

No. 879,304.

PATENTED FEB. 18, 1908.

G. F. OLDHAM.

HEM FINDER.

APPLICATION FILED JULY 27, 1907.

Fig. 1,

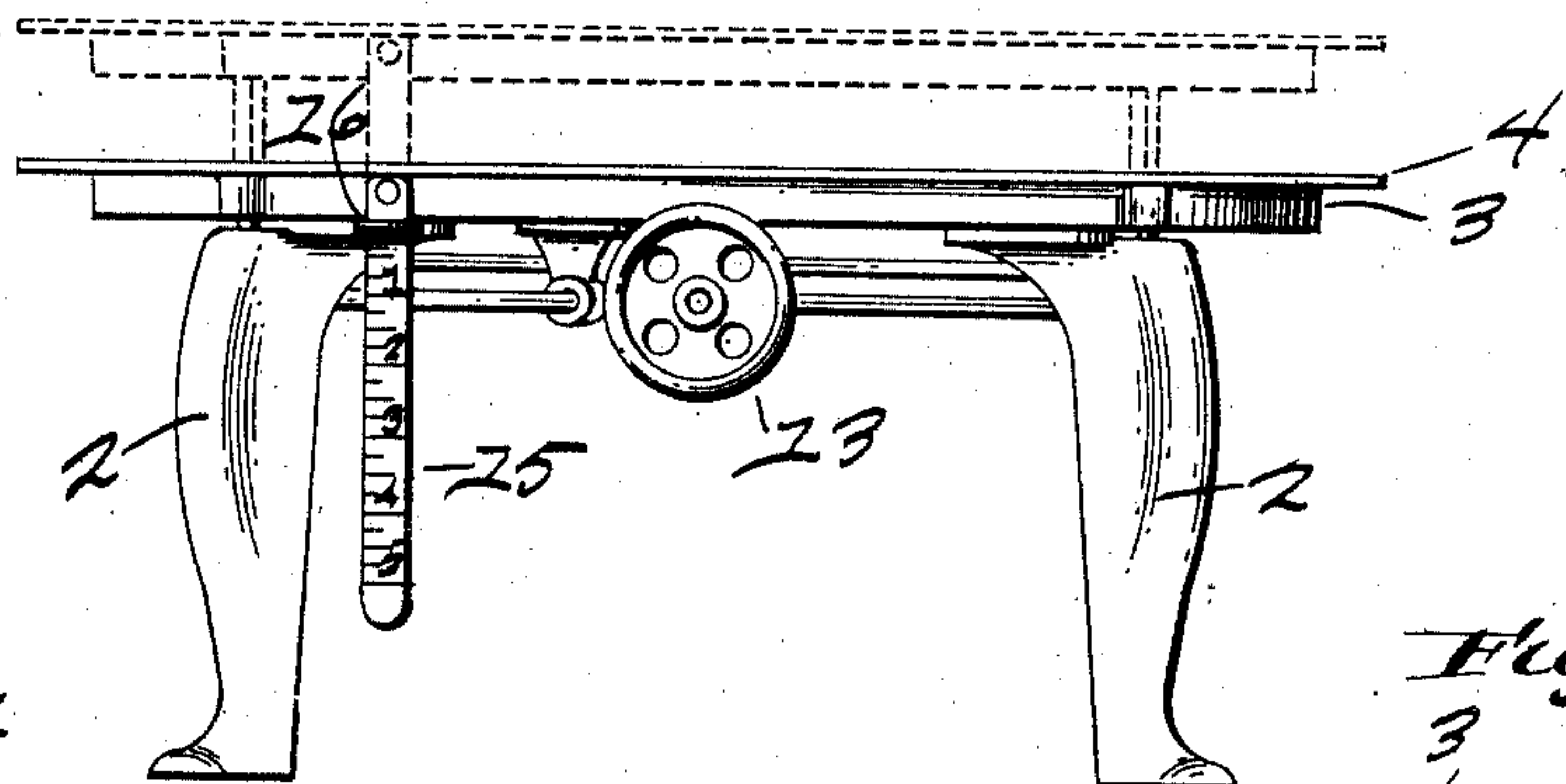


Fig. 3,

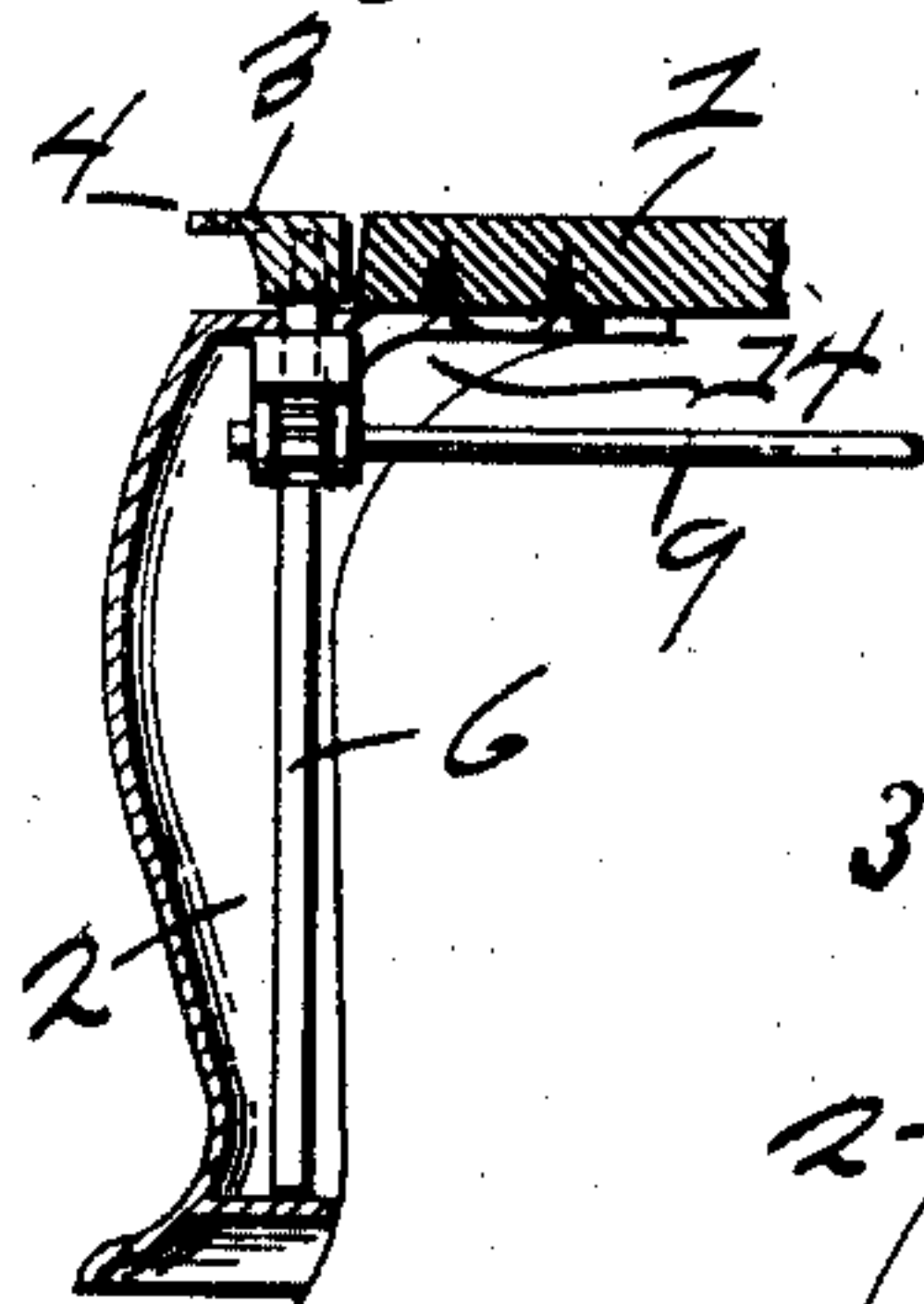


Fig. 4,

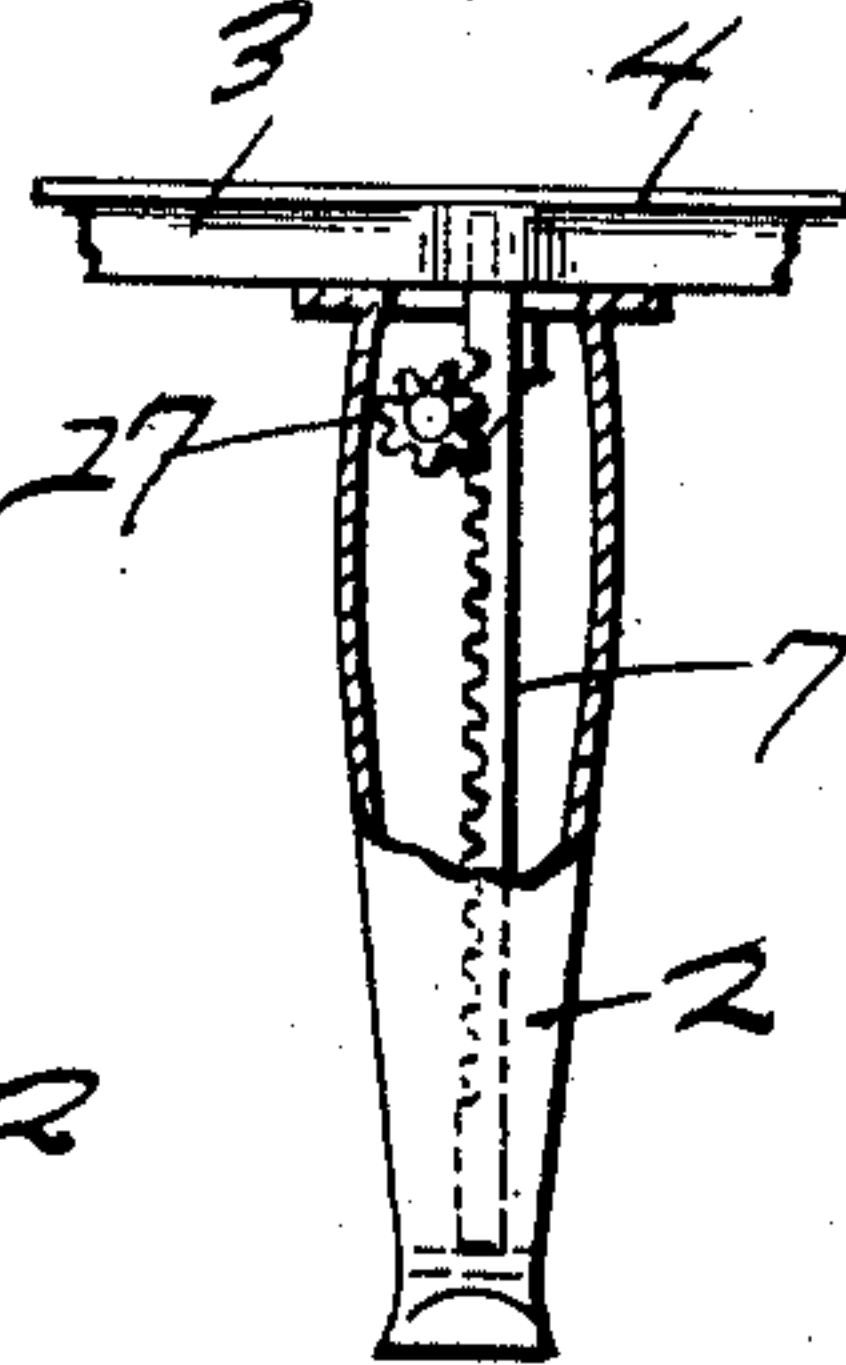


Fig. 2,

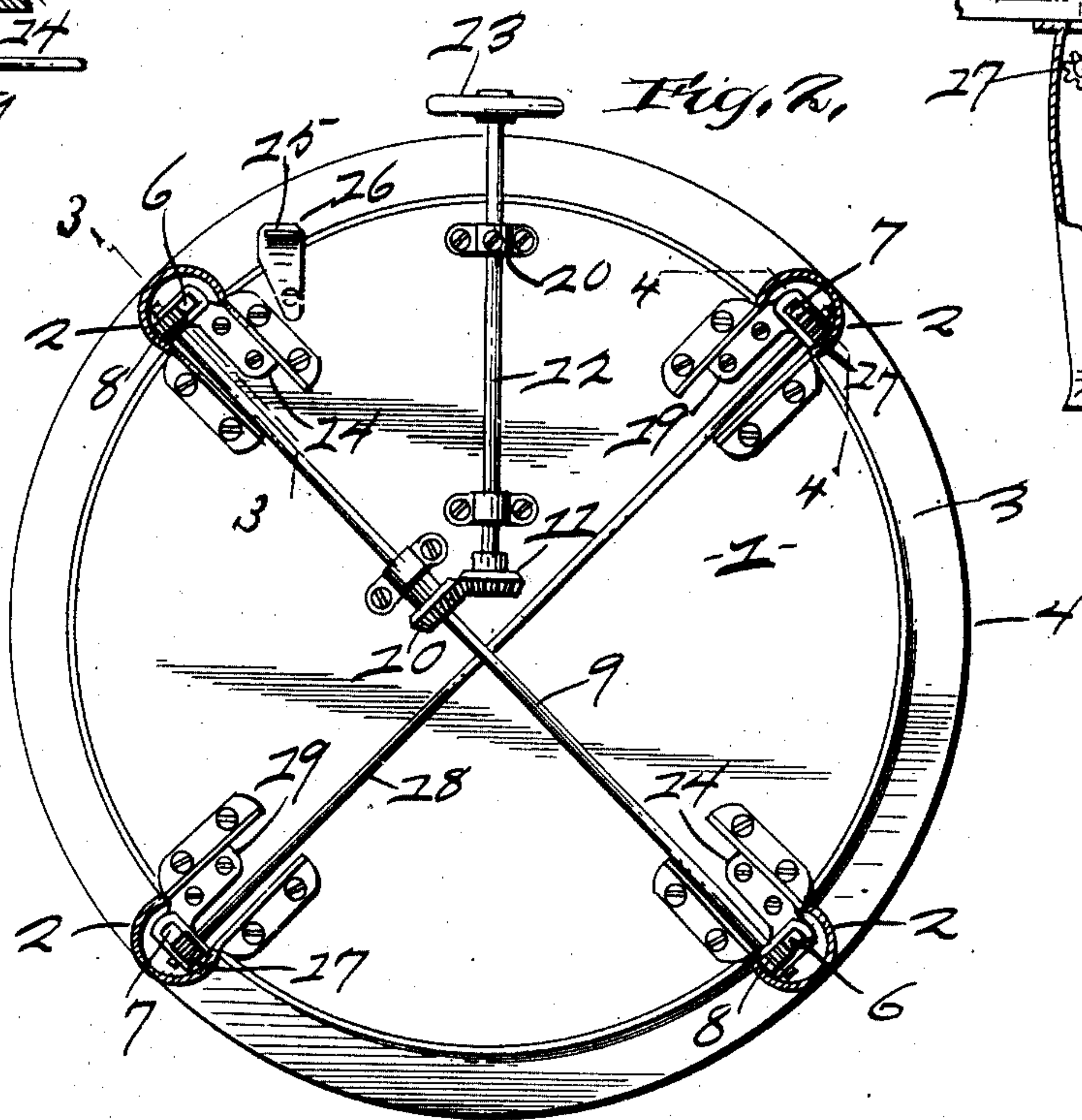
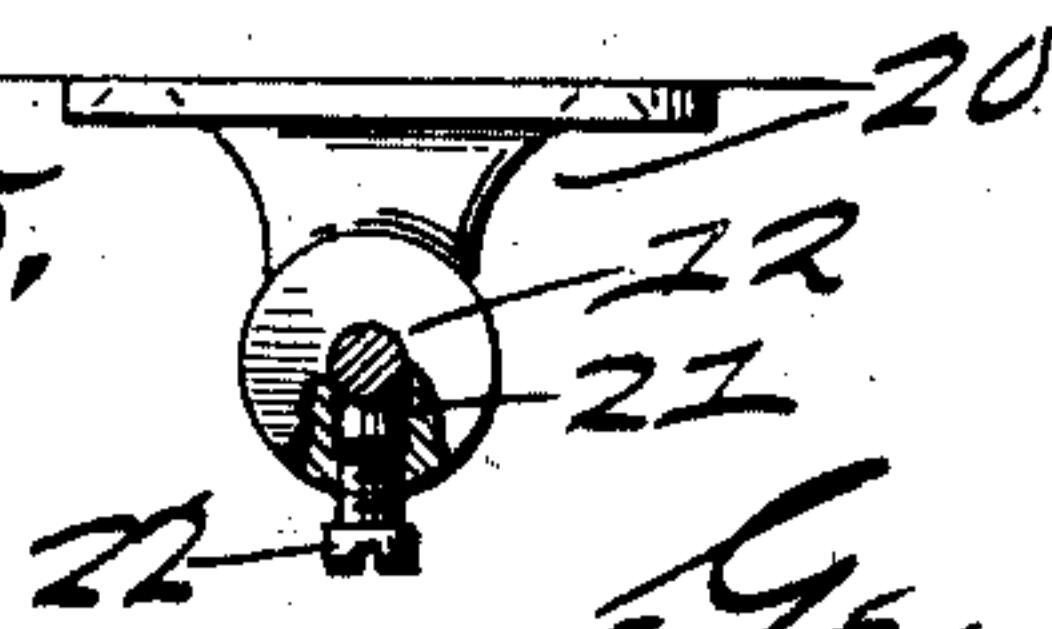


Fig. 5,



Witnesses,
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UNITED STATES PATENT OFFICE.

GEORGE F. OLDHAM, OF TOLEDO, OHIO, ASSIGNOR TO JESSE D. BUTTERFIELD, OF TOLEDO, OHIO.

HEM-FINDER.

No. 879,304.

Specification of Letters Patent.

Patented Feb. 18, 1908.

Application filed July 27, 1907. Serial No. 385,800.

To all whom it may concern:

Be it known that I, GEORGE F. OLDHAM, of Toledo, county of Lucas, and State of Ohio, have invented certain new and useful Improvements in Hem-Finders; and I do hereby declare that the following is a full, clear, and exact description thereof, which 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 figures of reference marked thereon, which form part of this specification.

This invention relates to devices for accurately positioning the hem of a skirt relative to its distance from the floor and it has particular reference to improved operating means for devices of this character employing a stationary table or support for the model or person wearing the skirt, with a ring which is adjustable relative to the table to indicate the distance of the hem on the skirt above the table.

The invention embodies the novel combination, arrangement and the details of construction hereinafter shown, described and claimed.

In the accompanying drawings, Figure 1 is a front elevation of a hem finder embodying my invention; Fig. 2 is a bottom plan view showing the elevating mechanism for the ring and also the means for guiding the ring; the supporting legs being in cross section; Fig. 3 is a section through the leg on line 3—3, Fig. 2, the rack and pinion being shown within; Fig. 4 is a section on line 4—4 showing the rack and pinion in side elevation; and Fig. 5 is a view of the friction bearing or hanger for the actuating shaft, the same showing a preferred means for holding the movable ring elevated by friction.

Referring to the drawings, 1 is the central table or support for the person or model wearing the skirt, the same being elevated upon legs 2.

3 is a ring which rests normally upon the legs when lowered, fitting closely around the table relative to which it is to be elevated, and the same has an outwardly extending flange the outer edge 4 of which serves as a contacting portion against which the material of the skirt may be marked, creased or folded. Extending from the ring through the tops of the legs and concealed within the latter are two pairs of racks 6 and 7 respectively, the

racks 6 on opposite sides meshing with pinions 8 upon the ends of a shaft 9 rotatably supported from the lower face or bottom of the table 1, the shaft 9 carrying a bevel gear 10 which meshes with a bevel gear 11 secured upon the inner end of an operating shaft 12 also rotatably supported from the bottom of the table, the outer end of the shaft 12 carrying a hand-wheel 13 to actuate the same. The racks 6 are guided and the ends of the shaft 9 are rotatable in brackets 14 secured to the bottom of the table within the legs. It is thus seen that upon turning the hand-wheel of the actuating shaft the ring 3 will be elevated to any height, within desired limits, above the plane of the table top, the exact height being indicated upon a scale 15 secured at its upper end to the ring and guided vertically through a slotted plate 16 secured to the table. The scale is graduated and numbered to indicate in inches the exact height of the ring above the table. To elevate the ring evenly and overcome any tendency of the ring to tilt upon the racks 6, there are provided preferably at angular distances of 90 degrees from said racks at diametrically opposite points upon the ring the racks 7 extending downwardly through the legs and meshing with pinions 17 secured upon the ends of a shaft 18 also rotatably supported from the lower face of the table, the racks 7 being guided and the shaft 18 mounted in brackets 19 identical with the brackets 14, the shaft 18 rotating independently of the shaft 9. This simple and effective arrangement overcomes any tendency of the ring to tilt.

As the ring 3 and the racks carried thereby have a tendency to fall by their own weight, I have provided one of the hangers which support the actuating shaft, at 20 and illustrated in Fig. 5, with friction means consisting of a plug 21 of suitable material, such as rubber, the plug being in a recess in the hanger to contact with the actuating shaft, adjustable pressure being directed upon the plug by a set screw 22 threaded into the recess which carries the plug. In this manner the actuating shaft is held by friction of the plug thereon to maintain the ring 3 elevated while the device is being used, the rotation of the actuating shaft being however permitted to raise and lower the ring.

Having described my invention, what I

claim and desire to secure by Letters Patent, is—

1. In a hem-finder, a stationary table, a ring movable relatively thereto, racks carried by the ring, a rotatable shaft supported from the table, pinions upon the shaft to engage the racks, and a friction bearing for the shaft to maintain the ring elevated above the table.
2. In a hem-finder, a stationary table, a ring movable relatively thereto, two pairs of racks carried by the ring, a rotatable shaft supported from the table and carrying pinions to engage one pair of said racks, and a second shaft supported from the table and rotatable independently of the first shaft, and pinions on the second shaft to engage the other pair of racks.
3. In a hem-finder, a stationary table, a

ring movable relatively thereto, two pairs of racks carried by the ring, a rotatable shaft supported from the table and carrying pinions at the ends to engage one pair of said racks, a bevel gear at an intermediate point on said shaft, an operating shaft rotatable from the table, a bevel gear on the operating shaft to engage the bevel gear on the other shaft, and a second shaft supported from the table and rotatable independently of the first shaft, said second shaft carrying pinions to engage the other pair of racks.

In testimony, that I claim the foregoing as my own I affix my signature, in presence of two witnesses.

GEORGE F. OLDHAM.

Witnesses:

CARL H. KELLER,
JESSE D. BUTTERFIELD.