

A. J. LOGAN & R. B. HARRISON.

METAL BEDSTEAD.

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950,625.

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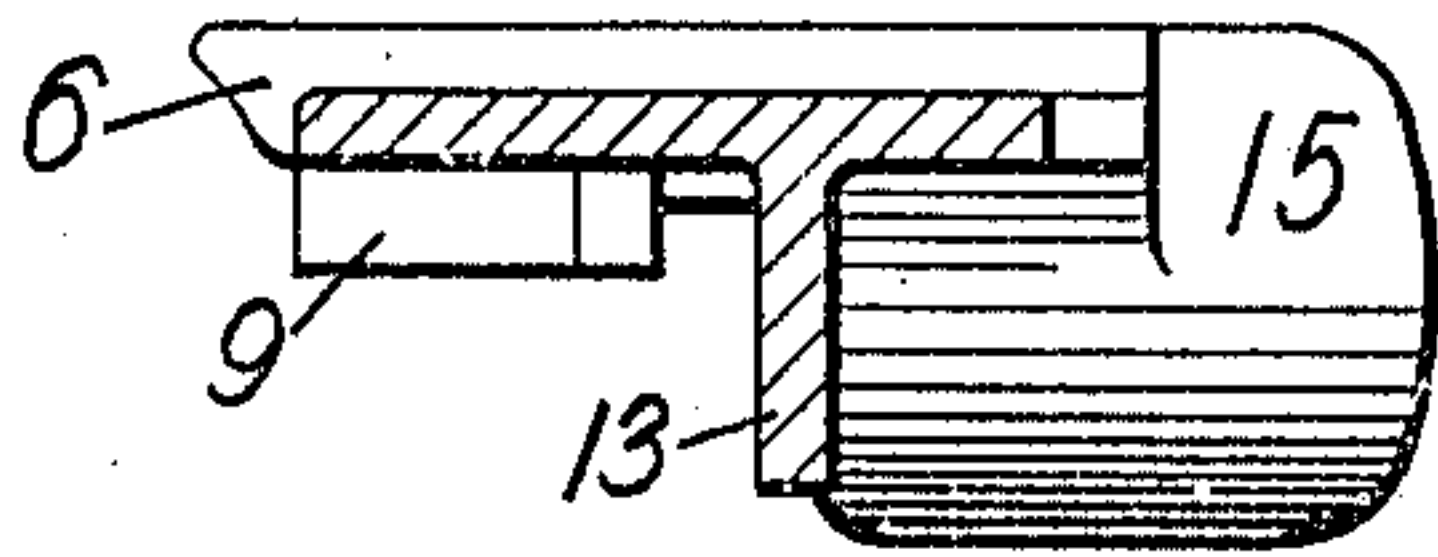


FIG. 3.

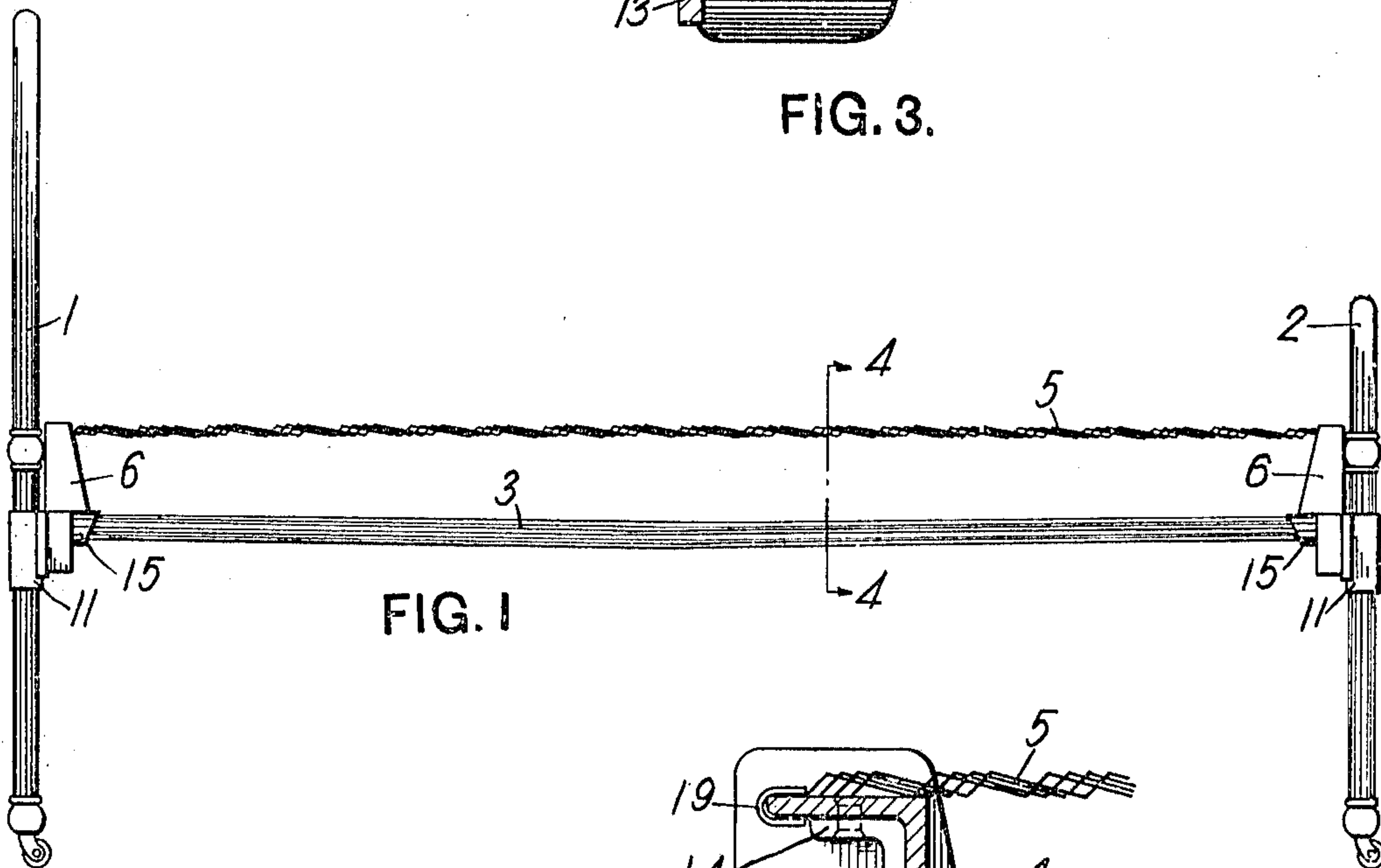


FIG. 1

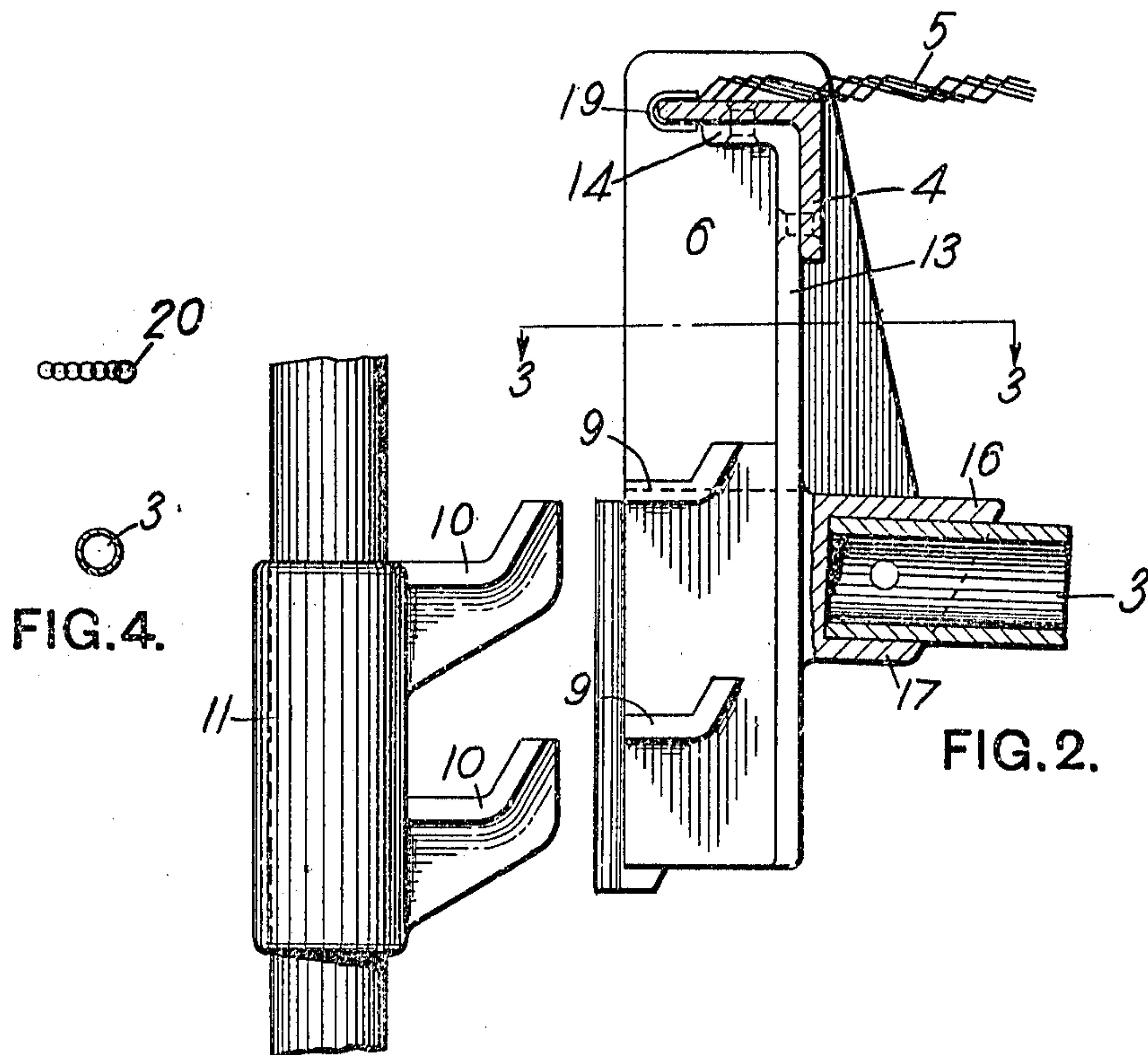


FIG. 2.

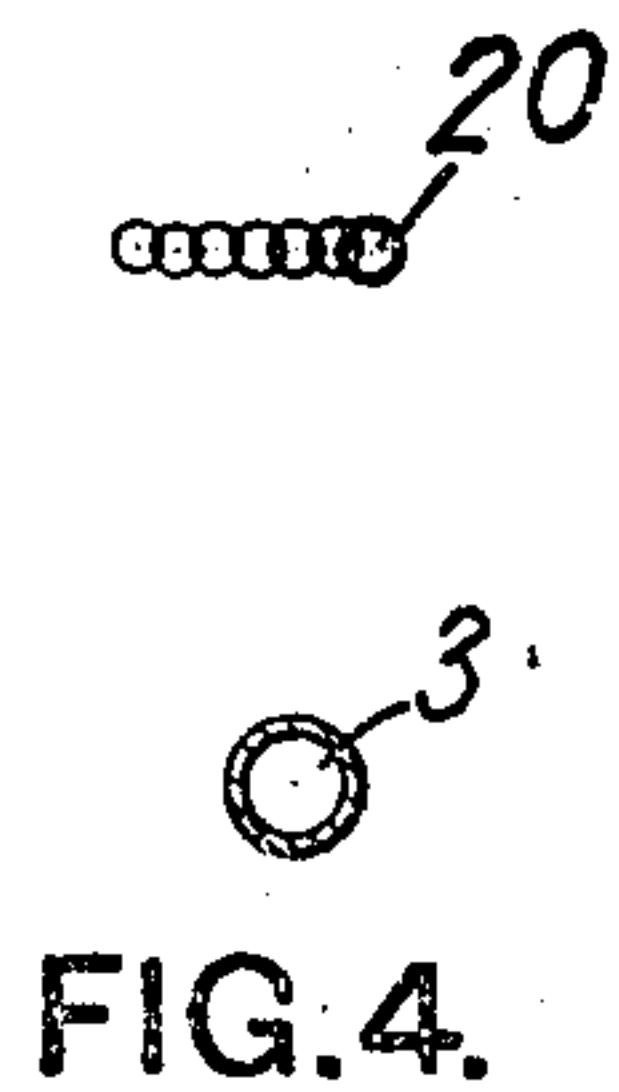


FIG. 4.

WITNESSES

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ALBERT J. LOGAN AND ROBERT B. HARRISON, OF PITTSBURG, PENNSYLVANIA.

METAL BEDSTEAD.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, ALBERT J. LOGAN and ROBERT B. HARRISON, both residents of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Metal Bedsteads, of which the following is a specification.

This invention relates to metallic bedsteads or couches, and particularly to what are known as three piece bedsteads, that is composed of a head piece, a foot piece and a bunk.

The object of the invention is to so construct a three piece bedstead that the bed bottom, which may be a woven wire or other style of fabric, may be of the full width of the bedstead and so supported that under extreme load, or extreme sagging, it does not contact with the side rails, so that for a minimum width of bedstead a maximum width of sleeping surface is provided.

The invention comprises the construction and arrangement of parts hereinafter described and claimed.

In the accompanying drawing Figure 1 is a side view of a metal bedstead embodying the invention; Fig. 2 is an enlarged inside view showing the connection between the bunk and the head or foot piece and showing the end rail and connection for the side rail in vertical section; Fig. 3 is a horizontal section on the line 3—3, Fig. 2; and Fig. 4 is a vertical section on the line 4—4, Fig. 1.

The bedstead shown comprises a head piece 1, a foot piece 2, and bunk or bed frame proper detachably connected to the head and foot pieces. The bunk is a unitary structure composed of side rails 3, shown as tubes, cross or end rails 4, shown as angle bars, the bed bottom 5 shown as a woven wire fabric, secured to the end rails 4, and the corner connecting members. The side rails are preferably tubes as shown, and the cross rails angle bars as shown, although they may be of any other desired shape.

The corner connecting members are formed of malleable iron, cast iron or any suitable material. Each comprises a vertically arranged plate 6 to form a finished exterior and provided on its inner face with suitable projections or lugs 9 arranged to engage hooks 10 formed on tubular sleeve members 11 secured on the posts of the head and foot pieces. These form detachable connections between the head and foot pieces which do not wedge or bind, but any other

detachable connections may be used. The plate 6 is provided on its inner face with the vertical flange or web 13 which at its upper end turns outwardly to form the horizontal flange 14 to which the angle cross rail 4 is secured, such as by rivets. The side rail 3 is connected to the corner member by having its end tightly driven into a socket 15 formed on each cast corner member inside of the plate 6 and forward of the vertical web or flange 13. This socket has a long bearing, indicated at 16, on the upper face of the side rail and also a bearing 17 against the lower face of the side rail, so that it is impossible for the corner connecting members to pivot on the side rails on a horizontal pivot transverse of the bed. The upper bearing face 16 is formed on an angle slightly greater than a right angle with the vertical plane of the corner connecting member, such vertical plane being represented by the web 13, so that if no fabric were on the bed, the head and foot pieces would slant outwardly toward their upper ends. This is to compensate for the slight downward bending or bowing of the side rails due to the heavy strain imposed by the fabric connected to the upper ends of the long corner connecting members, thus exerting a pull on a long lever which has a tendency to bend or bow the side rails downwardly, and which, except for the obtuse angle referred to, would cause the upper ends of the head and foot pieces to tilt inwardly. The obtuse angle described compensates for this so that in the normal condition of the bed the head and foot pieces stand perfectly vertical notwithstanding that the side rails may be slightly bowed.

The cross rails 4 are so connected to the corner brackets that their horizontal legs are at the top and project outwardly, thereby forming a convenient means for the connection of the fabric thereto, such as by means of a hooked clip or grooved bar 19. The edges of the fabric are made very strong, as by providing the same with a heavy corded, banded or reinforced edge 20.

The corner connecting members 6 support the cross rails 4 at their extreme upper ends and are of such length as to support the fabric 5 at a sufficient height to prevent the same from contacting with the side rails 3 under even extreme loads or extreme sagging. The consequence is that the fabric can be made of the full width of the bedstead, and insures a perfectly comfortable

and flat sleeping surface for said full width and without danger of having the edges thereof pushed upwardly by the side rails as in many beds in which the fabric must
 5 either be made narrow enough to pass down between the side rails or otherwise the sleeping surface will be trough shape in cross section. Our construction also enables a person to sit on the edge of the bed without
 10 bringing the bed bottom into contact with the side rails and in that way adds to comfort in getting in or out of the bed.

The corner connecting members are so constructed as to conceal the connections
 15 with the end and foot pieces and also conceal the ends of the side and cross rails of the bunk, thus making a sightly connection. The fabric is of the full width of the bedstead, and is supported above the side rails
 20 at such height that it cannot contact therewith. The tension of the fabric acting on the long lever of the long corner connecting members is compensated for by the form of socket used so as not to allow the upper ends
 25 of the head and foot pieces to tip inwardly beyond a vertical line.

What we claim is:

1. In a three-piece metal bedstead or couch, a head piece, a foot piece, and a bunk
 30 composed of side and end rails, corner connecting members, and a fabric secured to the end rails and extending over the side rails, said corner connecting members being provided with means for detachably engaging
 35 ing and holding the head and foot pieces, with means for attachment of the end rails

to their upper ends, and with means for receiving the ends of the side rails, said last named means having bearing on the upper and lower faces of said side rails, the bearing on the upper face forming an angle of
 40 more than 90 degrees with the vertical plane of the corner connecting member when the bed is in its normal assembled condition.

2. In a three-piece metal bedstead or couch, a head piece, a foot piece, and a bunk composed of side and end rails, corner connecting members, and a fabric secured to the end rails and extending over the side rails, said corner connecting members being
 45 provided with means for detachably engaging and holding the head and foot pieces, with means for the attachment of the end rails to their upper ends, and with means for receiving the ends of the side rails, said
 50 last named means having bearing on the upper and lower faces of the side rails, the bearing on the upper face forming an angle of more than 90 degrees with the vertical plane of the corner connecting member when
 55 the bed is in its normal assembled condition, said corner connecting members projecting above the side rails to such height as to prevent the fabric from contacting with the side rails under extreme load.
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In testimony whereof, we have hereunto set our hands.

ALBERT J. LOGAN.

ROBERT B. HARRISON.

Witnesses:

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 F. W. WINTER.