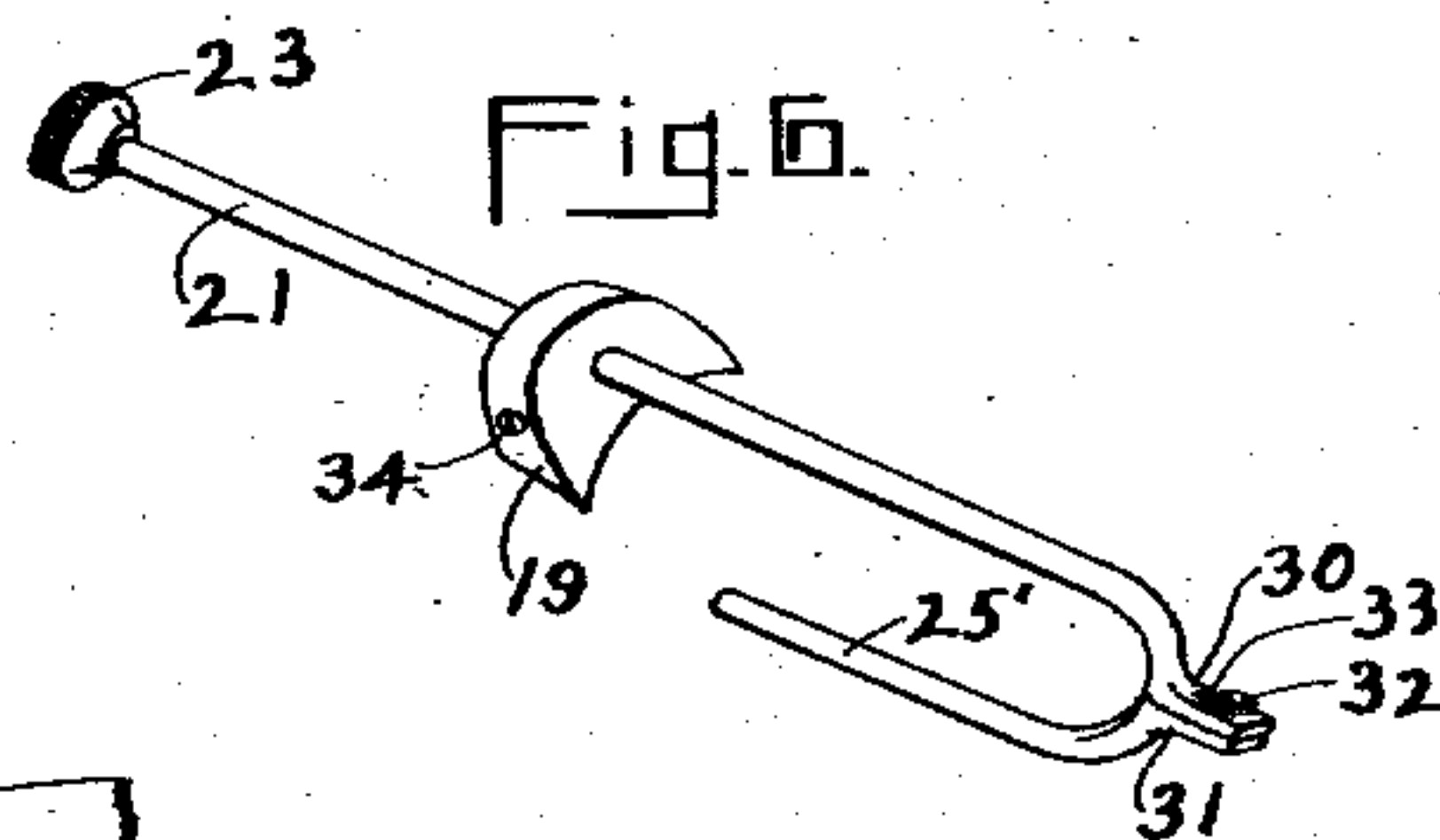
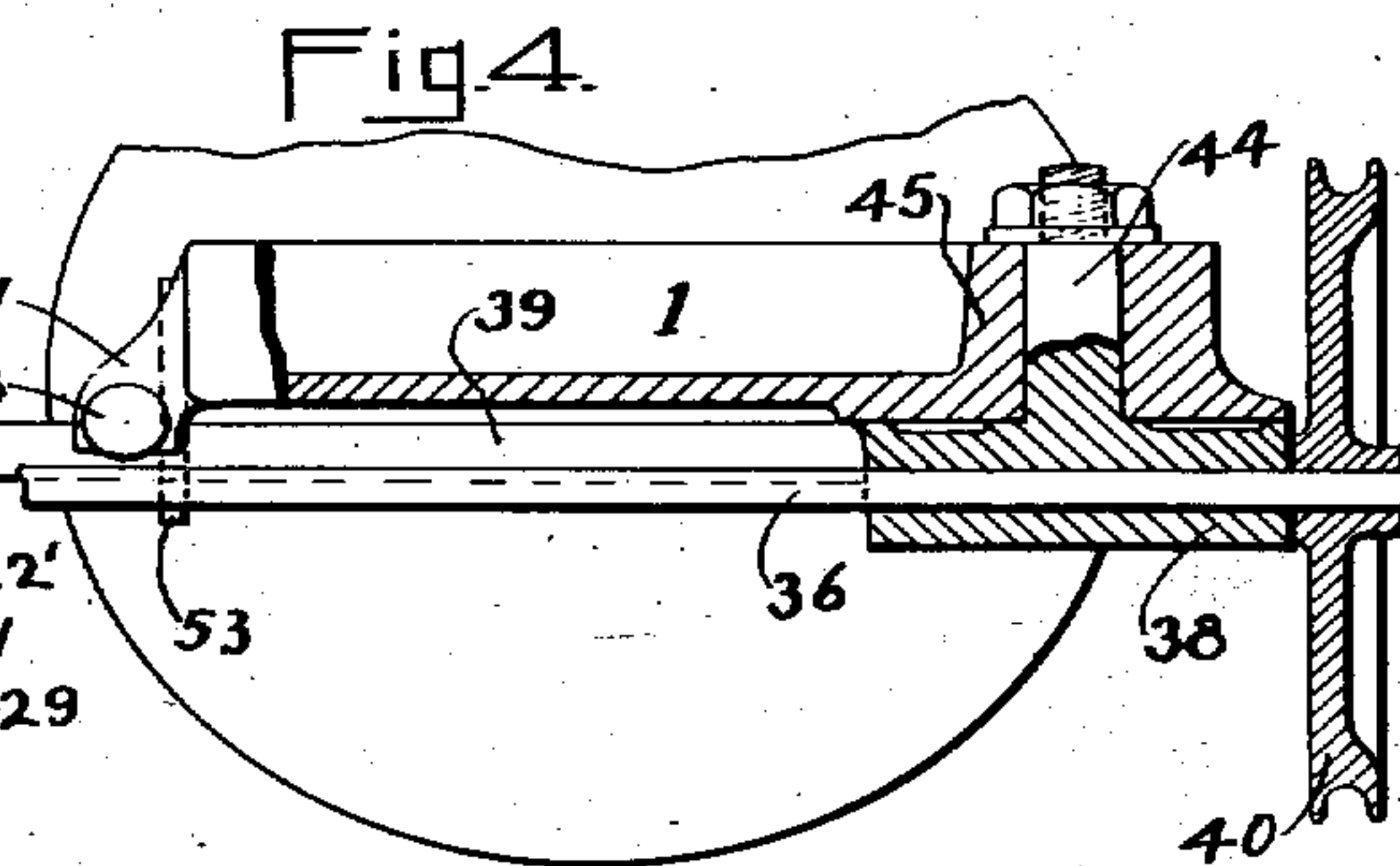
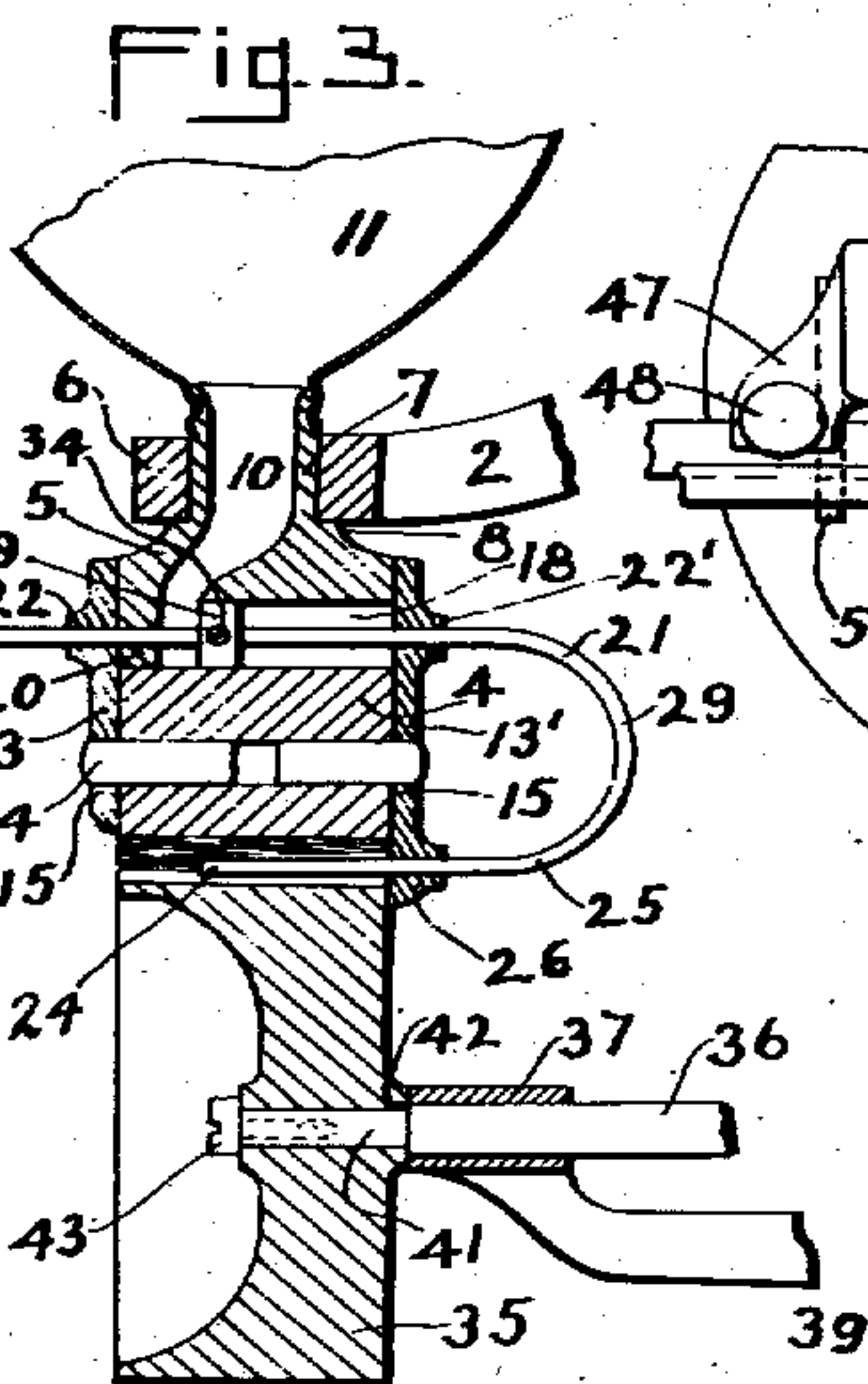
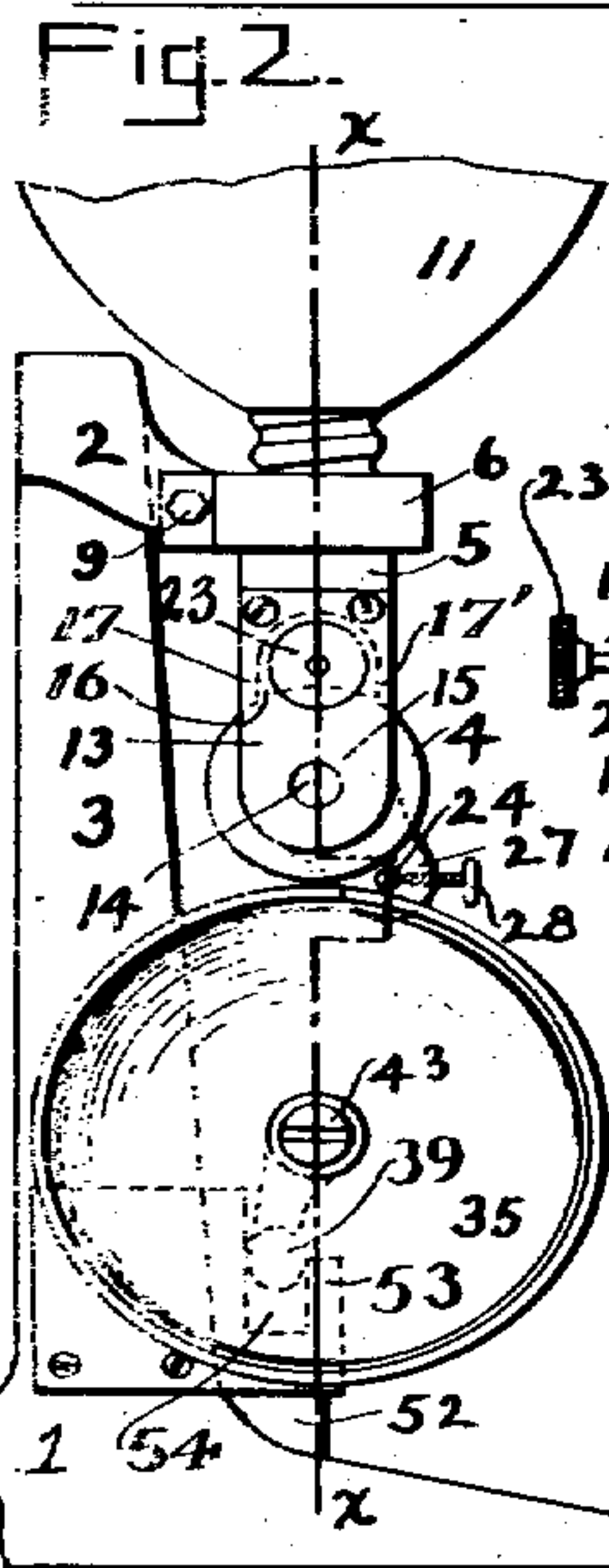
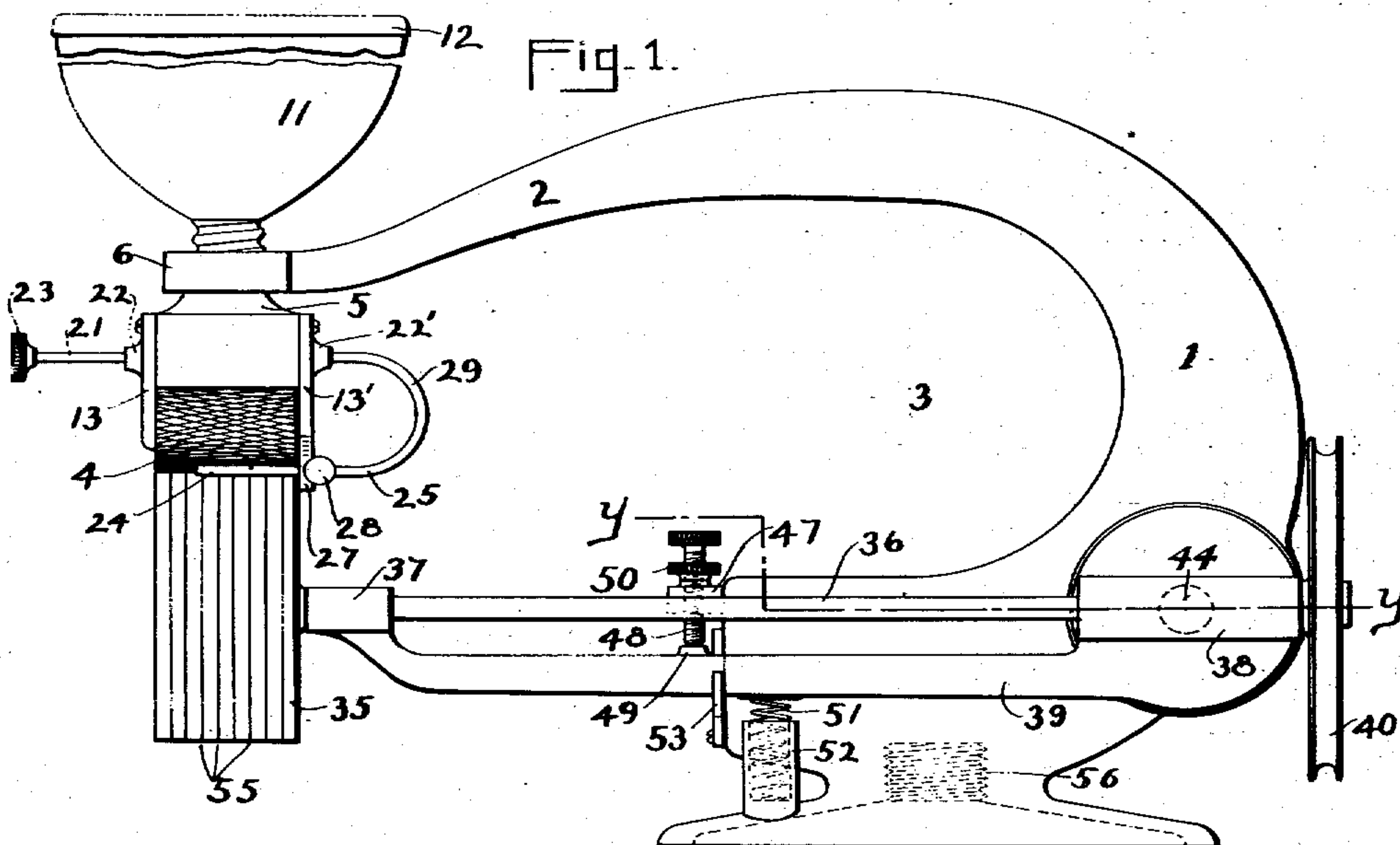


W. F. LAUTENSCHLAGER.
CEMENT APPLYING MACHINE.
APPLICATION FILED FEB. 12, 1906.

911,600.

Patented Feb. 9, 1909.



Witnesses.
Homer Bradford.
Cordelia O. Harw.

Inventor.
William F. Lautenschlager,
by H. H. Herbst, His Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM F. LAUTENSCHLAGER, OF CINCINNATI, OHIO, ASSIGNOR TO THE PEERLESS MACHINERY COMPANY, OF BOSTON, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

CEMENT-APPLYING MACHINE.

No. 911,600.

Specification of Letters Patent.

Patented Feb. 9, 1909.

Application filed February 12, 1906. Serial No. 300,687.

To all whom it may concern:

Be it known that I, WILLIAM F. LAUTENSCHLAGER, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Cement-Applying Machines, of which the following is a specification.

It is the object of my invention to provide a new or improved cement applying machine especially adapted for applying cement to the edges of materials, and so arranged that cement of a given width may be accurately applied along straight or curved edges, and is especially useful for applying cement along the edges of shoe parts, such as vamps, uppers or the like, and the invention will be further readily understood from the following description and claims, and from the drawing, in which latter:

Figure 1 represents a side elevation of my improved device. Fig. 2 is a front elevation of the same, partly broken away. Fig. 3 is a detail in cross section partly in elevation taken on the irregular line $x-x$ of Fig. 2. Fig. 4 is a plan detail partly in section on the line $y-y$ of Fig. 1. Fig. 5 is a plan detail partly in section showing manner of mounting the cement-applying head; and, Fig. 6 is a perspective view of a modification of the combined cement and stock-guide.

1 represents the frame, which is preferably of goose-neck construction, having an overhanging bracket 2 for forming an intermediate space 3 especially useful for accommodating the rear ends of goods, such as vamps, when applying cement to the curved edges thereof.

4 is an applying roll adapted to conduct the cement to the goods. It is preferably provided with grooves diagonally arranged and crossing each other in the form of knurling.

5 is an applying head supported by the overhanging-arm preferably by providing the latter at its forward end with a split ring 6 through which a shank 7 of said head takes, a shoulder 8 on the head taking against the ring for definitely positioning the same, and having shank 7 secured in said ring by compression exerted through a screw 9. This shank is hollow as shown at 10. A cement reservoir 11 is secured to the shank, as by screwing the same thereon, and has a cover 12 for closing the same, the hollow 10 of said

shank forming a passage from said reservoir, the passage continuing for communicating with the periphery of the applying-roll.

The roll 4 is journaled in the head as by having hangers 13 13' secured to the head, the roll being journaled on studs 14 having bearings 15 in said hangers. The head has a mouth 16 whose lips 17 17' are adjacent to the roll. A chamber 18 is in the head, extends longitudinally of the roll and has a piston 19 therein which forms a movable wall or cheek arranged to be moved longitudinally of the roll in the chamber for determining the width to which the cement is to be applied lengthwise of the periphery of the roll, the cement-application taking place between said movable wall or cheek and the stationary wall or cheek 20, said cheeks having their roll-edges curved to correspond with the periphery of the applying roll, and the movable cheek having sliding fit in said chamber for confining the cement to one side of said cheek.

For manipulating the piston 19, I prefer to attach it to a rod 21 slidable in bearings 22 22' in the hangers 13 13', and having a button 23 thereon.

24 is a guide for the stock, and preferably comprises an extension 25 of rod 21 slidable in a bearing 26 in an extension 27 of the hanger B', and secured in place by a thumb-screw 28, there being a bend 29 between said rod and its extension. The connection between the piston or movable wall and stock-guide may also be had by forming said stock-guide of a separate rod 25' and providing the respective rods with lugs 30 31, a screw 32 taking through a slot 33 in one of the lugs and screwing into the other of said lugs for permitting relative adjustment between the same, as see the modification shown in Fig. 6. A relative adjustment may also be given between piston 19 and the stock-guide by securing the piston along the rod in desirable positions by means of a set-screw 34.

It is desirable that the cement shall be applied to the roll for only approximately the width to which it is to be applied to the goods, the cement being usually applied adjacent the edges of the goods. In order therefore to gage the width of application of the cement and the edge of the goods with relation to the machine, I prefer to connect the piston or movable wall for regulating the width of application of the cement with the

stock-guide. Thus, when the button 23 is pushed or pulled in either direction, the piston and the stock-guide are simultaneously moved for instantly setting the machine for the desired width of application of the cement and the guiding of the goods with relation thereto. The goods, traveling against the guide, are liable to wear the latter, and consequent variations between it and the piston may be compensated for by the adjustments mentioned.

35 is a supporting roll which may be driven in suitable manner. I have shown it mounted on a shaft 36 journaled in bearings 37 38 on a rocker-frame 39 and provided with a pulley 40. For convenience in taking off the roll or substituting other rolls for it, I provide the shaft 36 with a reduced shank 41 having a shoulder 42 against which the supporting roll is held by a screw 43.

The rocker-frame or arm has a stud 44 having journal fit in a bearing 45 on the frame, thereby forming a pivot for the rocker-arm which I prefer to make closely adjacent to the pulley 40 for permitting relatively greater rocking motion at the roll than at the pulley and thereby preventing differences in strain on the belt operating the pulley. It is desired that when no goods are passing between the supporting and applying rolls, the supporting roll shall not touch the applying roll in order to prevent the application of cement thereto, and also that the supporting-roll shall be capable of adjustment for different thicknesses of goods, and shall yield to compensate for differences in thickness of the same lot of goods. For accomplishing these purposes, I provide the frame with a threaded lug 47 through which a screw 48 takes against a lug 49 on the rocker-arm acting as an adjustable stop therefor, a set-nut 50 securing the screw in adjusted position, the screw regulating the normal distance between the rolls. A spring 51 is received in a pocket 52 in the frame, and takes against the rocker-arm for urging the supporting roll toward the applying roll. For overcoming sidewise strain upon the rocker-arm, I provide a guide-plate 53 having a slot 54 between the walls of which the rocker-arm is steadied. The supporting-roll is provided with annular marks 55, as indentations, forming a gage on the periphery of the supporting roll by which the stock-guide may be adjusted, thereby also simultaneously adjusting the piston in the cement-chamber of the applying-roll to equal extent. In the present exemplification I have shown graduations of an eighth of an inch.

The stock-guide is narrow and is closely adjacent to but one side of the vertical plane of the rotary axes of the rolls so that the point of cement-application may be closely adjacent the guide against which the curved

edges, for instance, of the goods are guided, thereby preventing variation in width of cement application.

The machine may be readily secured to any suitable stand or table by means of a screw taking through the latter and into a threaded aperture 56 in the base, and the parts are so constructed and arranged that very rapid operation may be maintained.

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

1. A cement applying machine comprising an applying-roll, a part having a cement-chamber therein adjacent to the periphery of said roll, a stock-guide, and regulating means for said chamber having connection with said stock-guide.

2. In a cement applying machine, the combination with an applying-roll and a part having a chamber adjacent to said roll, of a stock-guide, regulating means for said chamber having connection with said stock-guide, and means for adjusting the operative position between said regulating means and stock-guide.

3. In a cement applying machine, the combination with an applying-roll and supporting-roll, of a cement applying head, a chamber therein at said applying roll, a stock-guide, a movable wall in said chamber having connection with said stock-guide, and means for adjusting said movable wall and stock-guide simultaneously.

4. In a cement applying-machine, the combination with an applying-roll and supporting roll, of a cement applying head, a chamber therein at said applying roll, a stock-guide, a movable wall in said chamber having connection with said stock-guide, and means for adjusting said movable wall and stock-guide simultaneously and independently of each other.

5. In a cement applying machine, the combination with an applying-roll and a supporting roll, of a rocker-arm, a shaft on which said supporting roll is mounted journaled on said rocker-arm, means for driving said shaft, said rocker-arm having a pivot closely adjacent said latter means, a head in which said applying-roll is journaled and having a cement-chamber adjacent to and extending lengthwise of said last-named roll, a movable wall for said chamber, means for adjusting said wall lengthwise of the periphery of said applying-roll, and a stock-guide adjacent both said rolls, substantially as described.

6. In a cement applying-machine, the combination of a frame having an overhanging bracket, a head at the overhanging end of said bracket, an applying-roll journaled in said head, said head having a cement-chamber extending longitudinally of said roll, a movable wall for said chamber, means for

adjusting the latter lengthwise of said roll, a rocker-arm, a shaft therein, a supporting-roll on said shaft under said applying-roll, means for driving said shaft, said rocker-arm pivoted to said frame closely adjacent said latter means, an adjustable stop for limiting the movement of said rocker-arm, and a spring for urging said rocker-arm toward said stop, substantially as described.

7. In a cement applying-machine, the combination with an applying-roll and a supporting-roll, of a head for said applying-roll having a cement-chamber, a movable wall for said cement-chamber, means for adjusting said wall lengthwise of said applying-roll, a stock-guide, and a gage on said supporting-roll for said stock-guide.

8. In a cement applying machine, the combination of a supporting roll, an applying-roll, a head for said applying-roll, said head having a cement-chamber, a movable wall for said chamber, means for permitting said movable wall to be adjusted lengthwise of said applying-roll, and means for permitting one of said rolls to yield automatically to pressure by stock fed between said rolls, substantially as described.

9. In a cement applying machine, the combination with an applying roll and a supporting roll, of a stock-guide having a guid-

ing-face which is narrow in its cross-section presented to the goods for permitting the goods to pass to the side of said guiding-face, said guiding-face being located between said rolls and to one side of the vertical plane between the rotary axes of said rolls.

10. In a cement applying machine, the combination of an applying-roll, a supporting roll, a head for said applying-roll having a cement-chamber, means for permitting one of said rolls to yield pressure by stock being fed between said rolls, means for adjusting the limit of approach between said rolls and a stock-guide having a guiding-face which is of narrow cross-section transverse of the rotary axes of said rolls and having clearance at the sides of said guiding-face for permitting goods being fed between said rolls to extend to the sides of said guiding-face, adjacent thereto, said guiding-face located between said rolls and to one side of the vertical plane of the rotary axes of said rolls, substantially as described.

In testimony whereof, I have signed my name hereto in the presence of two subscribing witnesses.

WILLIAM F. LAUTENSCHLAGER.

Witnesses:

CORDELIA O'HEARN,
A. F. HERBSLEB.

Correction in Letters Patent No. 911,600.

It is hereby certified that in Letters Patent No. 911,600, granted February 9, 1909, upon the application of William F. Lautenschlager, of Cincinnati, Ohio, for an improvement in "Cement-Applying Machines," an error appears in the printed specification requiring correction, as follows: In line 41, page 3, after the word "yield," the word *to* should be inserted; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 2nd day of March, A. D., 1909.

[SEAL.]

C. C. BILLINGS,
Acting Commissioner of Patents.

adjusting the latter lengthwise of said roll, a rocker-arm, a shaft therein, a supporting-roll on said shaft under said applying-roll, means for driving said shaft, said rocker-arm pivoted to said frame closely adjacent said latter means, an adjustable stop for limiting the movement of said rocker-arm, and a spring for urging said rocker-arm toward said stop, substantially as described.

7. In a cement applying-machine, the combination with an applying-roll and a supporting-roll, of a head for said applying-roll having a cement-chamber, a movable wall for said cement-chamber, means for adjusting said wall lengthwise of said applying-roll, a stock-guide, and a gage on said supporting-roll for said stock-guide.

8. In a cement applying machine, the combination of a supporting roll, an applying-roll, a head for said applying-roll, said head having a cement-chamber, a movable wall for said chamber, means for permitting said movable wall to be adjusted lengthwise of said applying-roll, and means for permitting one of said rolls to yield automatically to pressure by stock fed between said rolls, substantially as described.

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10. In a cement applying machine, the combination of an applying-roll, a supporting roll, a head for said applying-roll having a cement-chamber, means for permitting one of said rolls to yield pressure by stock being fed between said rolls, means for adjusting the limit of approach between said rolls and a stock-guide having a guiding-face which is of narrow cross-section transverse of the rotary axes of said rolls and having clearance at the sides of said guiding-face for permitting goods being fed between said rolls to extend to the sides of said guiding-face, adjacent thereto, said guiding-face located between said rolls and to one side of the vertical plane of the rotary axes of said rolls, substantially as described.

In testimony whereof, I have signed my name hereto in the presence of two subscribing witnesses.

WILLIAM F. LAUTENSCHLAGER.

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