

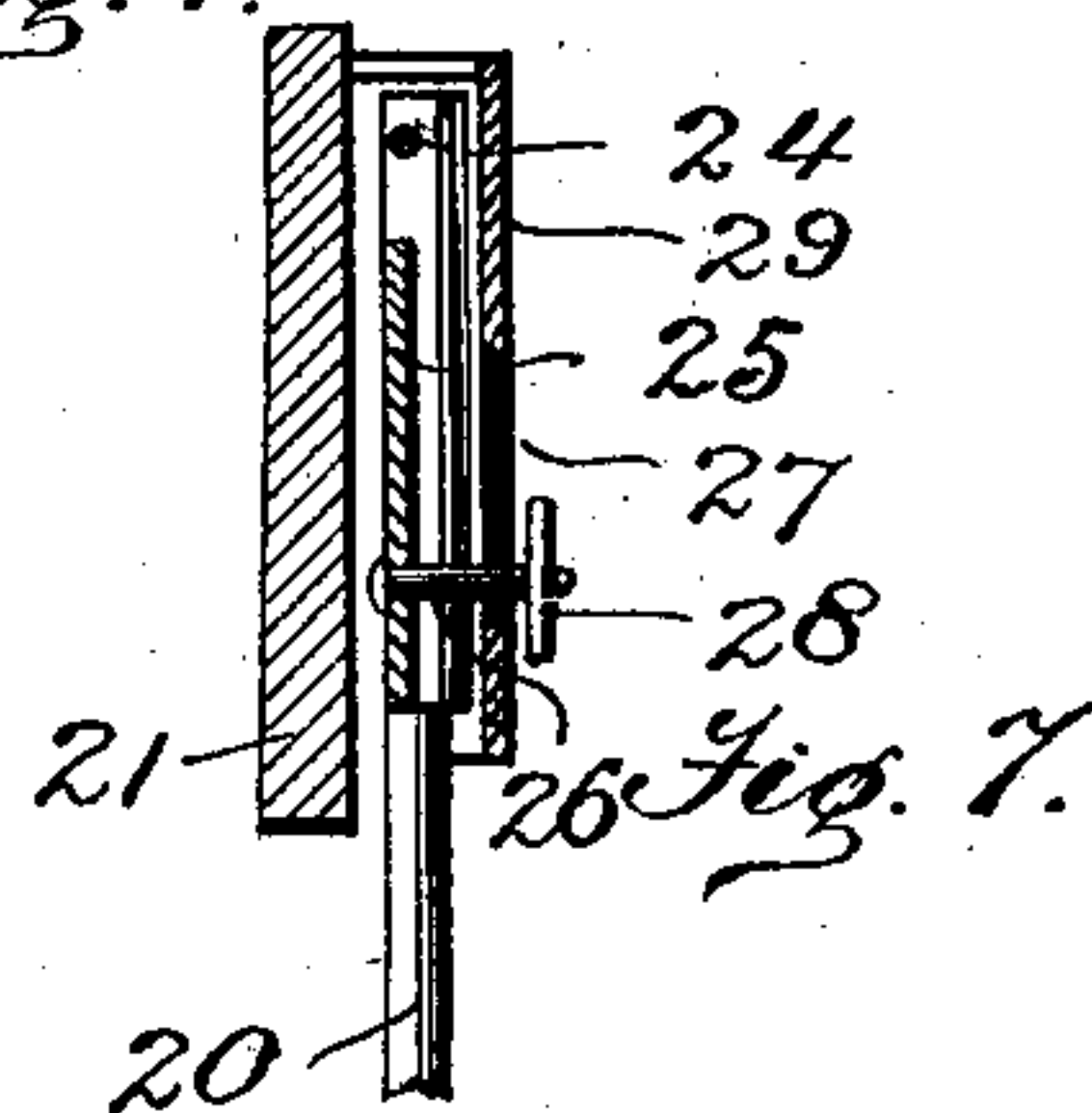
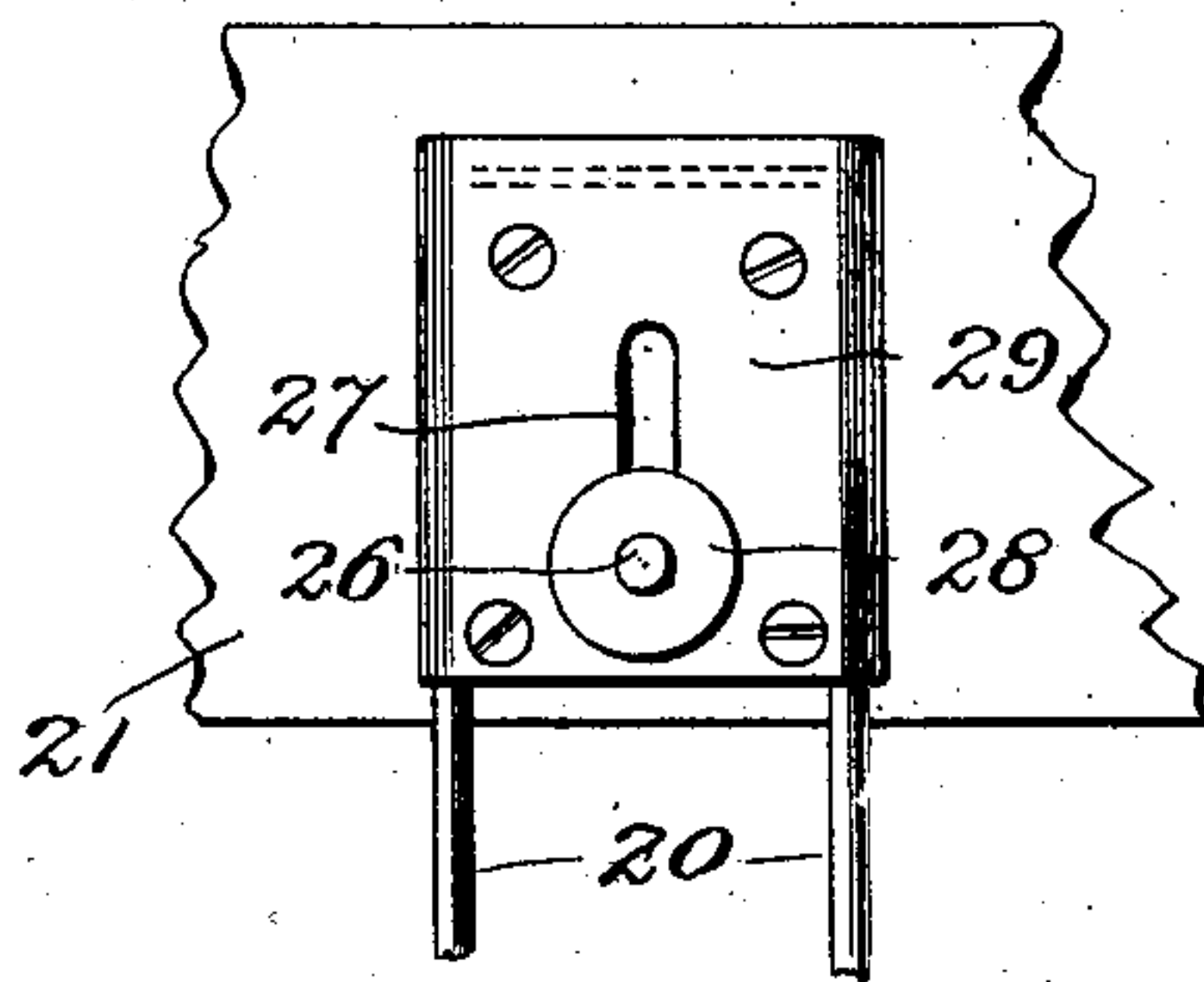
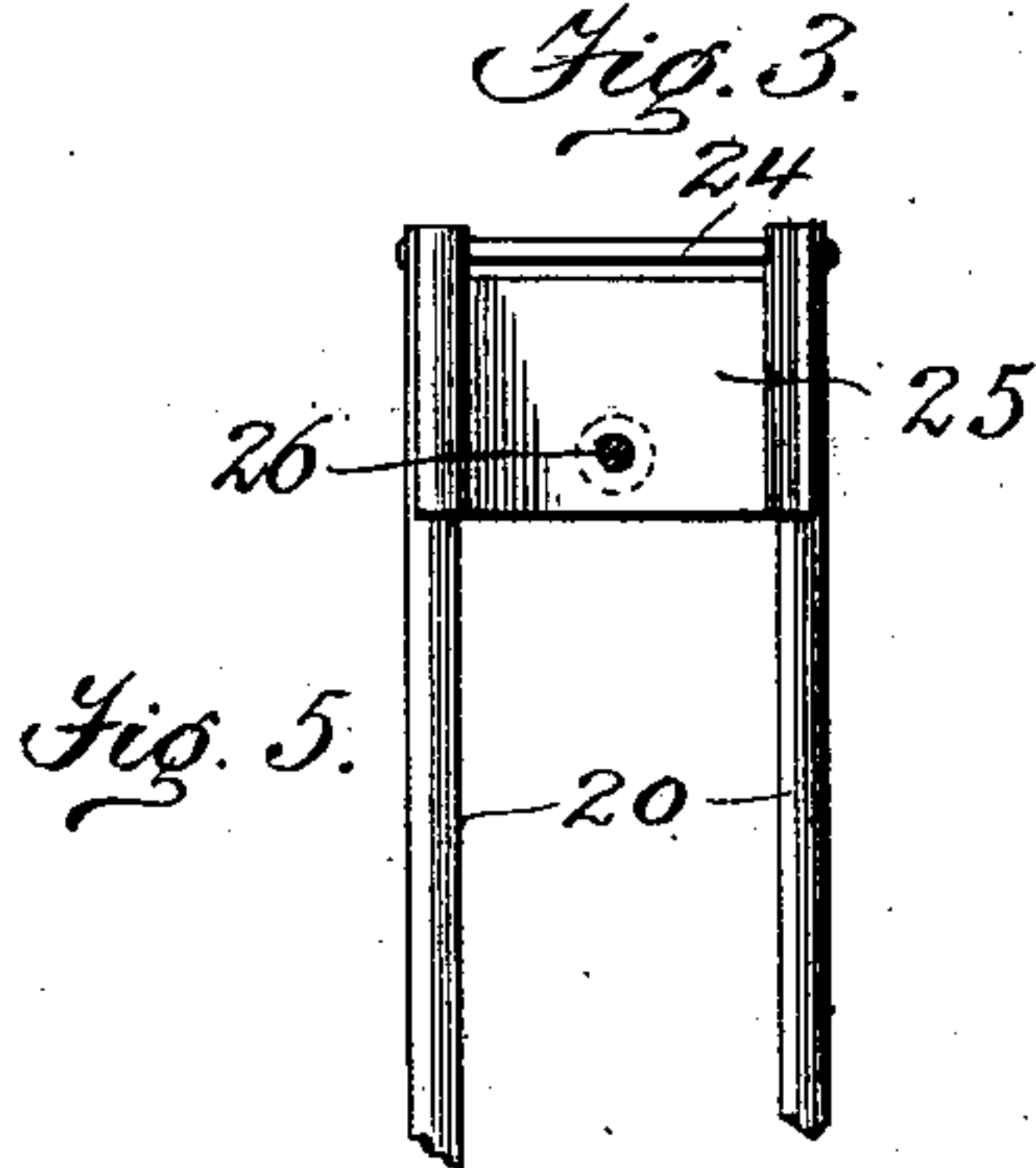
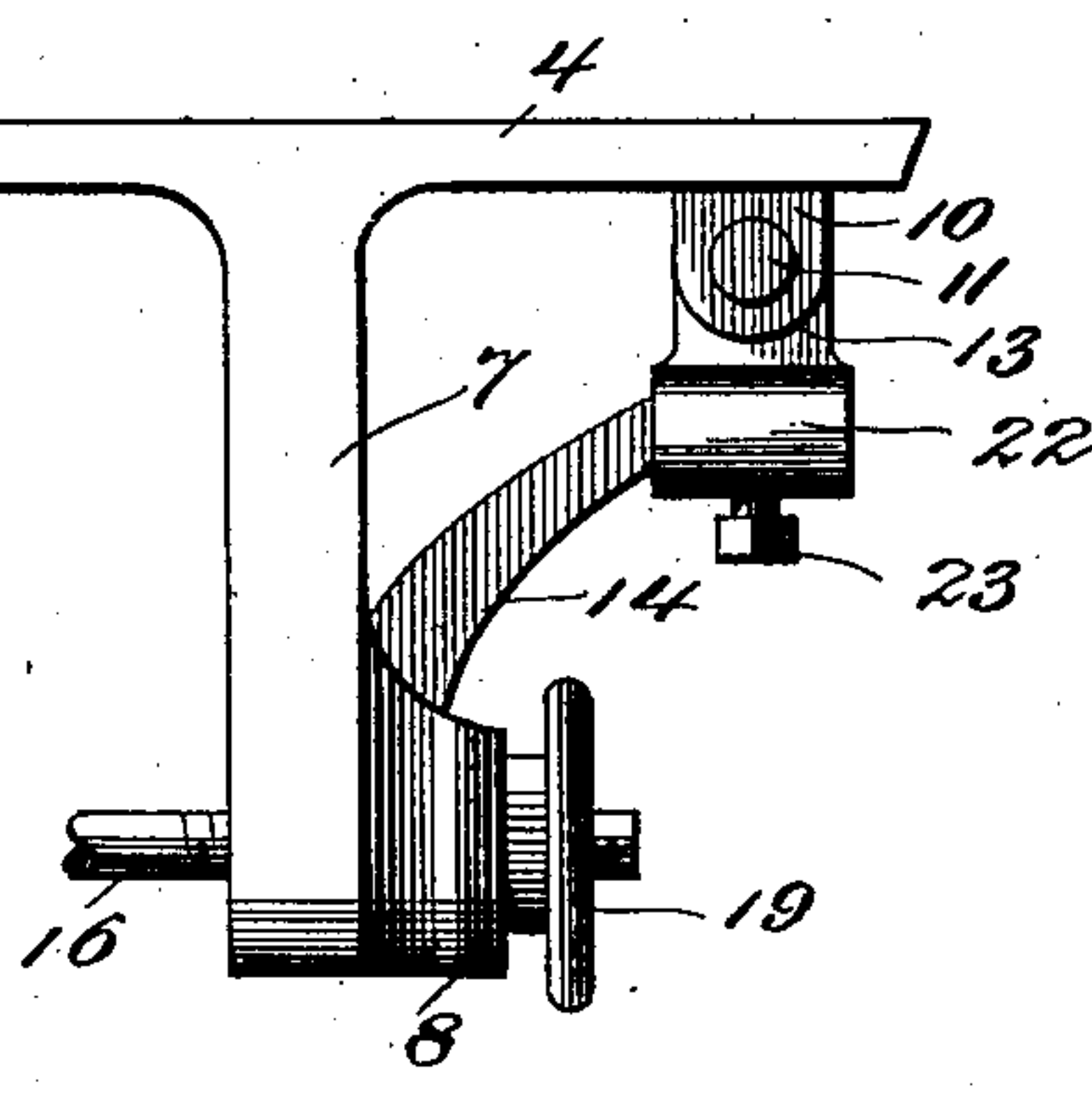
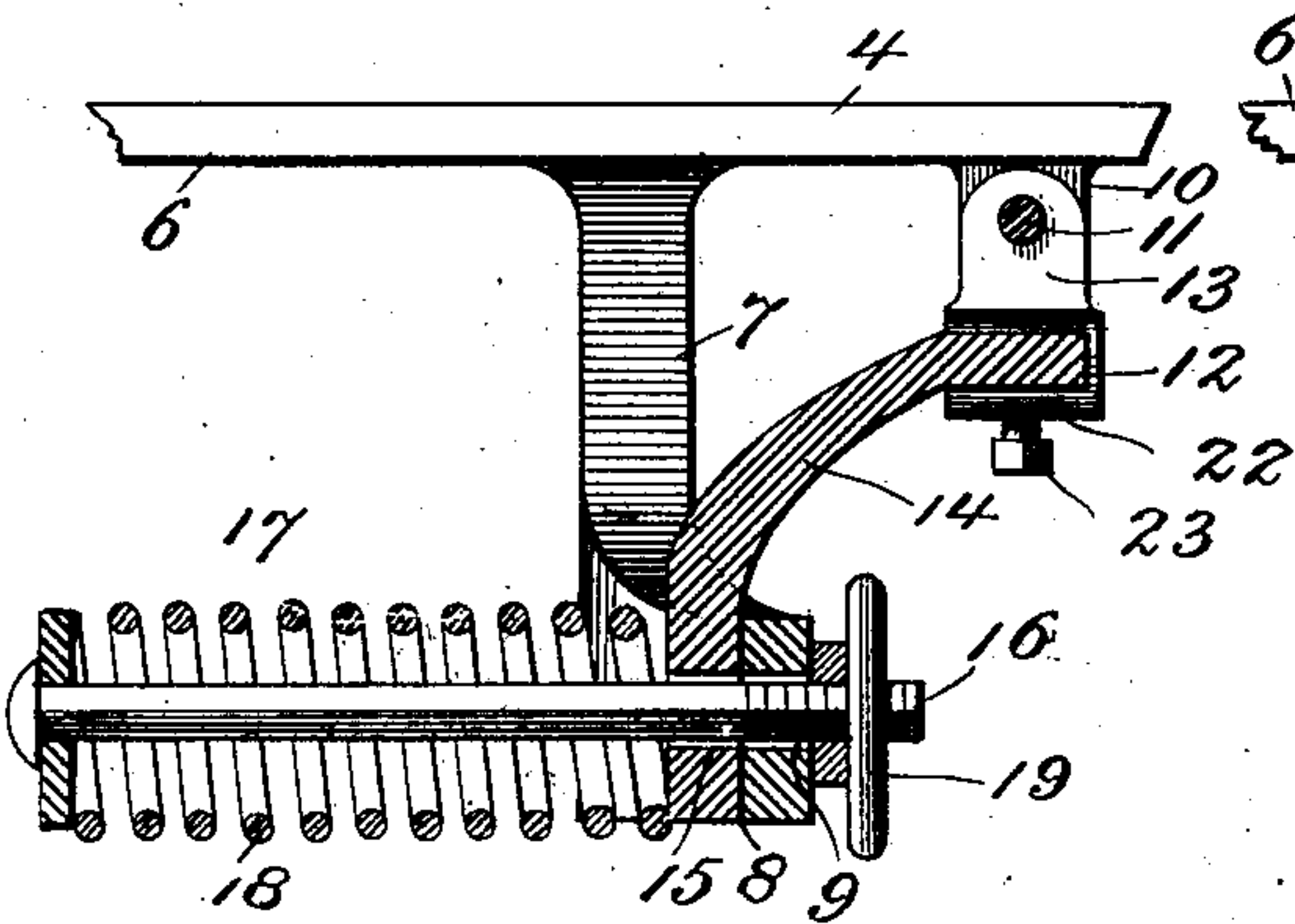
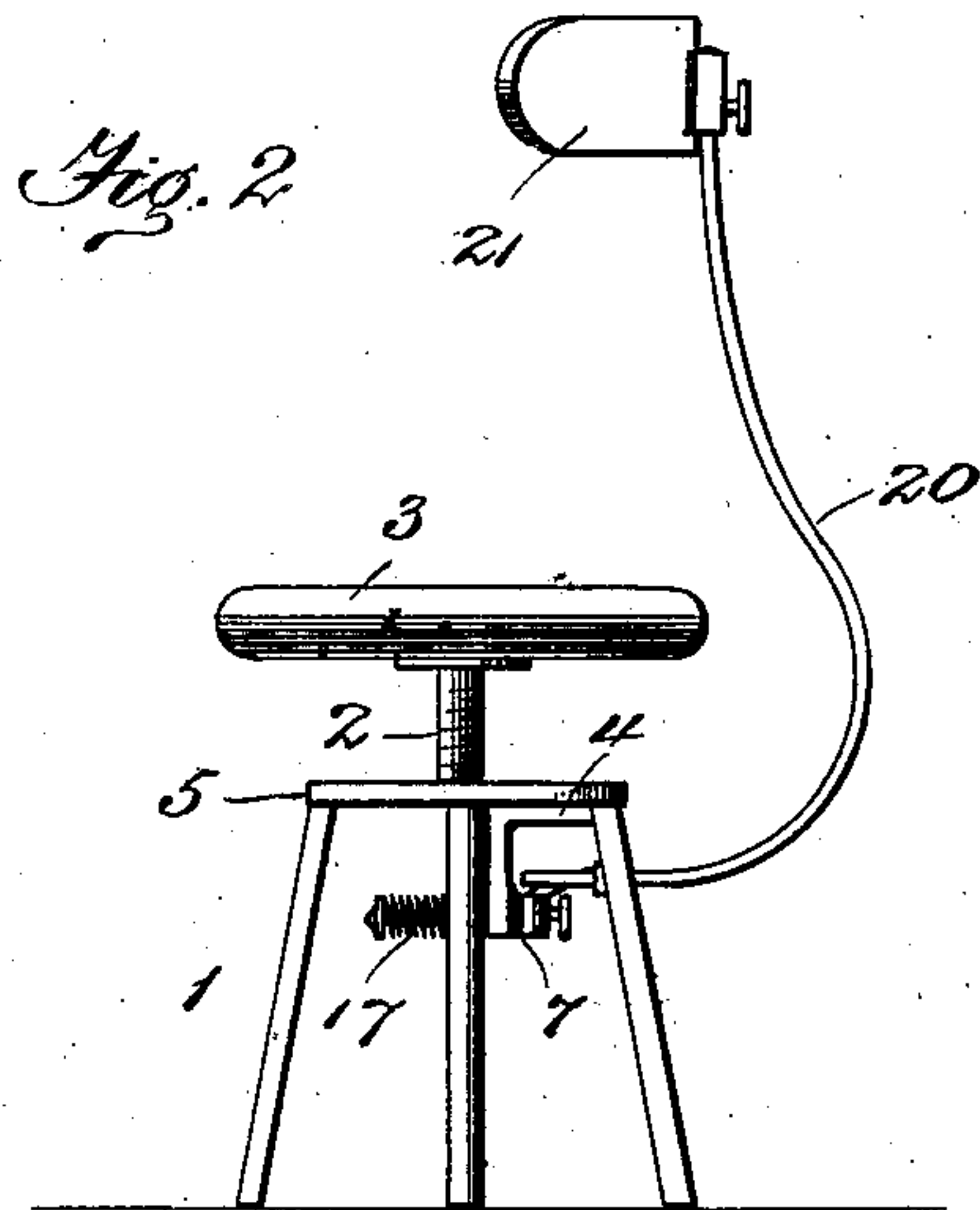
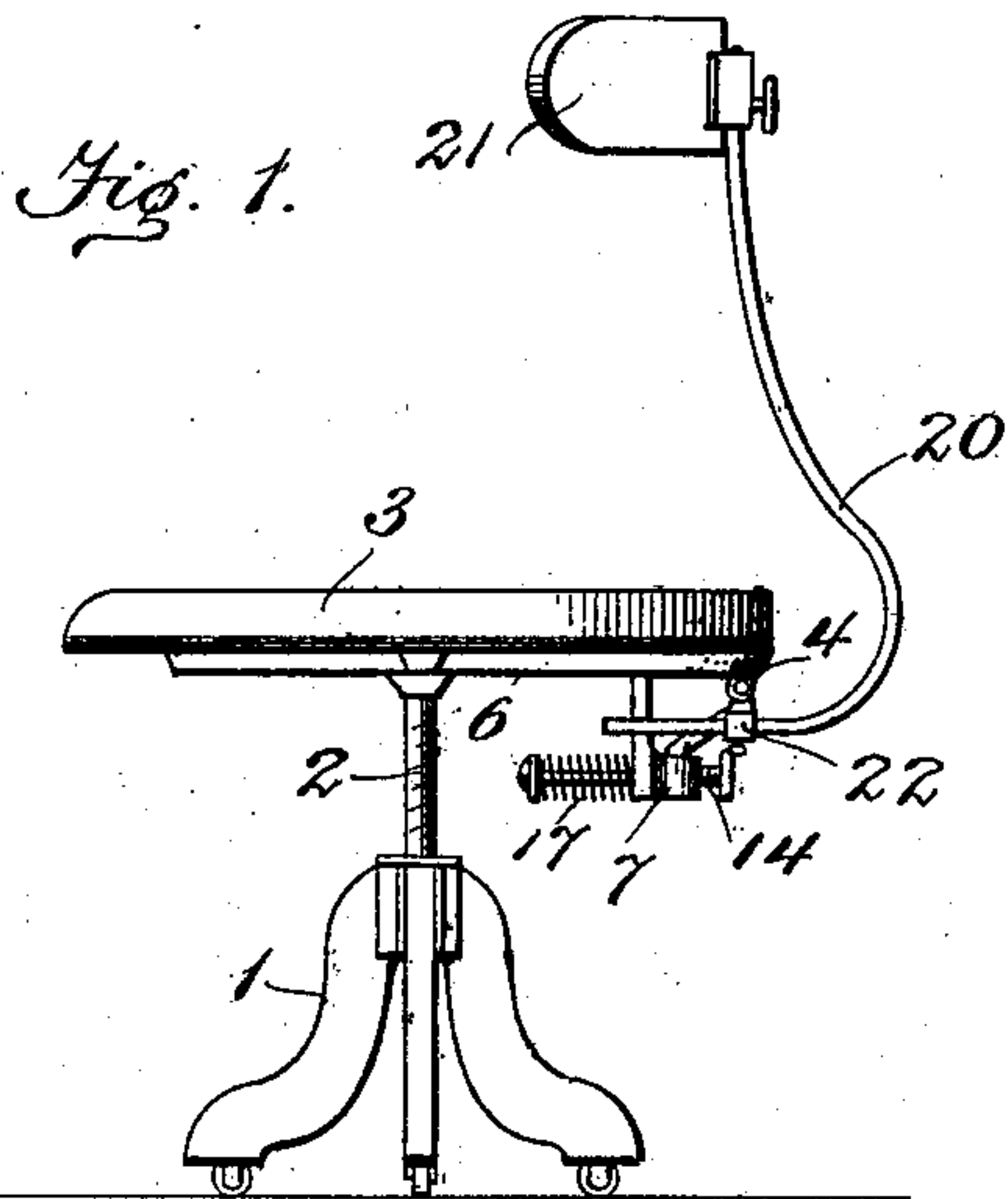
No. 755,991.

PATENTED MAR. 29, 1904.

H. W. BOLENS.
TYPE WRITER CHAIR, PIANO STOOL, &c.,
APPLICATION FILED SEPT. 10, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:
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No. 755,991.

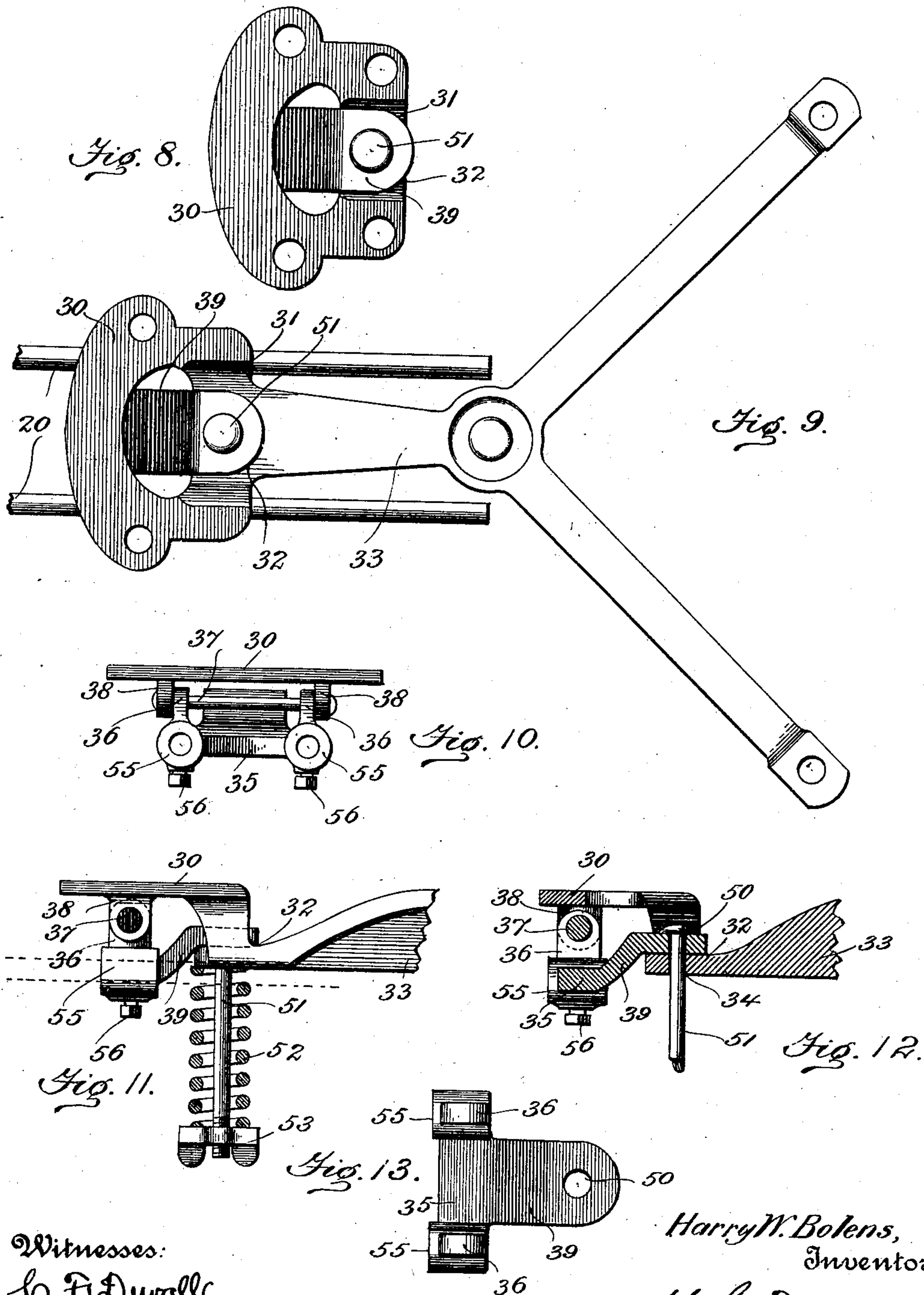
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

HARRY W. BOLENS, OF PORT WASHINGTON, WISCONSIN.

TYPE-WRITER'S CHAIR, PIANO-STOOL, &c.

SPECIFICATION forming part of Letters Patent No. 755,991, dated March 29, 1904.

Application filed September 10, 1903. Serial No. 172,678. (No model.)

To all whom it may concern:

Be it known that I, HARRY W. BOLENS, a citizen of the United States, residing at Port Washington, in the county of Ozaukee and State of Wisconsin, have invented certain Improvements in Type-Writers' Chairs, Piano-Stools, &c., of which the following is a specification.

This invention relates to improvements in backs for chairs, and more particularly to those intended primarily for use in type-writers' chairs, piano-stools, and the like, though, of course, the invention is not to be understood as limited in its application.

The main objects of the invention are to provide an adjustment for this purpose which will yieldingly and adjustably support the chair-back in such manner as to give the maximum comfort to the operator or occupant of the chair, which is simple and economical of construction, and most readily manipulated to secure the desired adjustment.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof be particularly pointed out in the claims.

Referring to the drawings, Figures 1 and 2 illustrate in side elevation, respectively, a type-writer's chair and piano-stool provided with my improved adjustment. Figs. 3 and 4 are respectively longitudinal central sections and side elevations of the rear ends of such adjustments, the spider-arms being broken away. Fig. 5 is a rear elevation of the back-standards; Fig. 6, a similar view of a portion of the back, standards, and the securing means. Fig. 7 is a vertical central section of Fig. 6. Fig. 8 is a plan view of a slightly-modified form of adjustment especially designed for a piano-stool. Fig. 9 is a similar view of such form adapted for a type-writer's chair. Fig. 10 is a rear elevation of the adjustment shown in Figs. 8 and 9. Fig. 11 is a side elevation of the adjustment shown in Fig. 9, the spider-arm broken away. Fig. 12 is a central longitudinal section of the same. Fig. 13 is a detail in plan hereinafter referred to.

Similar numerals of reference indicate similar parts in all the figures of the drawings.

In each of the two styles of adjustments shown in Sheets 1 and 2 of the drawings I have illustrated constructions designed for use in both a type-writer's chair and piano-stool, the principal difference being that in the former it is desirable that the back be raised and lowered with the seat, while in the latter, which is constantly subject to new adjustments, it would be undesirable to have the back whirling with the seat each time the seat is adjusted for occupancy by a new performer. As a general thing piano-stools have their seats swiveled in a base, and it is to the latter I prefer to attach the adjustment, and hence when adapted for such attachment the spider-arms are unnecessary, and consequently omitted.

Referring to Sheet 1, it will be seen that both the type-writer's chair and the piano-stool are of the conventional style, each comprising a base 1, supporting-spindle 2, and seat 3. 4 designates the base-plate of the improved adjustment, which it will be understood is provided with suitable screw-holes by which it may, as in Fig. 1, be secured to the under side of the chair-seat 3, and, as shown in Fig. 2, may be attached to the horizontal portion or subseat 5 of the base 1. In the former application this base-plate is formed at the rear end of the rearwardly-disposed spider-arm 6 of the chair-iron. Depending from this base-plate is a substantially U-shaped stirrup 7, rigid with the base 4, and which at its lower end may be offset to form a seat 8, having a central perforation 9. Immediately in rear of the stirrup 7 a pair of lugs 10 depend from the base 4, and connecting the two lugs is a transverse horizontal pin or rod 11. A rocker 12 is located between the lugs 10 and is formed with upwardly-disposed lugs 13, through which the pin or rod loosely passes and by which said rocker becomes loosely pivoted or suspended from said pin or rod. From the center of the rocker and disposed forwardly and downwardly in advance of the seat 8 is a rocker-arm 14, which in line with the perforation 9 in said seat is likewise perforated, as at 15. Through the perforations 9 and 15 extends the usual ten-

sion-rod 16 of the conventional tension device 17, the spring 18 of which is seated against the front face of the rocker-arm 14 and serves to yieldingly hold said rocker-arm against the rigid seat 8, which latter, as will be seen, serves as a stop. The tension of course may be regulated by a proper manipulation of the hand-nut 19, threaded on the rear end of the tension-rod and bearing against the rear side of the stirrup opposite the seat 8 thereof. In addition to the parts mentioned the rocker also carries the support or supports for the seat-back 21. These are preferably resilient steel rods 20, which may be secured to the back in any suitable manner, adjustable or otherwise, or the support may be of any other style. Of course the socket for the support may be modified accordingly. In the present instance for the accommodation of the back-supports 20 the rocker is provided with a pair of bored hubs 22, each being tapped for a binding-screw 23. The lower ends of the rods 20 are forwardly and horizontally disposed, are readily adjustable in the hubs, and when so adjusted may be secured by the screws 23. In this manner horizontal adjustment of the back may be secured. The back 21 may be secured adjustably to the supporting-standards in any approved manner—as, for instance, a pin 24 may be employed to connect the upper ends of the supports and a cross-plate 25, and from the latter may extend the outer threaded end of a bolt 26. A cover-plate 29 may inclose these parts and be secured to the back 21 and be provided with a slot 27, through which the bolt 26 may project and beyond which it may carry an adjusting-wheel 28. It will be apparent that by loosening the wheel or nut 28 the back 21 may be vertically adjusted and subsequently secured in such position.

Referring now more particularly to Sheet 2 of the drawings, it will be seen that the same elements of construction are employed, but that they are somewhat-differently arranged. In this latter construction the base-plate 30 is depressed at its front so as to form the stirrup 31 and its seat 32, the latter in Figs. 9, 10, and 11 occurring at the rear end of the rear spider-arm 33. The stirrup is perforated, as at 34, as before, only vertically. The rocker 35 (see Fig. 13) is provided with the bearing-lugs 36, which by means of the cross-pin 37 are hung loosely suspended from the depending lugs 38 of the base-plate. From the rocker depends forwardly the rocker-arm 39, which rests upon the stirrup-seat 32 and is perforated, as at 50, in line therewith. Through the perforations 34 and 50 depends the tension-rod 51 of the usual spring tension 52, the same being adjustable through the nut 53. The rocker, as before, carries the means for supporting the back-standards 20, being in this instance, as before, the bored hubs 55. The operation while slightly differ-

ent, yet the result is practically the same. The rocker swings to the force brought to bear against the back against the tension device, the latter being adjusted to suit.

By reason of the fact that the fulcrum-point 11 is located in the extreme rear edge of the chair it is impossible for the operator's clothing to become caught between the moving parts and thus torn. Furthermore, by having the fulcrum-point so far in the rear the back standard or spring-rods will move in practically a circle concentric with the back of the operator, thus increasing the comfort of the latter. The rods 20 being secured by the brace 25 and pin 24 obviate all side play, the set-screws 23 being insufficient for this purpose.

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

1. The combination, in an adjustment for the backs of chairs, of a base-plate adapted to be secured to a chair-bottom, and provided with a rigid depending open frame forming a seat, a rocker loosely hung at one side of the depending open frame and overlapping and extending therethrough, back-standard-supporting means carried by the rocker, and a tension device for yieldingly forcing said rocker against the seat of the depending open frame.

2. The combination in an adjustment for the backs of chairs, of a base-plate having securing means and a perforated stirrup, a rocker having back-standard-engaging means and pivotally connected to the base-plate and having an arm perforated and overlapping the stirrup, and an adjustable spring-tension device having its adjusting-rod located in the perforations of the stirrup and arm.

3. The combination in an adjustment for the backs of chairs, of a base-plate, a stirrup depending therefrom and lugs also depending therefrom at one side of the stirrup, a rocker-bar having lugs pivotally connected to those of the base and provided with standard-engaging means, a rocker-arm extending from said bar and through and seated against the stirrup, a tension-rod extending through the perforations in the bar and stirrup, a spring bearing against the bar and a nut at the opposite end of the rod.

4. The combination in an adjustment for the backs of chairs, of a base-plate, a stirrup of substantially U shape having a central seat and perforated lugs in rear of the stirrup, a cross-pin connecting the lugs, a rocker-bar, lugs extending therefrom and connected loosely to the cross-pin, bored hubs, a rocker-arm extending from the rocker-bar, perforated in line with a perforation in the stirrup extending through the latter and seated thereon, and a spring-tension device the adjusting-rod of which is located in said perforations.

5. The combination in a chair with the back

rods 20, the connecting-plate 25 at the upper
ends thereof, and the bolt 26, extending out-
ward from the plate 25, of the back 21, in
front of the rods, the cover-plate 29 secured
5 thereto over the rods and having the slot 27,
receiving the bolt 26 and the hand-wheel 28
on outer end of the bolt.

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

HARRY W. BOLENS.

Witnesses:

EDWARD BARELMAN,
T. A. BOERNER.