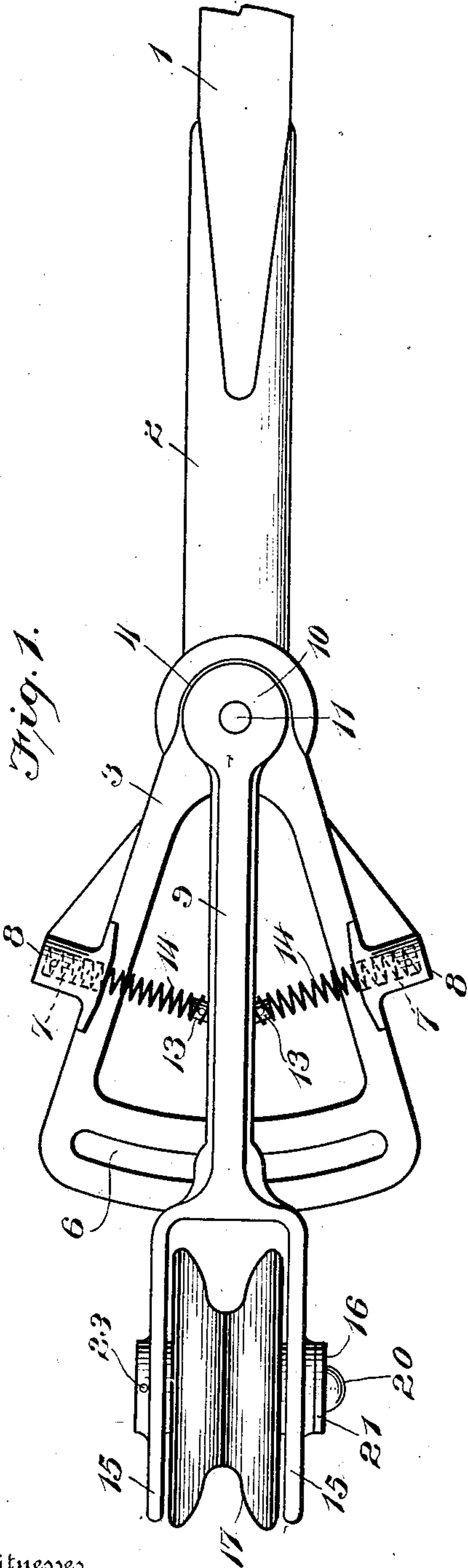


No. 879,729.

G. G. BUCHANAN.
TROLLEY POLE HEAD.
APPLICATION FILED APR. 21, 1906.

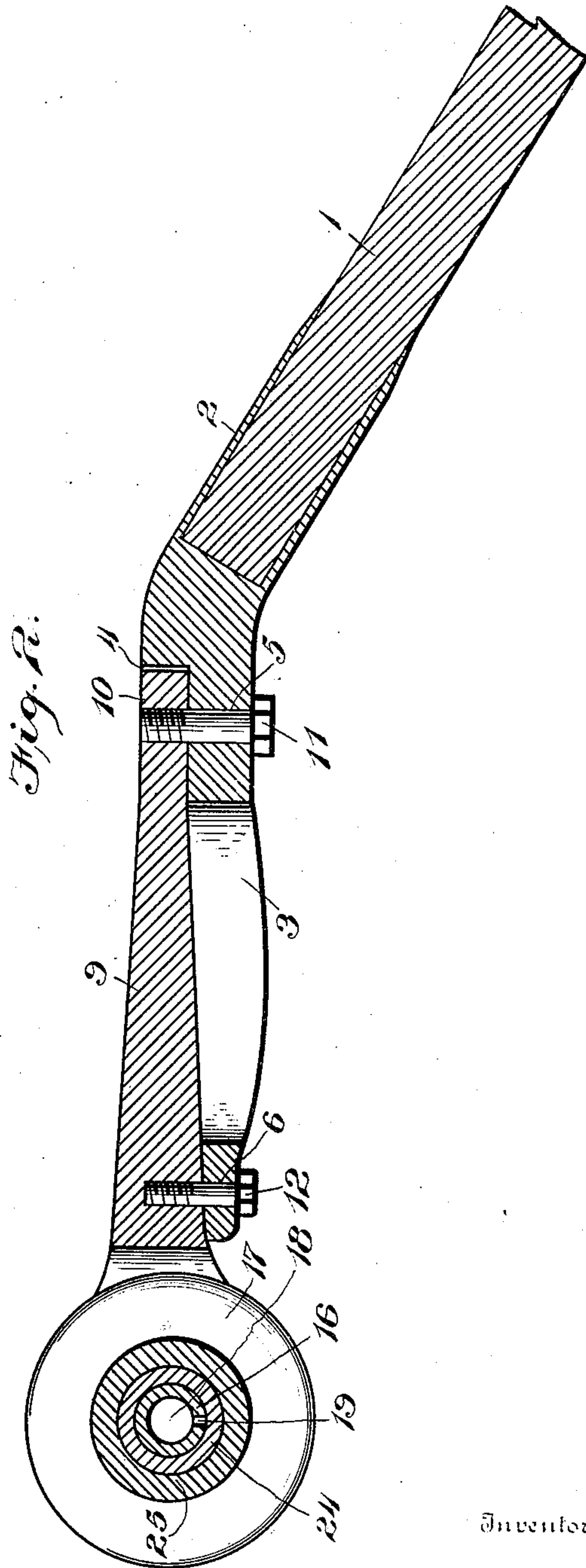
PATENTED FEB. 18, 1908.

2 SHEETS—SHEET 1.



Witnesses

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Inventor

G. G. Buchanan

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2 SHEETS—SHEET 2.

Fig. 3.

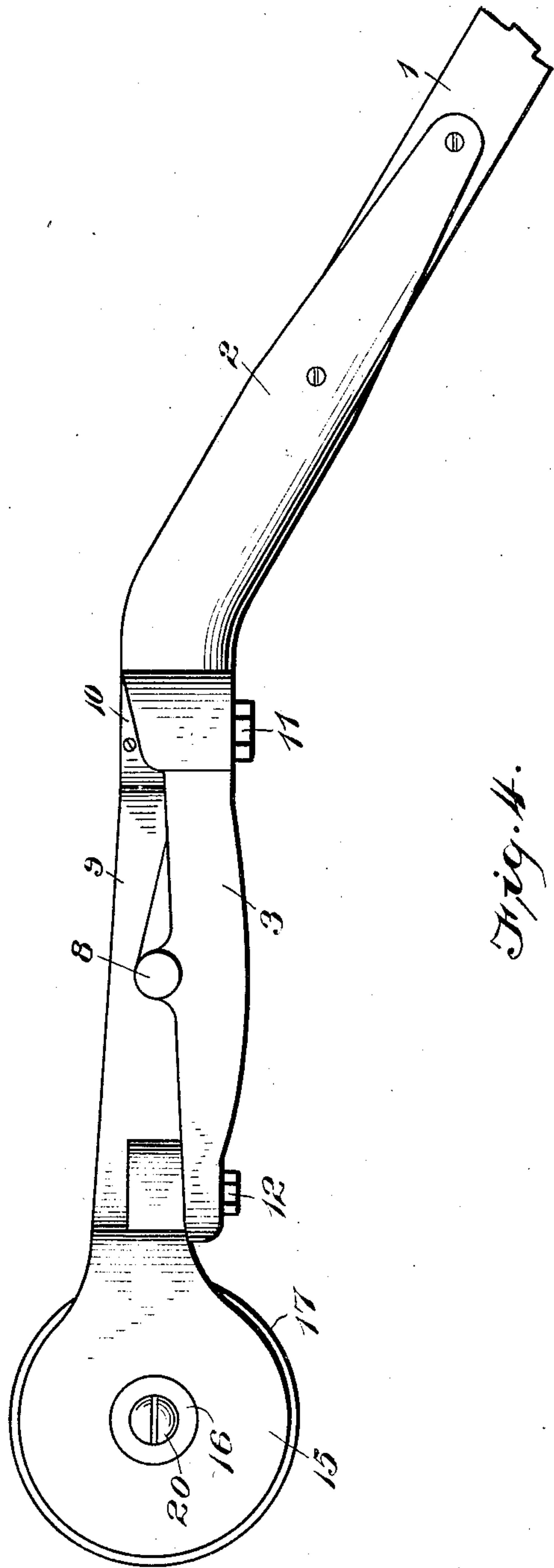
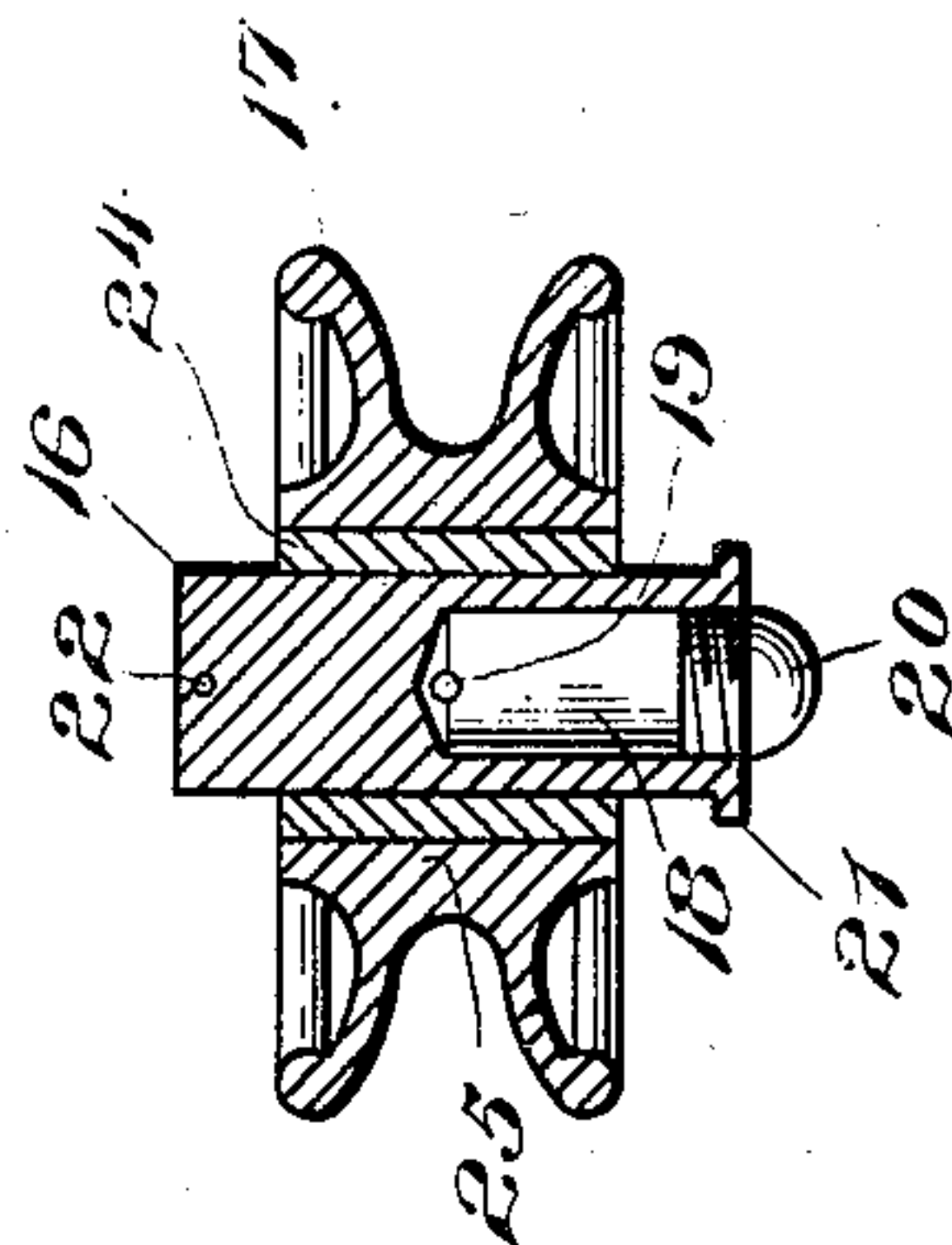


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE GIRDEN BUCHANAN, OF DUBOIS, PENNSYLVANIA.

TROLLEY-POLE HEAD.

No. 879,729.

Specification of Letters Patent.

Patented Feb. 18, 1908.

Application filed April 21, 1906. Serial No. 313,051.

To all whom it may concern:

Be it known that I, GEORGE GIRDEN BUCHANAN, a citizen of the United States, residing at Dubois, in the county of Clearfield and State of Pennsylvania, have invented a new and useful Trolley-Pole Head; 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 over head trolley pole heads and wheels, and has for an object to provide an improved pole head which is formed to permit the wheel to swing from side to side when the car is going fast or turning curves.

Another object is to improve the construction of the trolley wheel.

Other and further objects will appear in the following description and will be more particularly pointed out in the appended claims.

In the drawings Figure 1 is a top plan view of the invention Fig. 2 is a longitudinal section Fig. 3 is a side elevation, and Fig. 4 is a transverse section through the wheel and pin.

Referring more particularly to the drawings, 1 indicates the trolley pole. Fitting the upper end of the trolley pole is a tubular member 2 from which extends rearwardly and at an angle thereto, a frame 3. At the point where the tubular member joins the frame 3, the frame is depressed to form an upwardly opening semi-cylindrical pocket 4 and a bolt opening 5 extends through the frame within the pocket. The frame gradually widens from the semi-cylindrical pocket and at its end is provided with an arcuate slot 6 the center of which is the center of the bolt opening 5. On each side of the frame is provided a laterally opening pocket 7 which is formed in a housing 8 extending slightly above the frame 3.

The head 9 is provided at one end with a perforated enlargement 10 which fits in the semi-cylindrical pocket 4 before mentioned and is held therein by a bolt 11 which permits the head to swing. The walls of the pocket shield the forward end of the head. The head 9 rests upon the frame and is provided with a headed bolt 12 which extends through the arcuate slot 6 and holds the rear portion of the head to the frame. Also carried on opposite sides of the head be-

tween its pivot and the arcuate slot 6, are studs 13 to each of which one end of a helical spring 14 is secured, the other end of the helical spring being seated in one of the lateral pockets 7 on the frame. These springs acting on the head in opposite directions, normally maintain it alined with the trolley pole. At its free end the head is bifurcated, the arms 15 of the bifurcation being provided with alined openings to receive the spindle 16 of the wheel 17. This spindle or pin is formed of case hardened steel and is provided with a grease or lubricant chamber 18 opening by a lateral perforation 19 to the wheel bore. This chamber further opens toward one end of the spindle, this opening being closed by a screw plug 20. At the end at which the grease chamber opens, the spindle is provided with an annular flange 21, while at the other end it is provided with a lateral perforation 22 through which a cotter pin 23 is passed to hold the spindle within the head. The wheel 17 is formed of a case hardened steel bushing 24 which is surrounded with a cast brass portion 25.

I desire it to be understood that the invention may be constructed otherwise than the manner herein shown, provided the essence of my invention is employed.

Having thus described my invention, what I claim and desire to secure by Letters-Patent, is

The combination with a member, formed to be fitted to a trolley pole, of a triangular shaped frame, comprising two diverging arms having pockets, and a guiding member connecting the outer ends of the arms, said guiding member having curved slots, said triangular frame having at its smaller end, a circular flange, a head pivotally connected to the forward end of the frame and inside of said flange, said head having a headed stud projecting through the slot of the guiding member, coiled springs seated in the pockets and connected to the opposite sides of the heads, and a trolley wheel carried by the head.

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

GEORGE GIRDEN BUCHANAN.

Witnesses:

F. R. SCOFIELD,
D. S. HERON.