(No Model.) 2 Sheets—Sheet 1.

G. M. THOMPSON.

FOLDING STOOL OR SEAT.

No. 451,084. Patented Apr. 28, 1891.

FIG-1-

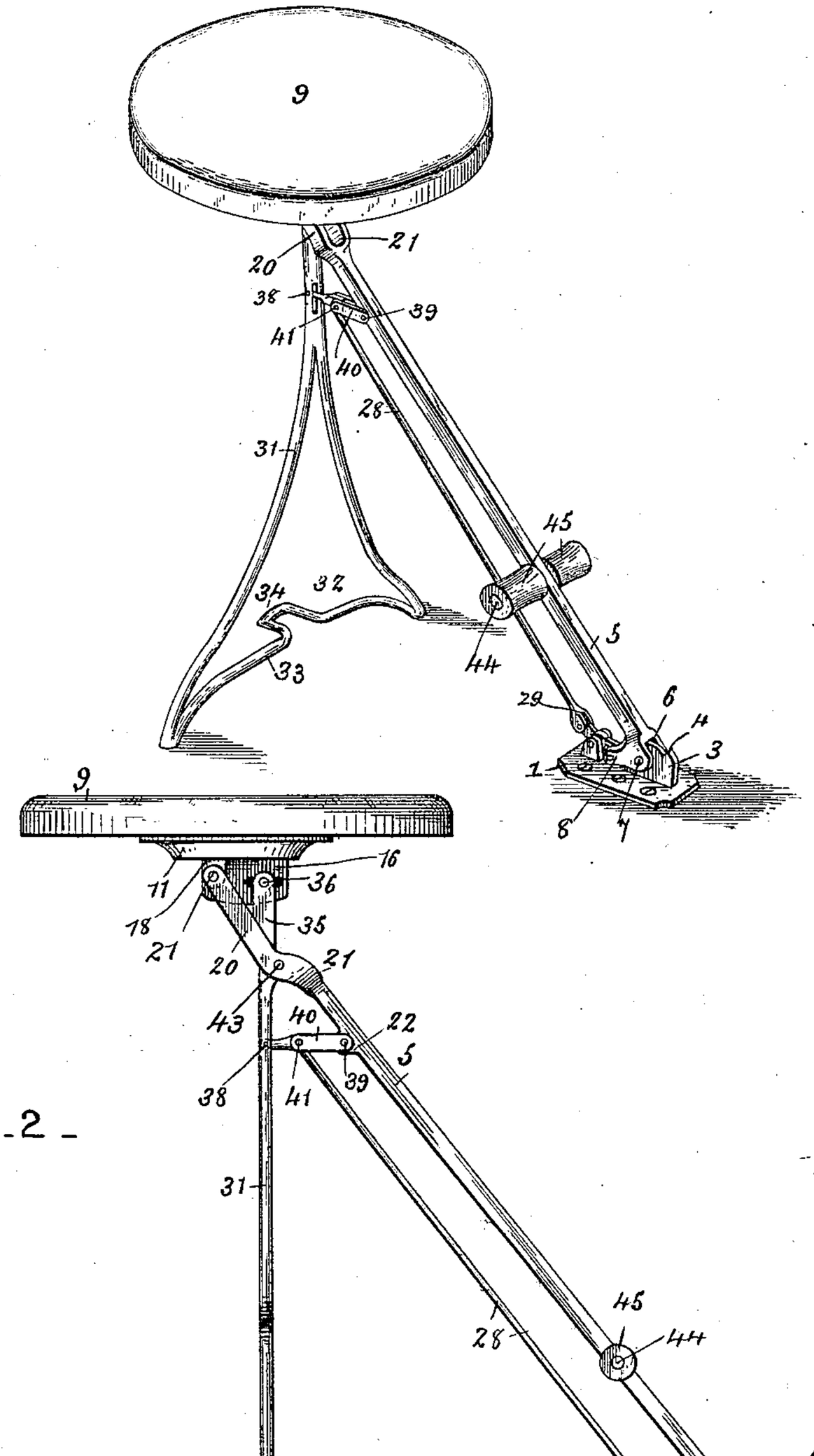

FIG-2-

Witnesses

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(No Model.) 2 Sheets—Sheet 2.

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FIG-3-

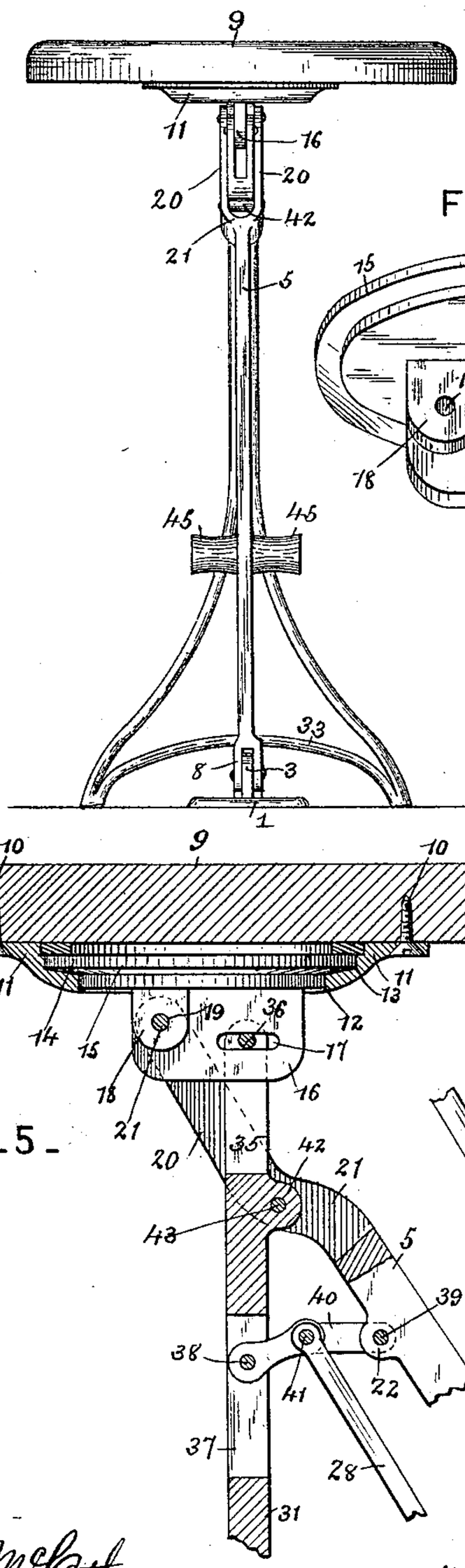


FIG-7-

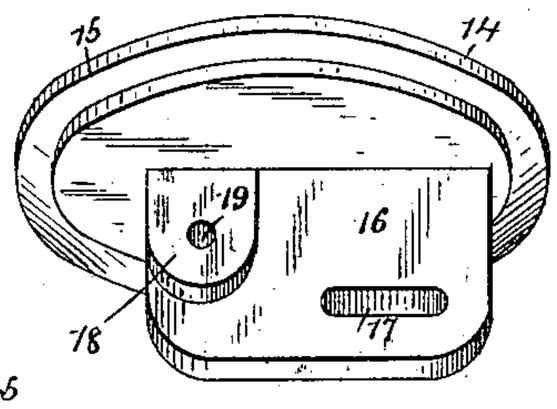


FIG-4-

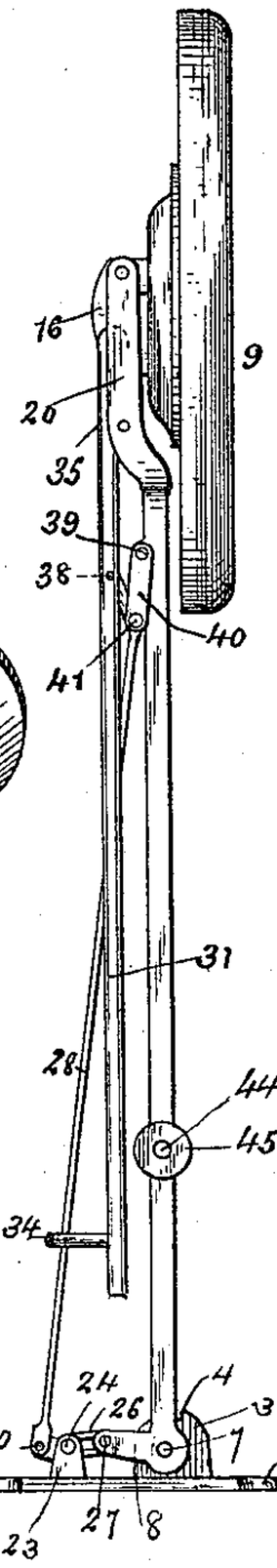
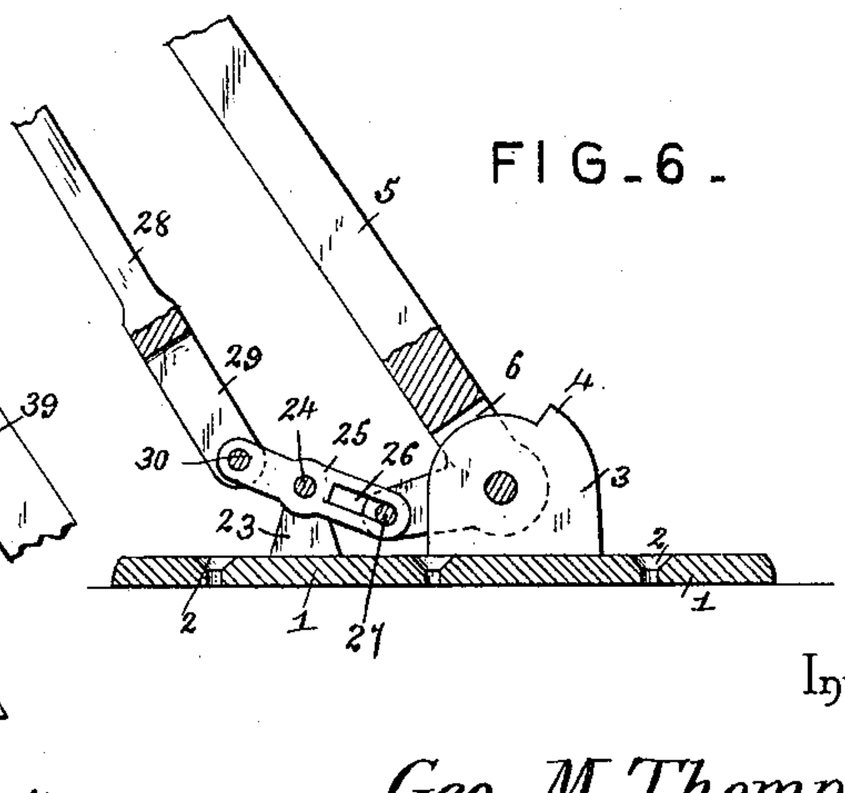


FIG-5-

FIG-6-



Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE M. THOMPSON, OF BOSTON, MASSACHUSETTS.

FOLDING STOOL OR SEAT.

SPECIFICATION forming part of Letters Patent No. 451,084, dated April 28, 1891.

Application filed July 3, 1890. Serial No. 357,685. (No model.)

To all whom it may concern:

Be it known that I, GEORGE M. THOMPSON, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Folding Stool or Seat, of which the following is a specification.

This invention has relation to improvements in folding stools or seats designed for use in connection with counters and other places where it is desirable to employ a stool capable of being folded up out of the way when not in use and unfolded when in use and form a most rigid seat.

Further objects of the invention are to construct such a stool in a simple, cheap, and durable manner.

With the above objects in view the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective view of a stool constructed in accordance with my invention, the same being in position. Fig. 2 is a side elevation. Fig. 3 is a front elevation, the same positions being occupied as in Fig. 1. Fig. 4 is a side elevation, the stool being folded or out of position. Fig. 5 is a central vertical section in detail of the upper portion of the stool-seat and its support. Fig. 6 is a similar view of the base-plate and lower portions of the standard and its connections. Fig. 7 is a detail in perspective of the swivel-ring and plate or disk.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates the base-plate, provided with screw-openings 2, whereby the same may be rigidly connected to a floor or platform, as may be desired. The base-plate is provided at or near its front edge with a vertical lug 3, provided with a shoulder or stop 4.

5 designates the swinging standard, the lower end of which is bifurcated, as at 6, so as to embrace the lug 3, and the bifurcations are pivoted to the lug by means of a pivot-bolt 7. The rear edges of the bifurcations are laterally extended, forming ears 8, the functions of which will hereinafter appear. The depths of the bifurcations 6 are such as to permit the same to clear the upper edge of the lug 3, which is made semicircular or curved, and when the standard arrives at a vertical position the movement of the same is arrested by coming in contact with the shoulder 4, formed upon said lug.

9 designates the seat proper, which is of the usual circular shape, but may, if desired, be of any other shape and constructed of any suitable material. To the under side of the seat there is secured by means of screws 10 a circular retaining-plate 11, having a concentric annular opening 12. The inner wall of the opening 12 is provided with, in this instance, two concentric annular recesses 13.

14 designates a swivel-plate located within the retaining-plate 11, and its periphery is provided with two concentric flanges or shoulders 15, which fit the recesses 13 of said retaining-plate, whereby the retaining-plate is adapted to revolve upon the swivel-plate. The swivel-plate has cast integral therewith a diametrically-disposed flange 16, which depends from the under side of the same, which flange is provided near its front edge with a horizontal slot 17, and in rear of the slot at each side of the flange is a pair of lugs 18, through which is formed a transverse opening 19.

The upper end of the standard 5 is bifurcated, as at 20, and embraces the lugs 18, and is pivoted thereto by means of a bolt 21, passed through the perforation 19. Between the points of pivot 7 and 19 of the standard 5 said standard is provided with an offset 21 and below said offset with a pair of perforated lugs 22.

Upon the base-plate 1 in rear of the lug 3 there is located a pair of bearing-ears 23, and between the same there is pivoted, as at 24, a rocking link 25, the front portion of which is slotted, as at 26, and is loosely connected with the ears 8 of the standard 5 by means of a pivot-bolt 27.

28 designates a connecting-rod, the lower end of which is bifurcated, as at 29, and pivoted, as at 30, to the rear end of the rocking link.

31 designates the supporting-standard, and the same is flared at its lower end to form a broad supporting-base 32. In fact, the standard is bifurcated at its lower end, the bifurcations diverging, and are connected by a cross-bar 33, having a central offset 34. The upper end of the standard 31 is bifurcated, as

at 35, and the bifurcations are connected to a bolt 36, which passes transversely through the slot 17 of the lug 16, that depends from the under side of the swivel-plate. A recess 37 is formed in the supporting-standard a short distance below its upper end, and through the same is passed a bolt 38. A bolt 39 is passed through the perforated ears 22 of the standard 5 at a point opposite the recess 37, and the two bolts are loosely connected by means of a toggle joint or lever 40. To the center bolt 41 of said joint or lever is connected the upper end of the connecting-rod 28. The supporting-standard 31, it will be observed, is loosely connected to the flange 16, and the bolt 36, forming the connection, may be slid to either side of the center of the swivel-plate. The front edge of the standard 31 is provided with a forwardly-disposed lug 42, which takes between the bifurcations 20 of the standard 5 and is pivoted to said standard by a bolt 43. This completes the construction of the stool, and it will be observed that all of the parts may be cheaply and conveniently cast and assembled with little or no hand-finishing, whereby I greatly simplify and cheapen the construction of the stool.

Taking the parts in the position shown in Figs. 1, 2, and 5 to close the stool or throw the same out of operative position, the rear edge of the same is grasped and the seat swung to the front. This forward movement upon the part of the seat and the standard 5 causes the ears 8 of said standard to become elevated or raised, and therefore raises the front end of the slotted rocking link 25 and depresses the rear end thereof. Such depression draws upon the connecting-rod 28 and breaks the toggle-joint 40, thus drawing the supporting-standard 31 inward, which inward movement is permissible by reason of the loose connection between the upper end of the standard 31 and the flange 16. When the folding operation has been completed, it will be observed that the offset 34 embraces the connecting-rod 28, and the entire device is compact and offers no protruding parts to engage wearing-apparel of passers-by. To throw the stool into operative position it is simply necessary to tilt the seat rearwardly beyond the pivotal point of the lower end of the standard with the base-plate, when the parts will fall by gravity and assume their proper positions.

A transverse pin 44 is passed through the standard 5 near the lower end of the same, and upon the pin at opposite sides of the standard are mounted foot-supports 45.

Having thus described my invention, what I claim is—

1. In a stool, the combination, with a base-plate having a perforated lug provided at one side of the center with a stop or shoulder, of a standard pivoted at its lower end to the lug and bifurcated to embrace the same, said bifurcations being of such a depth as to prevent said standard from passing beyond the lug in its pivotal movement, a stool mounted upon the upper end of the standard, and means for supporting said standard in an inclined position, substantially as specified.

2. In a stool, the combination, with a base and a standard pivoted at its lower end to the base and extended in rear of its pivot, of a stool-seat having a depending flange slotted at its front end and having a bearing-opening at its rear end, a bolt connecting said opening with the upper end of the standard, a supporting-standard pivoted to the first-mentioned standard and loosely connected by a bolt to the slot of the flange, a toggle-lever connecting the two standards below their point of pivot, a connecting-rod depending from the central joint of the lever, and a rocking link pivoted upon the base and connected at its rear end to the connecting-rod and loosely connected at its front end to the rear extended portion at the lower end of the first-mentioned standard, substantially as specified.

3. In a stool, the combination, with the seat and a retaining-ring secured to the under side of the same, having a central opening and concentric annular bearing-recesses, of a swivel-plate having corresponding shoulders mounted in the recesses and provided with a depending flange, and crossed standards pivoted to each other and one of them to a suitable base and at their upper ends loosely connected to the depending flange, substantially as specified.

4. The combination, with the base-plate provided with the front and rear lugs, the standard pivoted in the front lug and having a rear extension and bifurcated at its upper end, the seat having a depending flange provided at its rear end with a bearing-opening and at its front end with a slot, said standard being bifurcated at its upper end to receive said flange, and a bolt passing through the opening and the bifurcation, of the supporting-standard pivoted to the first-mentioned standard, bifurcated at its upper end to embrace the flange, and a bolt passing through the bifurcations and the slot in the flange, a toggle-lever loosely connecting the two standards, a rocking link pivoted on the rear lug of the base-plate and loosely connected at its front end to the rearward extension of the first-mentioned standard, and a connecting-rod connecting the rear end of the rocking link with the central joint of the toggle-lever, substantially as specified.

5. The combination, with the securing-plate having the lugs 3 and 23, arranged at the front and rear ends of the base, respectively, the former lug having a shoulder 4, and the standard 5, bifurcated at its lower end to embrace the lug 3 and pivoted thereto and having its upper end provided with an offset and a bifurcation, of the seat 9, having the retaining-ring 11 secured thereto and provided with concentric annular recesses, the swivel-plate 14, mounted in the ring and having annular

shoulders resting in the recesses, and a depending flange having a rear bearing-opening and a front elongated slot, the standard 31, flared at its base and having an offset 34 and pivoted between the bifurcations of the opposite standard and having its upper end bifurcated and bolted, as at 36, to the slot of the flange, the toggle-lever 40, connected, as at 38 and 39, to the standards 31 and 5, respectively, the rocking link 25, mounted in the bearings 23, slotted, as at 26, and bolted to the rear extension of the standard 5, and the connecting-rod 28, pivoted at its upper end at 41 to the central joint of the toggle-lever and at its lower end, as at 30, to the rear end of the rocking link, substantially as specified.

6. The seat 9, having a plate 11, having a concentric annular opening 12, the inner wall of which is provided with a series of concentric annular recesses 13, combined with the swivel-plate 14, located within the plate 11 and provided on its periphery with concentric shoulders or flanges 15, which fit the recesses 13, as set forth.

7. The seat and the swivel-plate 14, having slot 17 and perforation 19, combined with the supporting-standard 31, pivoted in the slot 17 at its upper end, and the standard 5, pivoted at its upper end in the perforation 19, and both the standards being pivoted directly together, as at 43, the standard 5 being hinged to the floor, as set forth.

8. The seat and the swivel-plate 14, having slot 17 and perforation 19, combined with the supporting-standard 31, pivoted in the slot 17 at its upper end, and the standard 5, pivoted at its upper end in the perforation 19, and both the standards being pivoted directly together, as at 43, the standard 5 being hinged to the floor, and the connecting-rod 28, having a toggle-joint 40 at its upper end, connecting the two standards together, and a link connection 25 with the standard 5 at its lower end, as set forth,

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

GEO. M. THOMPSON.

Witnesses:

J. H. SIGGERS,

R. J. MARSHALL.