vertical sectional view taken in a plane at right angles to the plane of Fig. 2. Fig. 6 is a front elevation of the bed. Fig. 7 is an inverted perspective view of the hanger for the spring. Fig. 8 is a bottom plan view showing a slightly modified form of hanger and the manner of attaching it to the under side of a buggy bed. Fig. 9 is a view similar to Fig. 2 showing this form of the invention. Fig. 10 is a view similar to Fig. 5 also showing this form of the invention. Fig. 11 is a detail perspective view of the hanger embodying this form of the invention.

In the first seven figures of the drawings, illustrating the preferred form of the invention, there is shown a vehicle bed 11 and its front spring, the upper bow of which is indicated by the numeral 12.

Secured in any suitable manner, such as by means of bolts 13, upon the under side of

the bed of the vehicle is a pair of parallel bars 14 and it is between these bars that the upper bow of the spring is received, the bars being of course extended transversely of the said bed. In order to support the said upper bow of the spring between these bars as stated, a plate is provided, and this plate will now be specifically described.

The plate mentioned above consists of a body portion which is indicated by the numeral 15 and which is equal in width to the distance between the bars 14 and which extends between the under side of the vehicle bed and the said upper bow 12 of the front spring of the vehicle and serves to support it in position. At each end of this plate there is formed a pair of extensions which are directed from each longitudinal edge of the plate and each of these extensions is bent downwardly at right angles as at 16 between the upper bow 12 and the adjacent bar 14 and is thence bent, as at 17, to extend over the under side of the said bar and is afterward bent upward against the outer side face thereof as is indicated by the numeral 18. In order to hold or secure these extensions to the bars, bolts 19 are passed through their portions 16 and 18 and through the corresponding bar, and in order to prevent sidewise movement of the upper bow with respect to the bars and the bed of the vehicle, a bolt 20 is passed through the said upper bow and the body of the plate at the middle thereof.

From the foregoing description of my invention, it will be seen that all torsional strain upon the spring is done away with as is also any backward or forward strain and consequently the spring is considerably strengthened but without losing any of its resiliency.

In the remaining figures of the drawings, illustrating a modification of the device shown in the preceding figures, the buggy bed, spring, and other similar parts are indicated by the same reference numerals as in the first group of figures but with the addition of the suffix *a*. In this form of the invention, the bars 14 are dispensed with altogether and merely a casting is used to support or hang the spring. This casting consists of a body portion 21 which is formed from a flat blank bent or otherwise formed for engagement around the upper bow 12<sup>a</sup> of the vehicle spring, the said portion being secured to the spring by means of a bolt 22 which is passed therethrough and the spring



bow and by means of bolts 23 which are passed through the edges of the body portion beneath the said bow of the spring, these edges being turned downwardly at right angles for the purpose stated. At each end of the said body of the casting there is formed an extension 24 and these extensions are formed each with a slot 25 which results in spaced portions 26 one of which extends to each side of the upper bow 12<sup>a</sup>. Bolts are passed through the ends of these extensions and through the bed of the vehicle body and serve to secure the casting thereto.

What is claimed, is:—

15 The combination with a vehicle body provided with rigid cross bars fixedly attached to said body, of an inverted trough shaped member secured to said body between said

cross bars, flanges formed on said member extending beneath the cross bars, upturned portions formed at the extremities of the flanges to engage the outer side of each of the cross bars, a spring having a portion resting between the sides of said member, and bolts passing through the upturned ends of the flanges, the cross bars, and the sides of the trough shaped member, said bolts lying beneath the portion of the spring engaged by the member to retain said spring within said member. 20 25 30

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

LAWRENCE RICE.

Witnesses:

GEO. WALROND,  
A. E. BALL.