

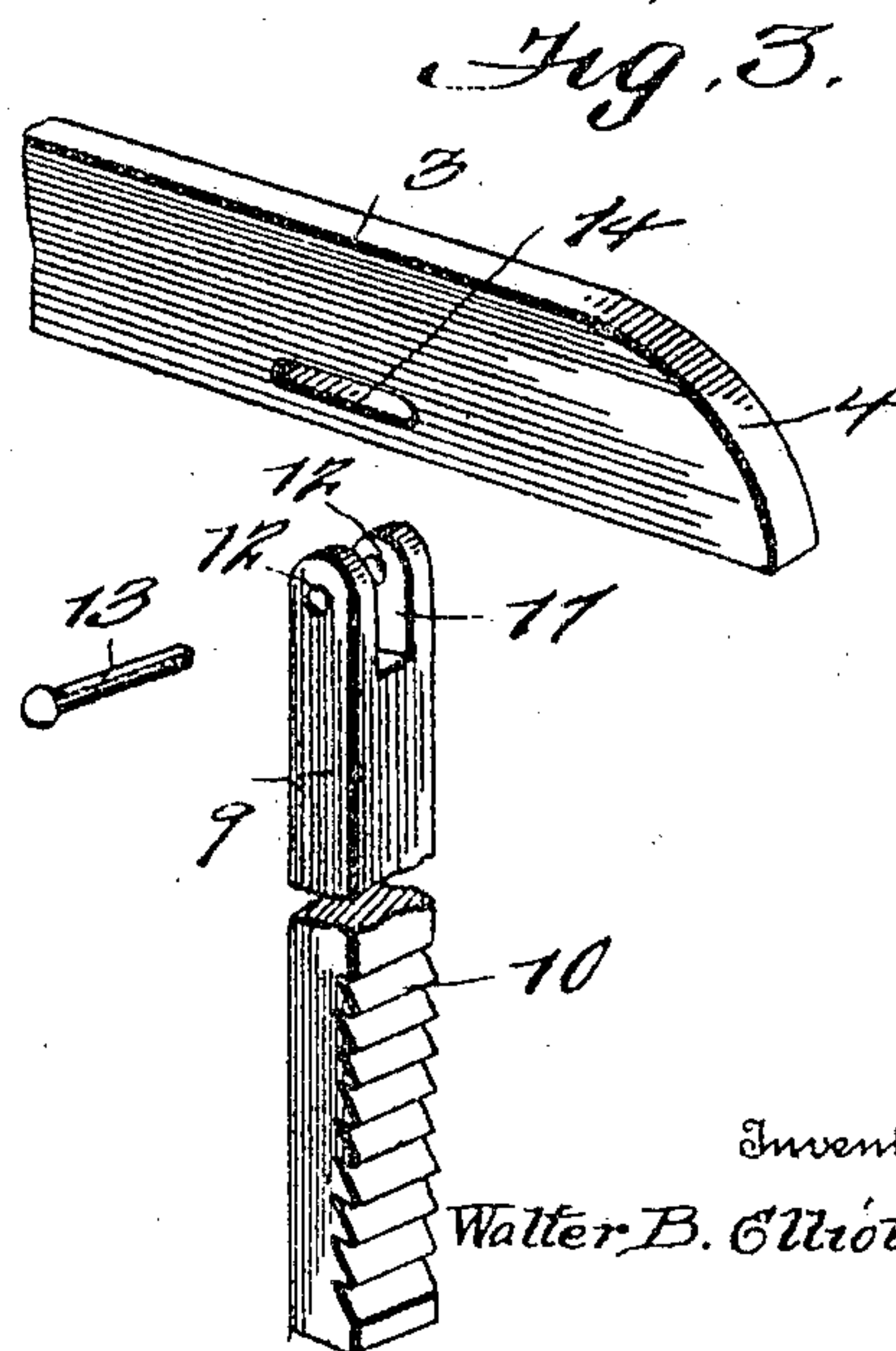
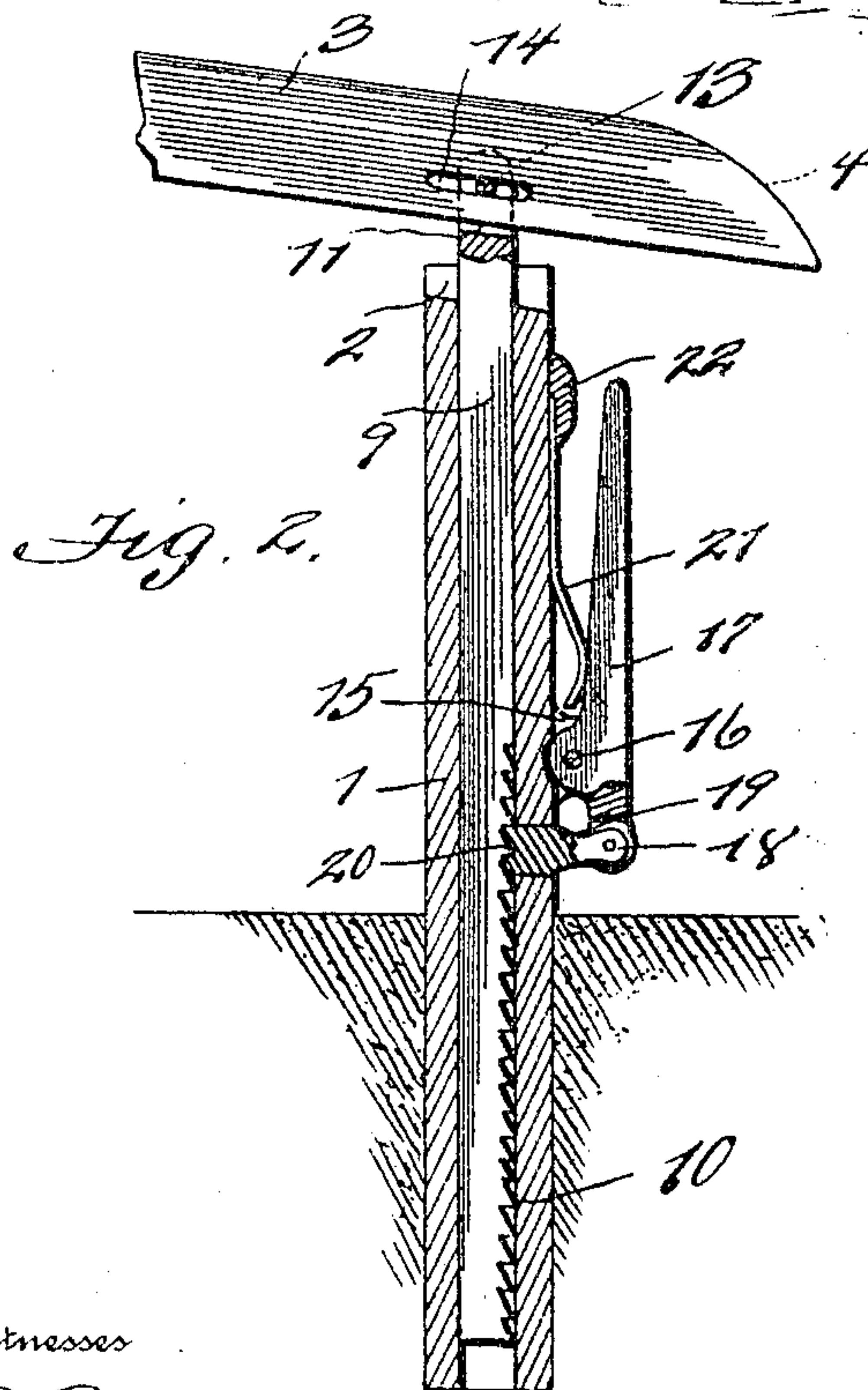
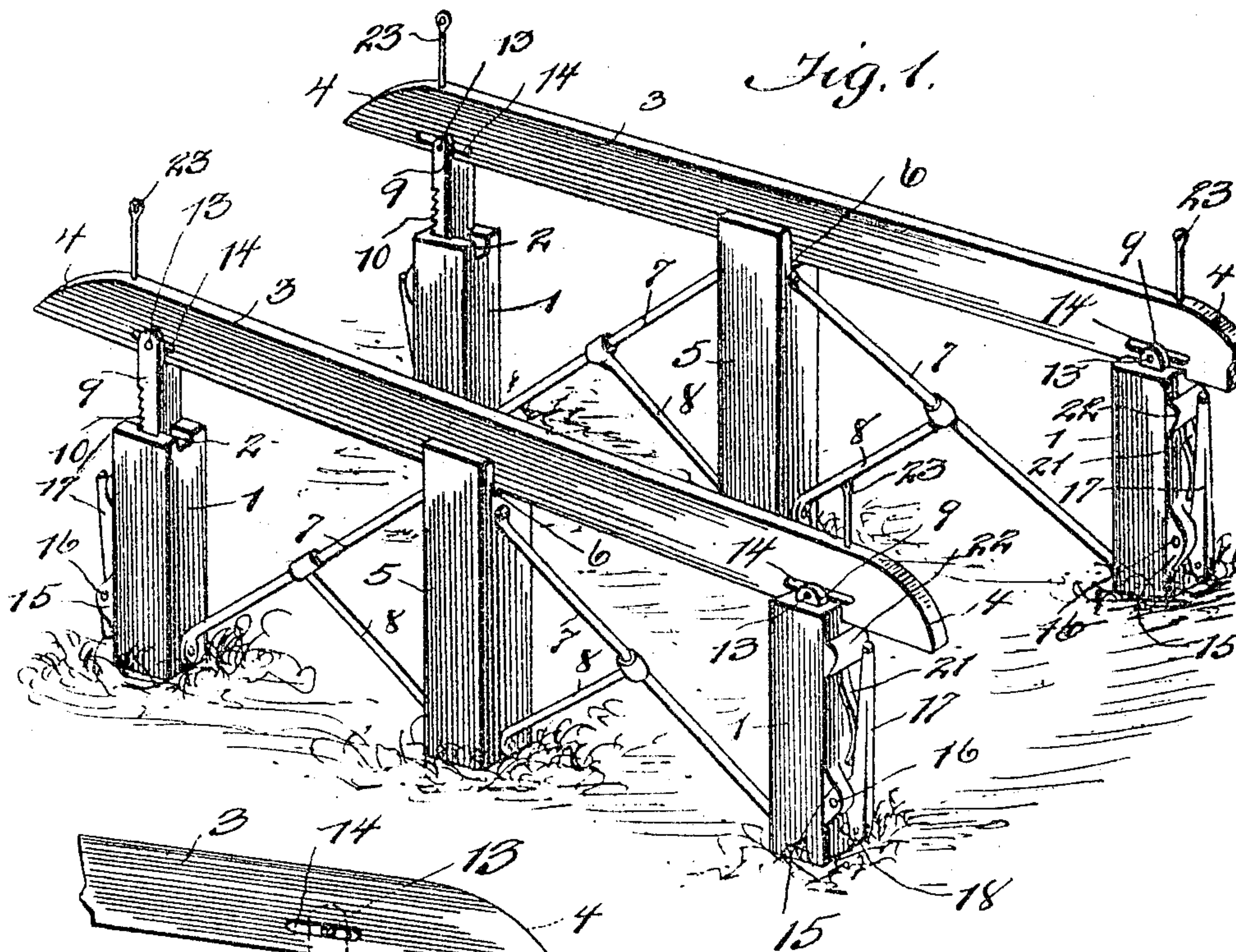
No. 798,998.

PATENTED SEPT. 5, 1905.

W. B. ELLIOT.

LOADING AND UNLOADING DEVICE.

APPLICATION FILED MAY 28, 1904. RENEWED AUG. 10, 1905.



Witnesses

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UNITED STATES PATENT OFFICE.

WALTER B. ELLIOT, OF HIGHFIELD, MONTANA.

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No. 798,998.

Specification of Letters Patent.

Patented Sept. 5, 1905.

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To all whom it may concern:

Be it known that I, WALTER B. ELLIOT, a citizen of the United States, residing at Highfield, in the county of Fergus and State of Montana, have invented certain new and useful Improvements in Loading and Unloading Devices, of which the following is a specification.

This invention relates to certain new and useful improvements in devices for raising and lowering or loading and unloading racks.

It has for its objects, among others, to provide a simple and efficient, strong, and durable loading and unloading device which can be easily manipulated and by means of which the manual labor is reduced to a minimum.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the numerals of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of the device with the parts in position to receive the rack. Fig. 2 is an enlarged detail, partly in elevation and partly in vertical section, showing one of the corner-posts, its rack, &c. Fig. 3 is a perspective detail showing a portion of one of the racks and the side bar of the lifter with the pivot-pin removed.

Like numerals of reference indicate like parts in the different views.

Referring now to the details of the drawings, 1 designates the corner-posts, about three feet and six inches in height. They may be made of any suitable material and are made hollow, as seen best in Fig. 2. The upper end of each is provided with a groove 2, as seen clearly in Fig. 1, in which the lower edges of the side pieces or skids 3 are received, as shown. The skids 3 may be of any desired length, usually about twenty feet, and made of any suitable material, their ends being rounded upon their upper faces, as seen at 4.

5 designates the center posts. They are of any suitable dimensions and material, being usually about five feet in height. They are provided upon their upper ends with notches 6, in which the skids 3 are received, as seen clearly in Fig. 1.

7 designates long braces connecting the center post near its upper end with the lower ends of the corner-posts. 8 designates shorter

braces connecting the long braces near the center of their length with the center post for firmly bracing the parts.

In each corner-post there is slidingly mounted a sliding post 9, which is provided with rack-teeth 10, as seen best in Fig. 2, and each post is bifurcated at its upper end, as seen at 11, and the bifurcations provided with coincident holes 12, through which passes a removable pin 13, which passes also through a horizontal slot 14 in the end of the skid 3, so that while the post 9 may slide in a direct vertical line the skid may have the necessary pivotal movement.

15 designates ears on the corner-posts, and between each pair of ears is pivotally mounted, as at 16, a lever 17, to one end of which is pivotally connected, as at 18, a dog or pawl 19, having the teeth 20, adapted to be engaged with the rack-teeth 10 of the sliding post 9 when the lever is actuated to throw the pawl or dog inward for this purpose.

21 is a spring, secured at one end, as at 22, to the post and its other end bearing against the lever near the pivot of the latter to hold the dog or pawl in engagement with the teeth of the rack.

23 designates pins removably inserted in the upper edges of the skids near the ends to prevent the rack from sliding after loading.

The operation will be readily understood from the foregoing description when taken in connection with the annexed drawings. As shown, the parts are in position to receive a rack. The corner-posts may be set in the ground to any desired depth, as shown, or they may be supported upon the top of the ground. To unload the rack (not shown) from the wagon, first push the levers inward at their upper ends, so as to lower the posts 9 and drop the skids 3. Then drive the wagon in between the skids. The front end of the rack slides up and the hind end still on the bolster until it comes to a balance, then the hind end raises and the pins lock it. Then place the pins 23 behind the rack to prevent its sliding. To load the rack onto the wagon, first place the wagon under the rack and then push the levers and the rack drops on the front bolster. Then drive out and the hind end of the rack comes into place on the wagon.

It will be found advisable to employ rack-guides, one on each end of the rack, to prevent it from slipping sidewise.

Modifications in detail may be resorted to

without departing from the spirit of the invention or sacrificing any of its advantages.

What is claimed as new is —

1. A rack loading and unloading device comprising corner-posts, center posts of greater height, skids mounted for rocking movement on the center posts and vertically-slidable means connected with the ends of the skids.

2. A rack loading and unloading device comprising corner-posts, center posts, skids mounted for rocking movement on the center posts, and vertically-movable means mounted in the corner-posts and having slidable connection with the skids.

3. A rack loading and unloading device comprising corner-posts, center posts, skids mounted for rocking movement on the center posts, vertically-movable means connected with the ends of the skids, and pivoted levers carrying means for holding said vertically-movable means in adjusted position.

4. A rack loading and unloading device comprising corner-posts, center posts, skids mounted for rocking movement and having rounded ends, vertically-movable means con-

nected with the ends of the skids, and removable pins in the upper faces of the skids.

5. A rack loading and unloading device comprising corner-posts having notches in their upper faces, center posts with like notches, skids guided in said notches, and means for holding the skids in adjusted position comprising ratchet-bars and pawls.

6. A rack loading and unloading device comprising corner-posts, center posts, skids mounted for rocking movement on the said center posts, vertically-slidable posts in the corner-posts having loose pivotal connection with the skids and provided with rack-teeth, levers mounted on the corner-posts and having pawls engaging the teeth of the sliding posts, and springs on the corner-posts acting upon said levers.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

WALTER B. ELLIOT.

Witnesses:

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W. C. WESTON.