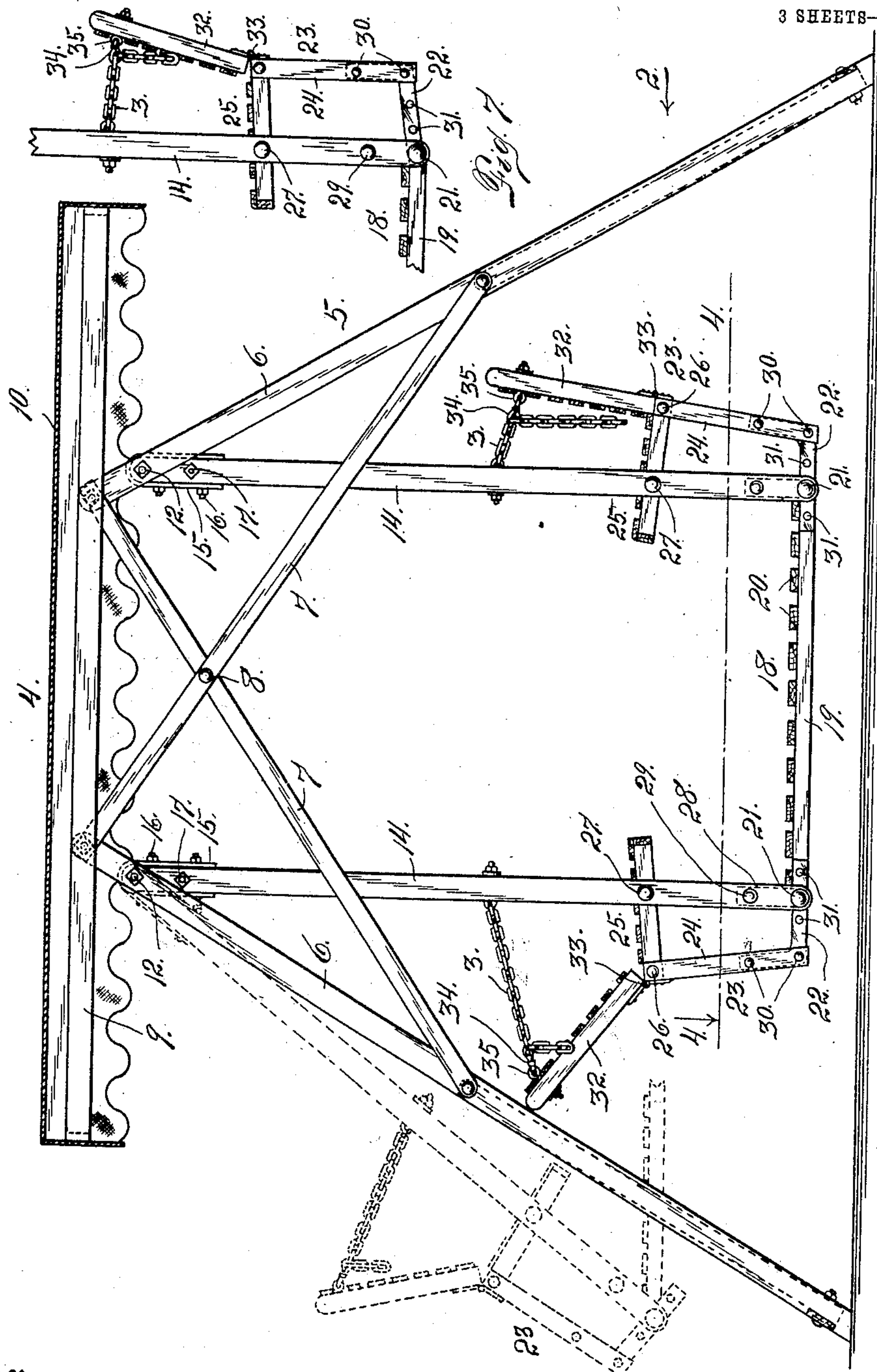


P. H. MURRAY.
LAWN SWING.
APPLICATION FILED MAY 20, 1909.

995,983.

Patented June 20, 1911.

3 SHEETS—SHEET 1.



Witnesses
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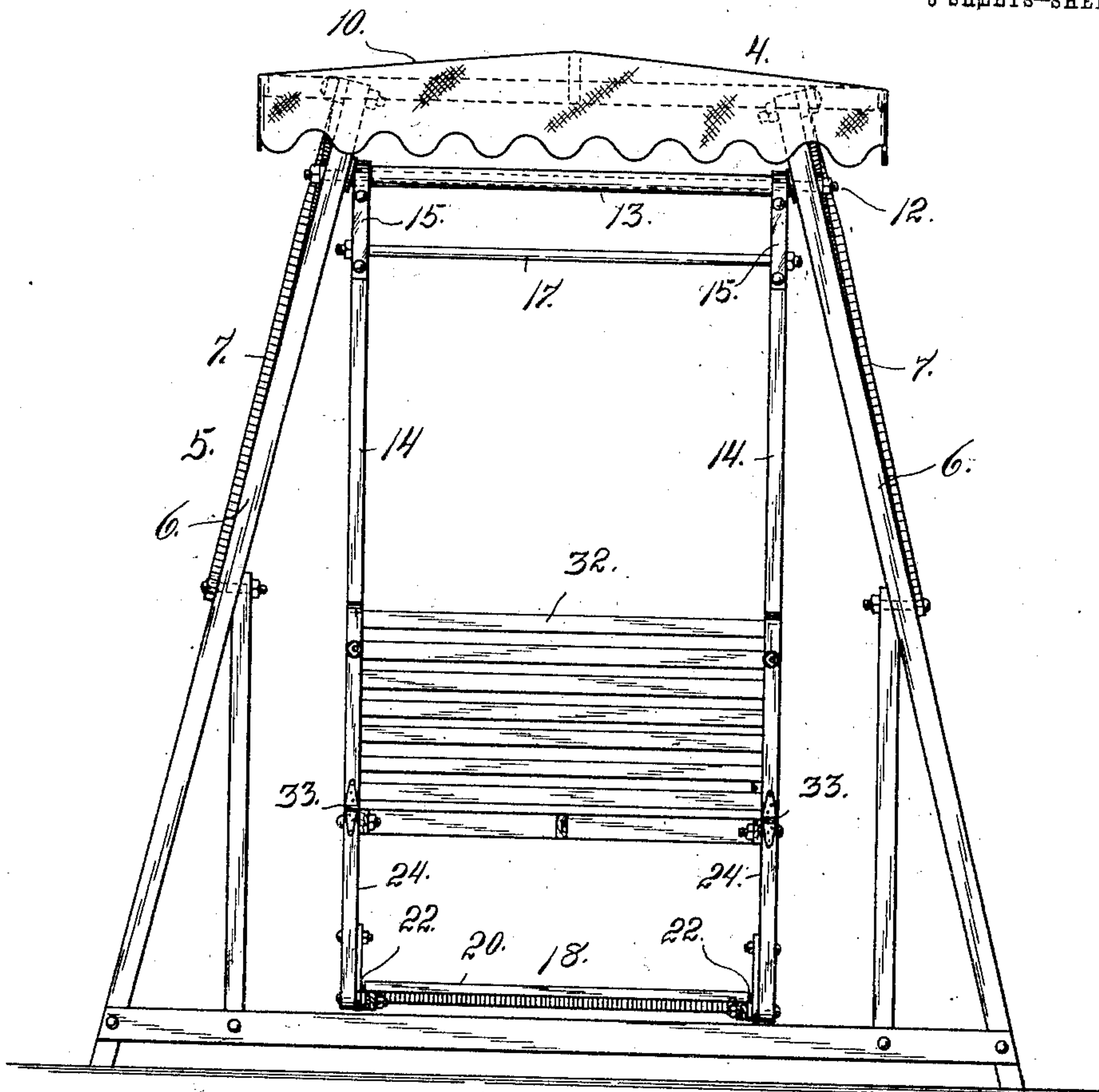


Fig. 2.

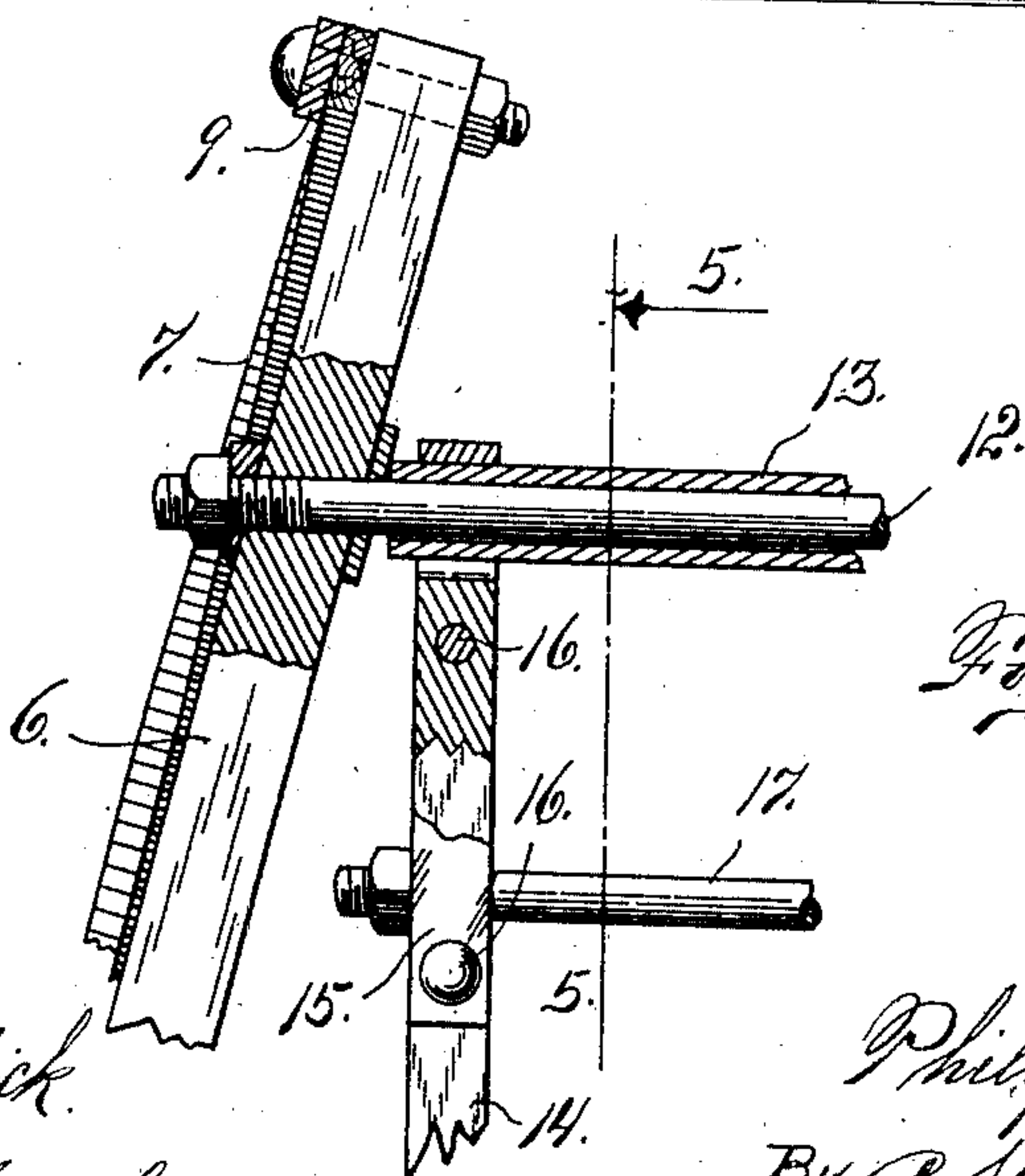


Fig. 3.

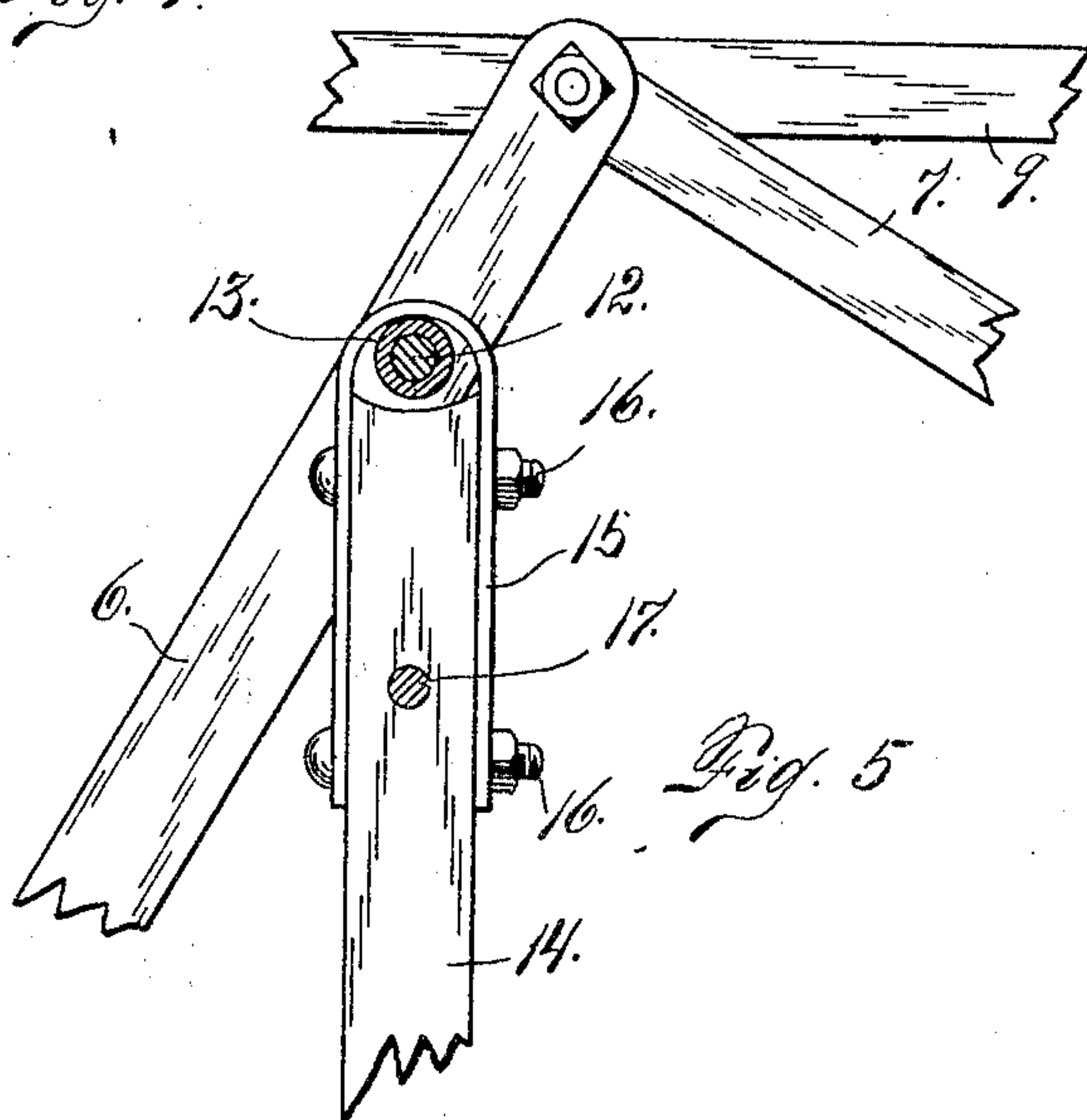
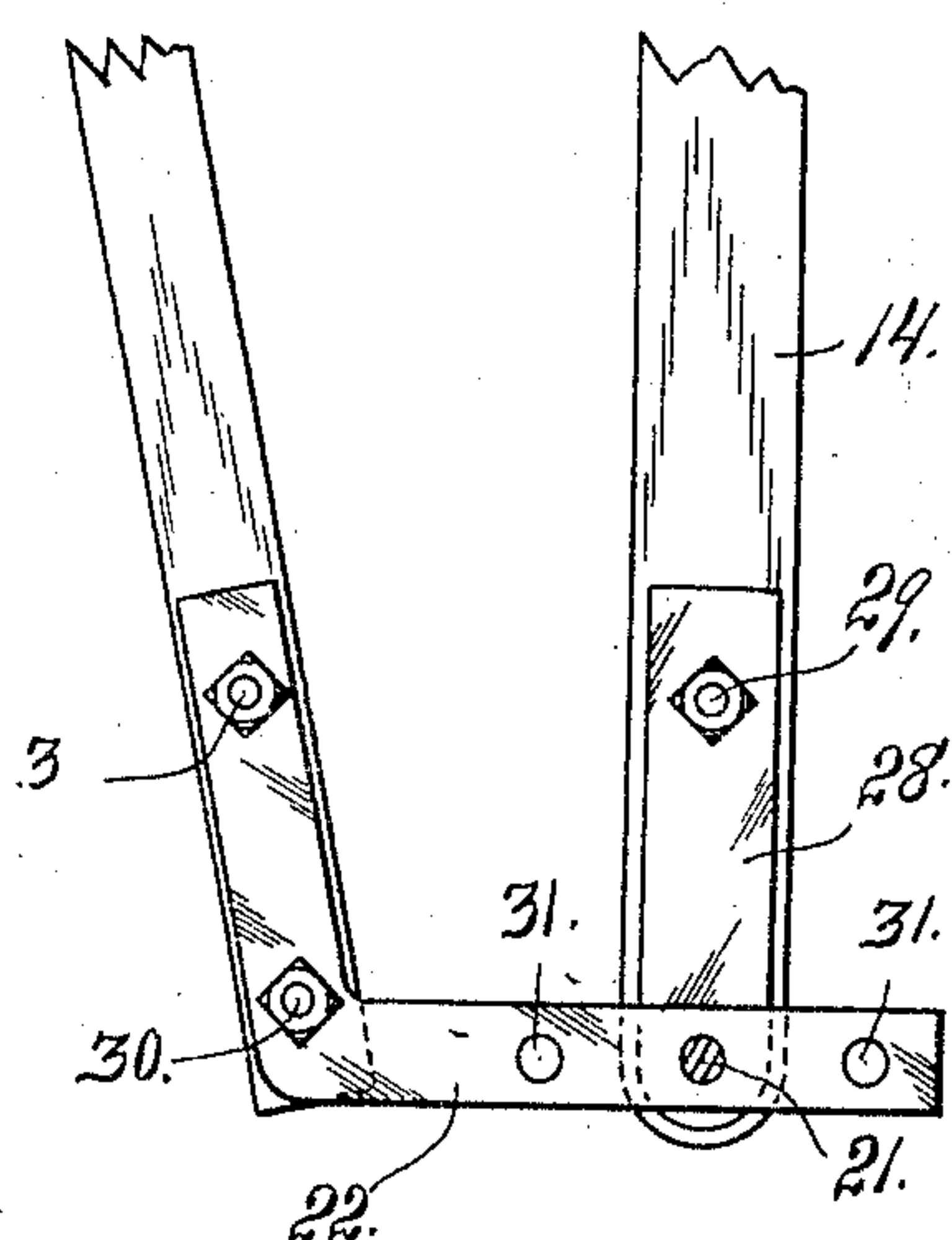
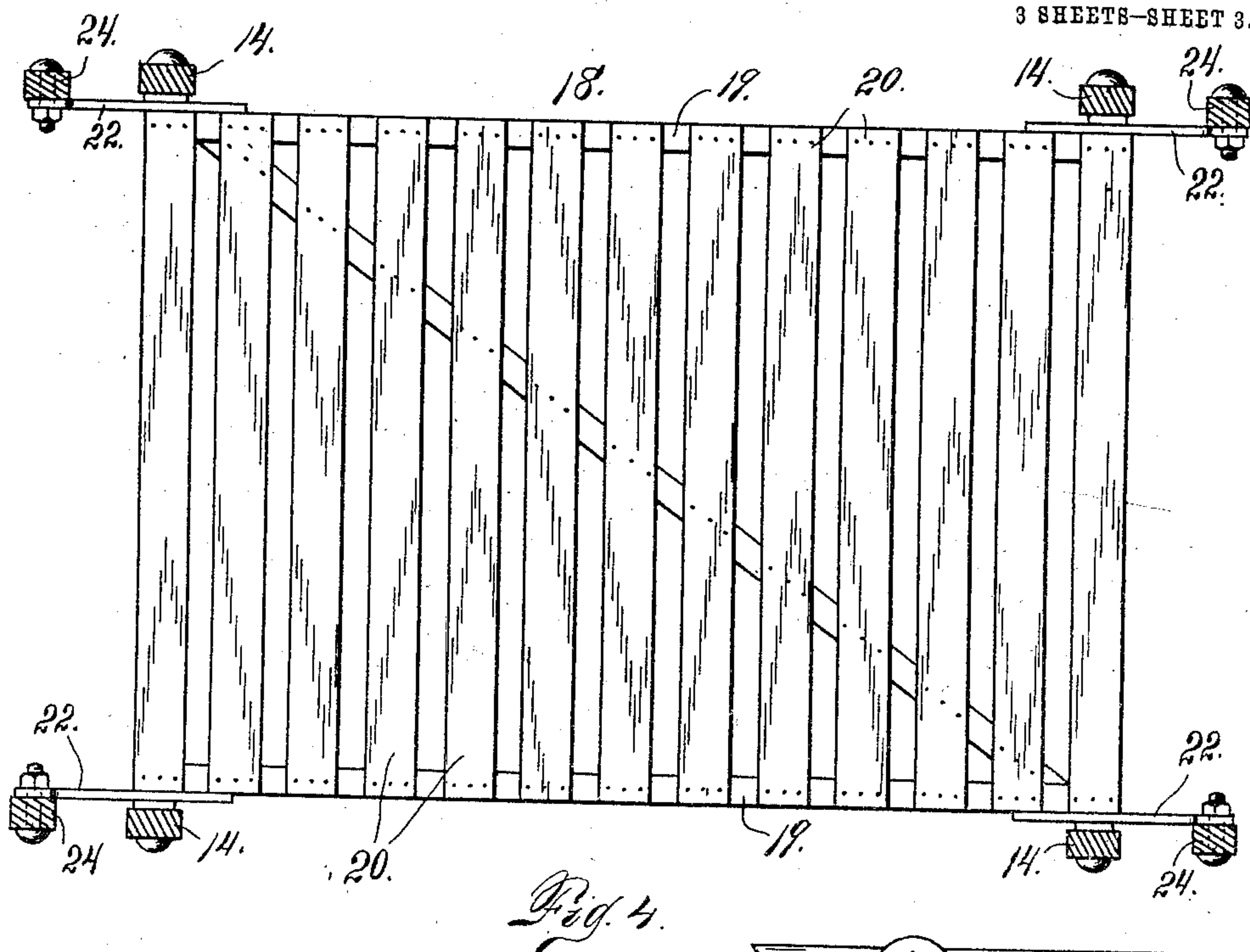
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3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

PHILIP H. MURRAY, OF DENVER, COLORADO.

LAWN-SWING.

995,983.

Specification of Letters Patent. Patented June 20, 1911.

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To all whom it may concern:

Be it known that I, PHILIP H. MURRAY, citizen of the United States, residing in the city and county of Denver and State of Colorado, have invented certain new and useful Improvements in Lawn-Swings; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in lawn swings, my object being to provide a construction of this class in which the depending arms forming the support for the rear edge of the seat are so constructed that they are adjustable with reference to the swinging bars forming the support for the floor of the swing. By virtue of this adjustment of the rear supporting arms of the seat, the angle which the latter forms with the swinging bars may be regulated at will. This is important, since this angle should be different according to the height which it is desired to swing, or the degree of oscillation to be given to the swinging bars.

Another feature of my improvement consists in a hinged back which is adjustably connected with the adjacent swinging bars, whereby the inclination of the back, or its angle with the seat, may be regulated to harmonize with the angle which the latter forms with the bars.

Having briefly outlined my improved construction, I will proceed to describe the same in detail, reference being made to the accompanying drawing in which is illustrated an embodiment thereof.

In this drawing, Figure 1 is a side elevation of my improved swing, the full line position being that which it occupies when at rest. The dotted lines on the left indicate the relative position of the various parts when the swing has moved toward the left, as indicated. Fig. 2 is an end elevation of the swing, or a view looking in the direction of arrow 2, Fig. 1. Fig. 3 is a detail view illustrating the manner of connecting the frame bars at the top, the parts being shown on a larger scale. Fig. 4 is a hori-

zontal section taken on the line 4—4, Fig. 1, looking downwardly, the parts being shown on a larger scale. Fig. 5 is a fragmentary detail view of the structure shown on a larger scale. This may be termed a section, taken on the line 5—5, Fig. 3. Fig. 6 is a similar view of another part of the swing. Fig. 7 is a fragmentary detail view of the swing illustrating the mechanism for adjusting the inclination of the seat, the adjustable seat supporting arm being shown in a different position from that illustrated in Fig. 1. The same reference characters indicate the same parts in all the views.

Let the numeral 5 designate the stationary frame work of the swing, composed of two pairs of inclined bars 6 connected by braces 7, which intersect at 8. Mounted on top of this frame work is a canopy 4 having parallel side bars 9 which are connected with the upper extremities of the bar 6. The canopy includes a suitable canvas cover 10.

The frame bars 6 at the opposite ends of the swing are connected near the top by rods 12 upon which are mounted sleeves 13, which space the end bars 6 on opposite sides of the swing and make it practicable to form a rigid frame work. These sleeves 13 also protect the rods 12 and form a relatively large bearing for the swinging bars 14. The upper extremities of each pair of swinging bars are connected with a sleeve 13 by means of U clips 15 whose upper extremities pass over the sleeve, their parallel depending parts being secured to the bars 14 on opposite sides by bolts 16. The sleeves 13 form a relatively large bearing for the swinging bars, thus constituting a substantial and durable structure. The individual bars 14 of each pair are connected near their upper extremities by a rod 17.

The platform 18 of the swing is composed of parallel side bars 19 connected by floor strips 20. This platform is pivotally connected with the lower extremities of the swinging bars 14 by bolts 21. Each bolt 21 passes through the extremity of a bar 19 and also through a perforation formed in a member 22 of a seat-supporting angle arm 23. The upwardly projecting member 24 of the arm 23 is fixedly connected with the rear edge of the seat by a bolt 26. The seat is further supported by a direct connection

with the adjacent pair of swinging bars 14, by bolts 27 upon which the seat is pivotally mounted.

The lower extremities of the swinging bars 14 are equipped with reinforcing plates 28 which are secured thereto by the bolts 21 and additional bolts 29.

As shown in the drawing, the seat-supporting angle arms 23 are provided with metal members which are secured to the lower parts of the members 24 by bolts 30 and project inwardly, forming the members 22, which are provided with a number of perforations 31 for purposes of adjustment. These metal parts are employed to give strength and durability to the structure and are particularly valuable in view of the adjustable feature of the swing.

Assuming that the swing is in its normal position, or that which it occupies when at rest, the angle of the seat 25 with the swinging bars 14, may be changed by removing the pivot bolts 21 and moving the members 22 inwardly or outwardly to bring other perforations 31 into register with the bolt openings in the lower extremities of the bars 14. If this movement be inwardly, the inclination of the seat as compared with the horizontal, or with the plane of the platform 18, will be increased, while if it be in the opposite direction (see Fig. 6) the plane of the seat will approach more nearly a parallel position with reference to the plane of the platform. It will thus be seen that this is an important adjustment in constructions of this character.

To the rear edge of the seat, a back 32 is hinged, as shown at 33, the said back being connected with the adjacent bar 14 by chains 3. As shown in the drawing, these chains are connected with the bars 14, while hooks 34 adapted to enter any link of the chain, are connected with the upper part of the seat back 32 by means of eye bolts 35. In order to permit the change of inclination of

the seat, the chains 33 should be correspondingly regulated, as will be readily understood.

From the foregoing description the use and operation of my improved swing will be readily understood. Assuming that the swing is in the position shown by full lines in Fig. 1, the bars 14, together with the platform and seats, are given an oscillating movement. The position of the parts after having reached a pre-determined degree of oscillation, is indicated at the left of Fig. 1 by dotted lines. It will be understood that if the seat-supporting angle arms 23 were so adjusted as to bring the outer perforation 31 into position to receive the pivot bolt 21, the position of the seat would be changed to approach the horizontal when the bars are in the aforesaid dotted line position. This would be desirable if the inclination of the seat were found too great when the bolt is in the middle perforation.

Having thus described my invention, what I claim is:

A swing, including a pair of oscillating bars, a seat pivotally connected with the said bars above their lower extremities, angle arms rigidly connected at one extremity with the rear extremities of the seat and pivotally connected with the bars below the seat, means for moving the lower extremities of the angle arms toward and away from the oscillating bar for the purpose of varying the angle of the seat, a back hinged to the seat, and a suitable connection between the seat back and the bars, whereby the position of the seat may be regulated at will, substantially as described.

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

PHILIP H. MURRAY.

Witnesses:

A. J. O'BRIEN,

A. EBERT O'BRIEN.