

No. 609,871.

Patented Aug. 30, 1898.

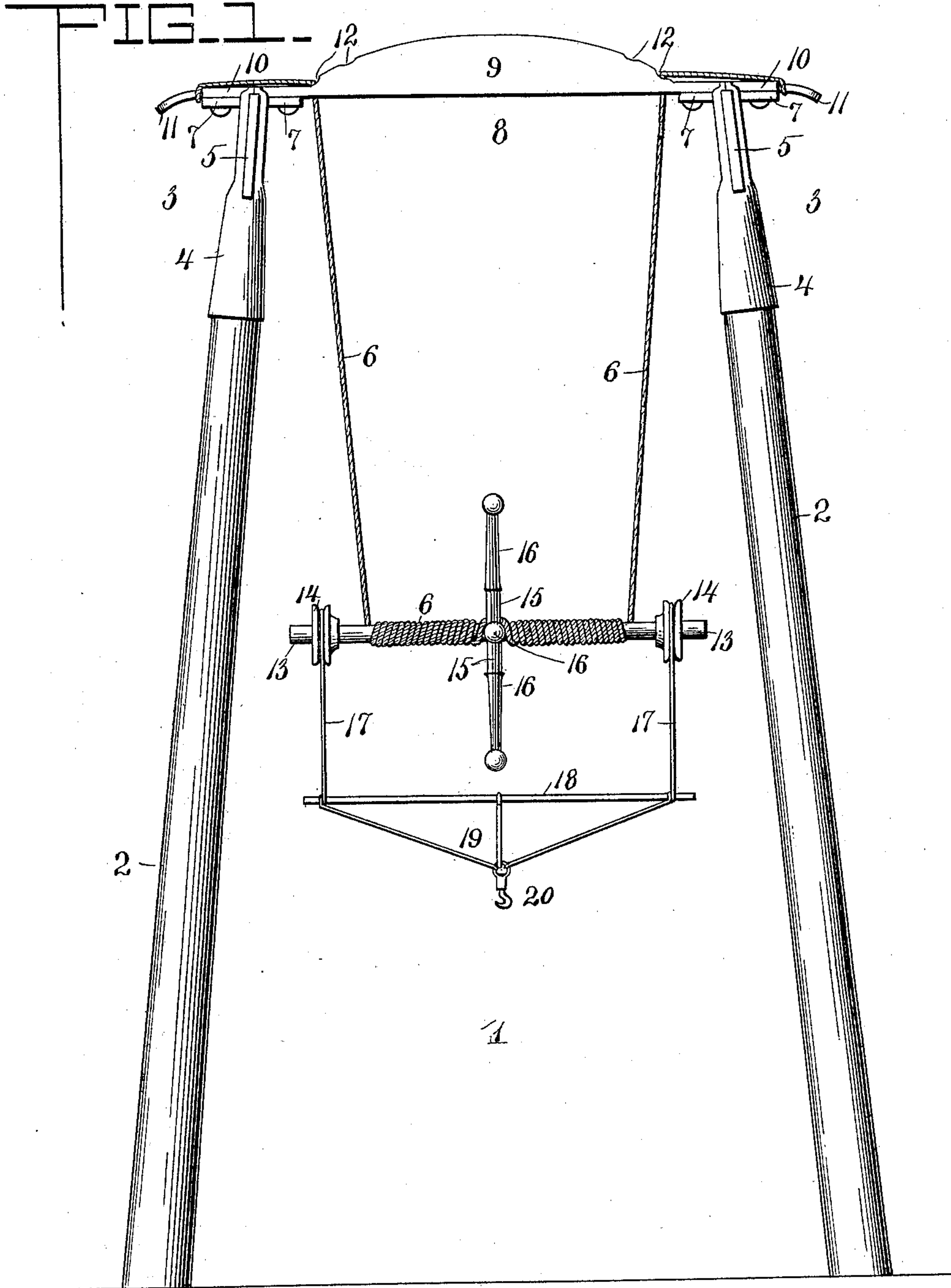
G. BRUNELLE.

WINDLASS.

(Application filed June 24, 1897.)

(No Model.)

3 Sheets—Sheet 1.



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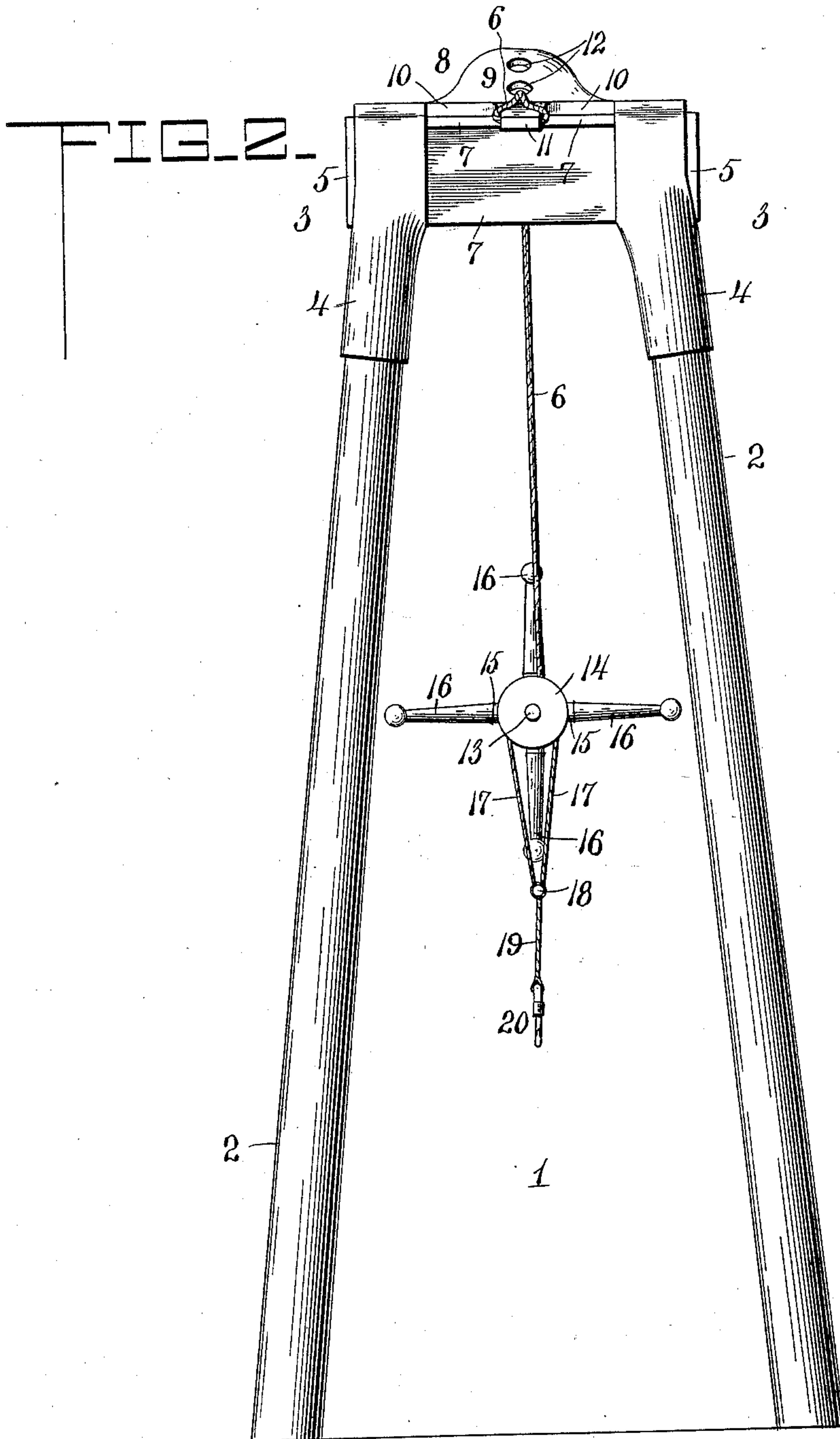
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FIG. 3.

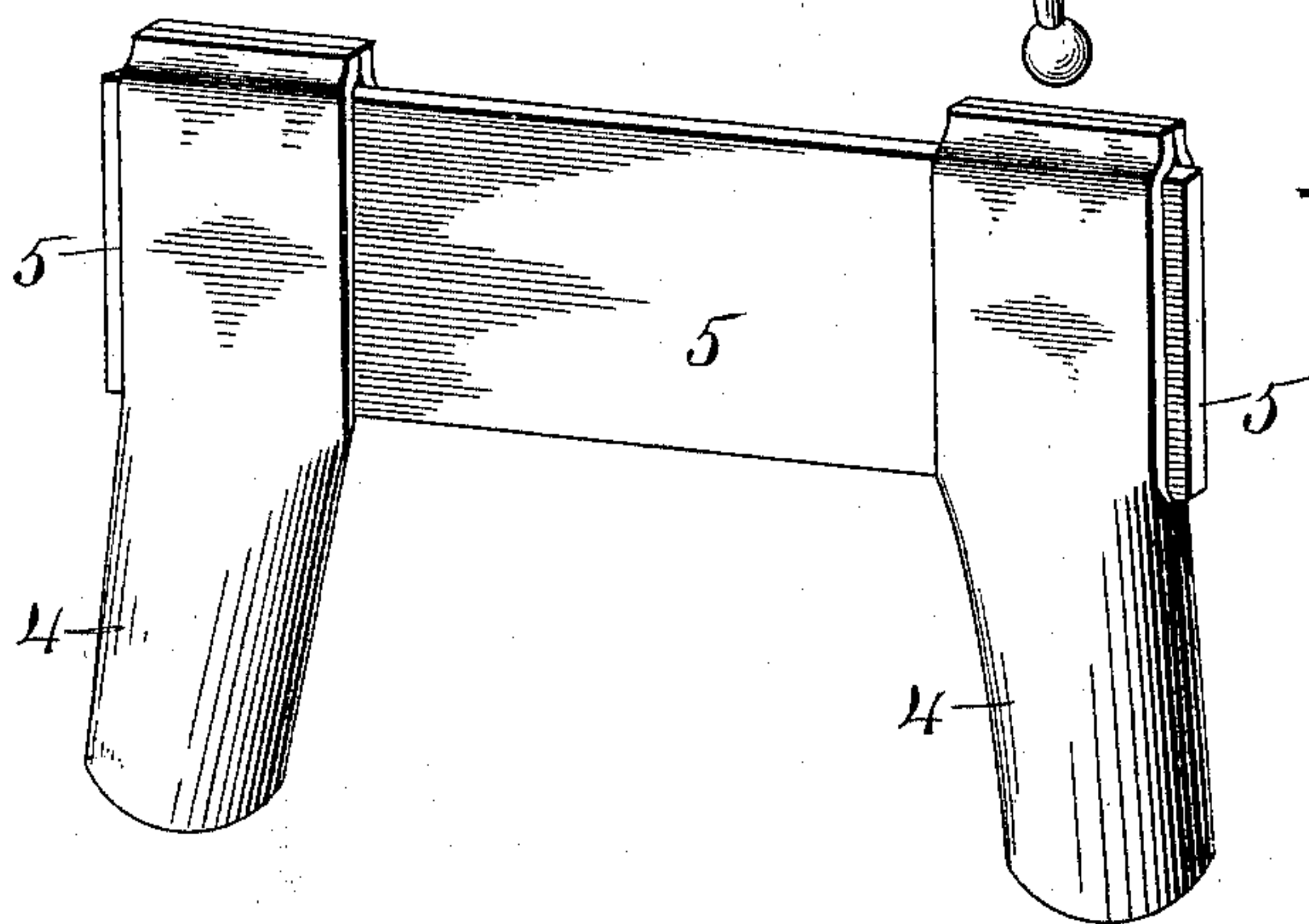
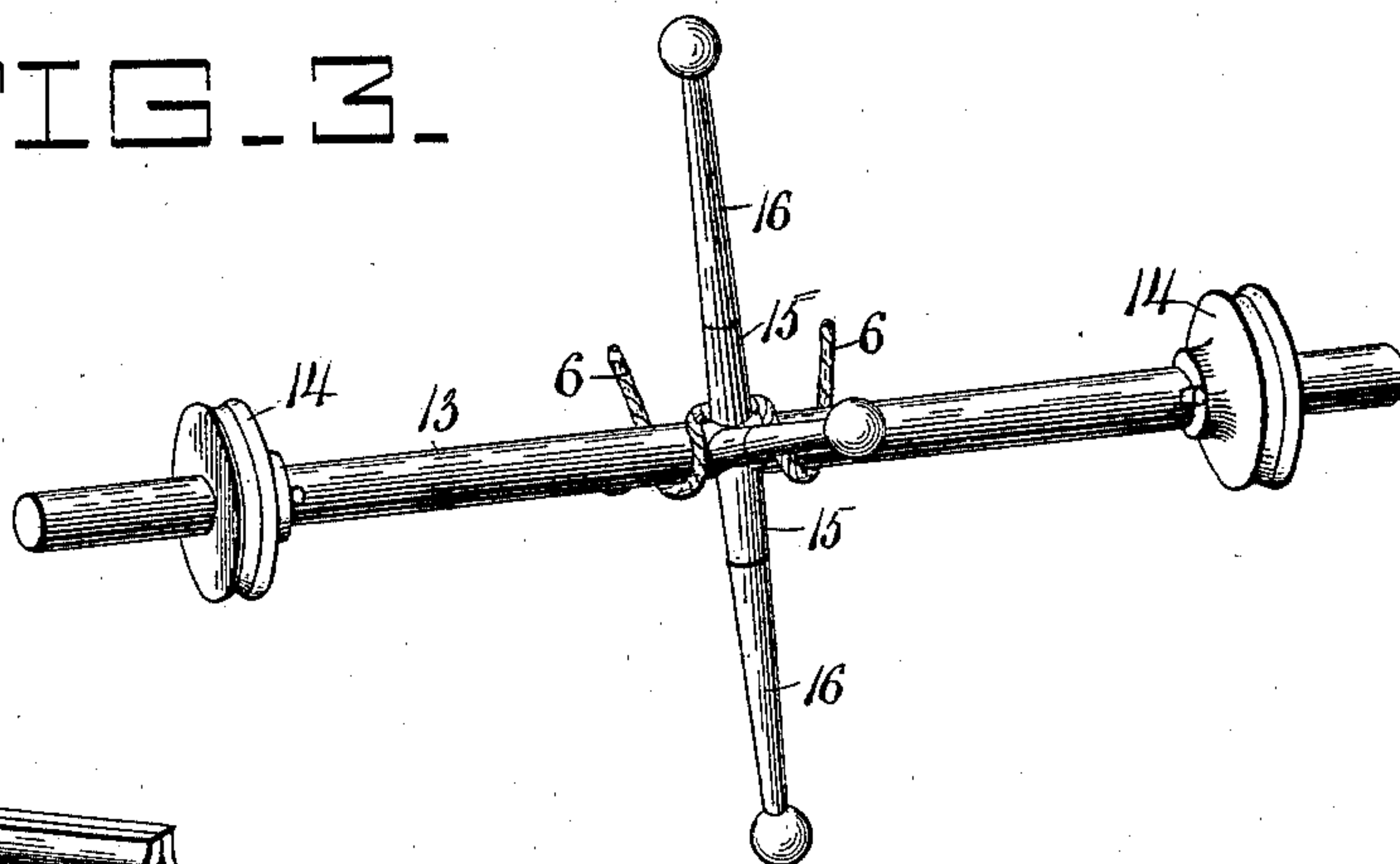
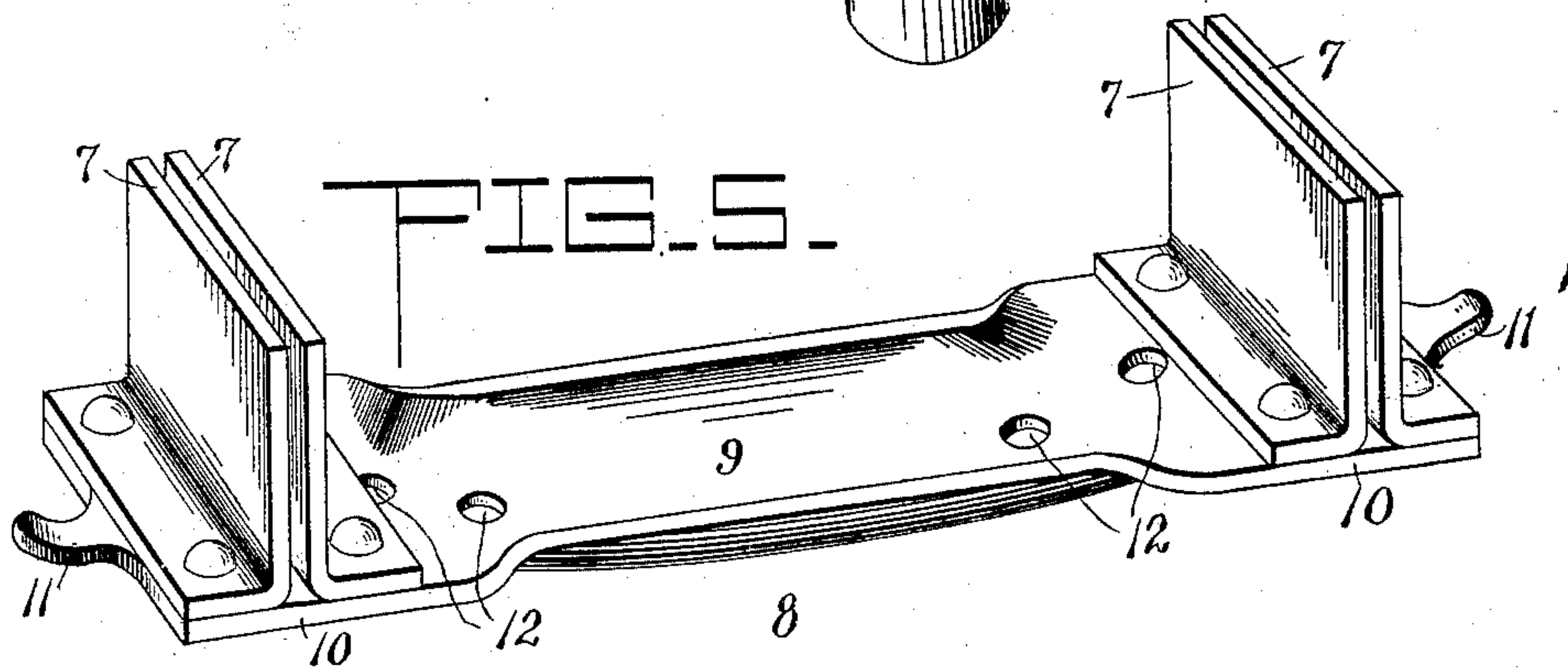


FIG. 4.



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# UNITED STATES PATENT OFFICE.

GEORGE BRUNELLE, OF RED LAKE FALLS, MINNESOTA.

## WINDLASS.

SPECIFICATION forming part of Letters Patent No. 609,871, dated August 30, 1898.

Application filed June 24, 1897. Serial No. 642,131. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE BRUNELLE, of Red Lake Falls, in the county of Polk and State of Minnesota, have invented certain new and useful Improvements in Windlasses; 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.

My invention relates to improvements in windlasses; and it consists in the novel constructions, combinations, and arrangements of parts hereinafter more fully described, and particularly pointed out in the appended claims.

The object of the invention is to provide an improved construction and arrangement of windlass-shaft and mechanism for lifting the same to enable an article to be both lifted and swung to its place of deposit and a novel construction of portable windlass-frame the parts of which may be quickly and conveniently assembled and taken apart for removal, storage, or shipment.

In the accompanying drawings, illustrating the invention, Figure 1 represents a side elevation of the windlass. Fig. 2 is an end elevation of the same. Fig. 3 is an enlarged detail view of the windlass-shaft and connections. Fig. 4 is a detail perspective view of one of the socket connections; and Fig. 5 is an enlarged detail perspective view of the head or bridge piece, showing the inside thereof.

Referring now more particularly to the accompanying drawings, 1 designates the windlass-frame, which consists of four standards 2, two being arranged on each side thereof. The two standards at each side of the frame are connected by socket-pieces 3, each socket-piece being formed with two depending socket members 4, which fit over the upper reduced ends of the standards, as shown, and are connected at their upper ends by cross-plates 5, which extend transversely of the frame and are arranged between the two standards.

A head or bridge piece 8 connects the four standards of the frame together. This head or bridge piece comprises a plate 9, which is hollow or concave on the under side thereof and provided with straight ends 10, having attaching-lugs 11, and adjacent to the ends

with openings 12. These ends of the head or bridge piece are each provided with two downwardly-projecting parallel plates, forming a guideway for the reception of the cross-plates 5 of the socket-pieces, the said parallel plates being slipped down over the cross-plates during the process of assembling the parts. When the parts are thus assembled, a light yet strong and durable rectangular windlass-frame is provided, which may be quickly taken apart for storage, removal, or shipment and as conveniently assembled for use.

13 designates a windlass-shaft provided at each end with pulleys 14, revoluble loosely thereon. A suspending cord, rope, or cable 6 is wound around the shaft, and the ends thereof extend upward through the openings 12 and are secured to the attaching-lugs 11. The said cord, rope, or cable will be long enough in practice to enable the shaft to extend down in close position to the floor or ground on which the windlass rests and provides means whereby the shaft may be raised vertically to a point in close proximity to the bridge-piece, the rope winding thereon during this operation. The shaft is provided at the center thereof with a series of radial arms 15, and metal handles 16 are provided to fit over the said arms to enable the shaft to be wound or unwound and swung to the point where the object is to be deposited with quickness and facility. Cords or ropes 17 are secured at one end to the pulleys 14 and support a suspending-rod 18, to which is secured by suitable connections 19 a hook 20, on which the weight is adapted to be suspended.

It will be noted that after the pulleys 14 are mounted loosely on the windlass-shaft the cord or rope may be wound upon the said shaft by turning the latter without winding up or otherwise disturbing the load or weight which is to be raised, and it will also be seen that as the shaft is suspended from the winding cord or rope the said weight or load may be swung readily and conveniently into a wagon, railroad-car, or other place of deposit.

In operating the windlass the operator will ordinarily stand upon an elevated platform or flooring, and where this is not convenient and it is desired to lift an object which would carry the windlass beyond the reach of the operator standing upon the ground he may



stand upon the cross-bar 18, thereby lifting himself with the weight to be lifted. Ordinarily, however, the windlass will be used only for lifting weights for a short distance.

5 I desire it understood that I do not limit my invention to the specific construction and arrangement of parts herein shown and described, but reserve to myself the right to make such changes and modifications as fall  
10 within the spirit and scope of my invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In windlasses, the combination of a frame  
15 consisting of side standards, the standards at each side being connected by socket-pieces having cross-plates, and a head or bridge piece connecting the standards and provided at each side with parallel plates forming guide-  
20 ways for the reception of the said cross-plates, substantially as described.

2. In windlasses, the combination of a frame comprising standards, a socket-piece connecting the standards at each side of the  
25 frame, said socket-piece being provided with a cross bar or plate, a head or bridge piece provided at each end thereof with parallel plates which fit down upon the cross-plates and connecting side standards, said bridge-

piece being also provided with attaching-lugs  
30 and openings adjoining the same, a windlass-shaft, and a winding cord or rope secured to the shaft and having its ends passed through said openings and attached to the said lugs, substantially as described. 35

3. In windlasses, the combination of a frame consisting of supporting-standards, a socket-piece at each side of the frame and each provided with two depending socket members which fit over the ends of the standards at  
40 that side, said socket members being connected by a cross-plate, a head or bridge piece provided at each end thereof with downwardly-projecting parallel plates which fit down upon and confine the said cross-plates, 45 said bridge-piece being also provided at each end with attaching-lugs and openings adjoining the same, a windlass-shaft, and a winding cord or rope secured to the same, passed through the said openings and attached to  
50 said lugs, substantially as described.

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

GEORGE BRUNELLE.

Witnesses:

F. T. HALL,

S. N. MORRISSETT.