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E. C. KECKELEY & A. KOSSMANN.

CLEANING MACHINE.

APPLICATION FILED MAR. 22, 1908.

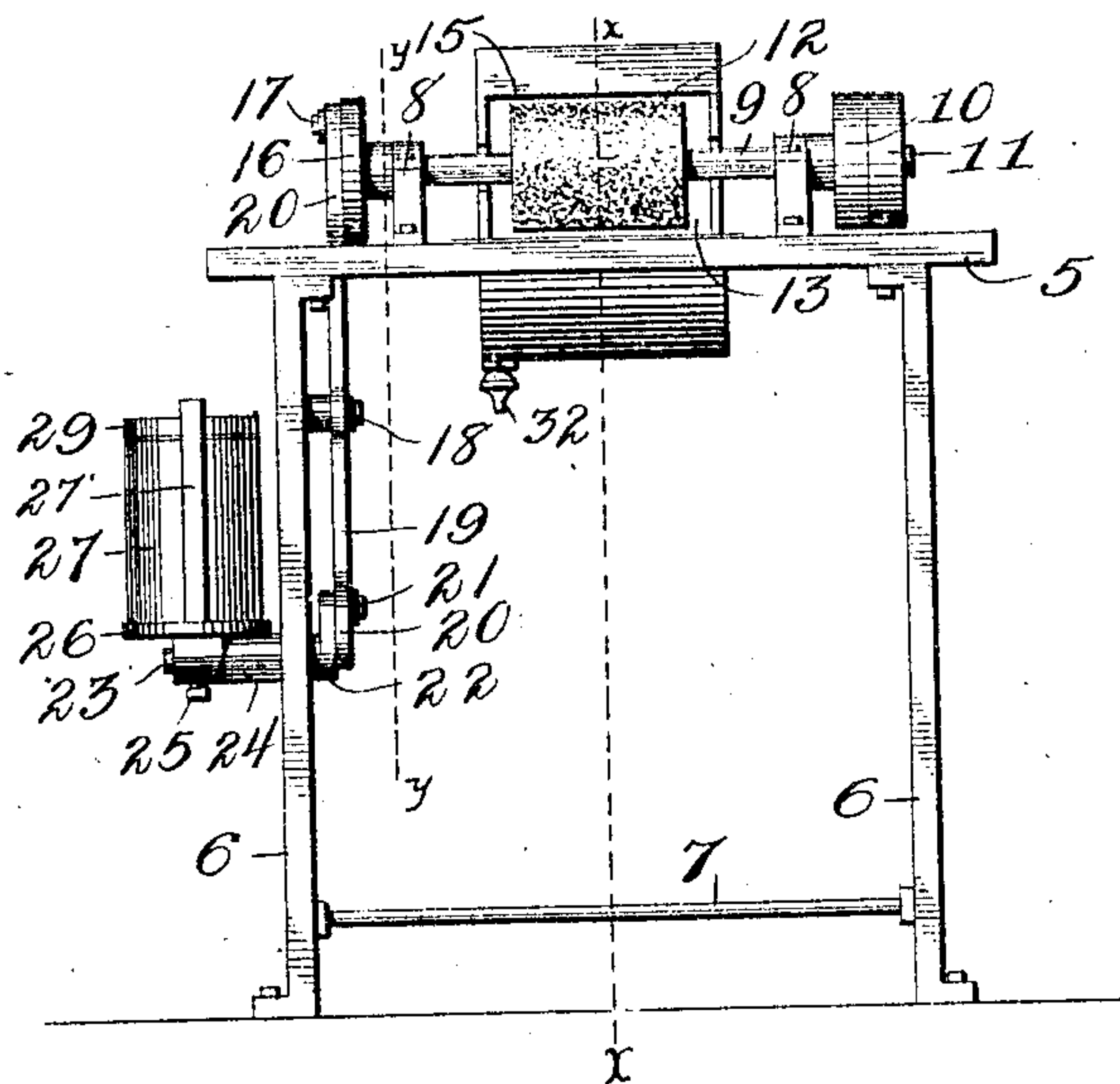


Fig. 1.

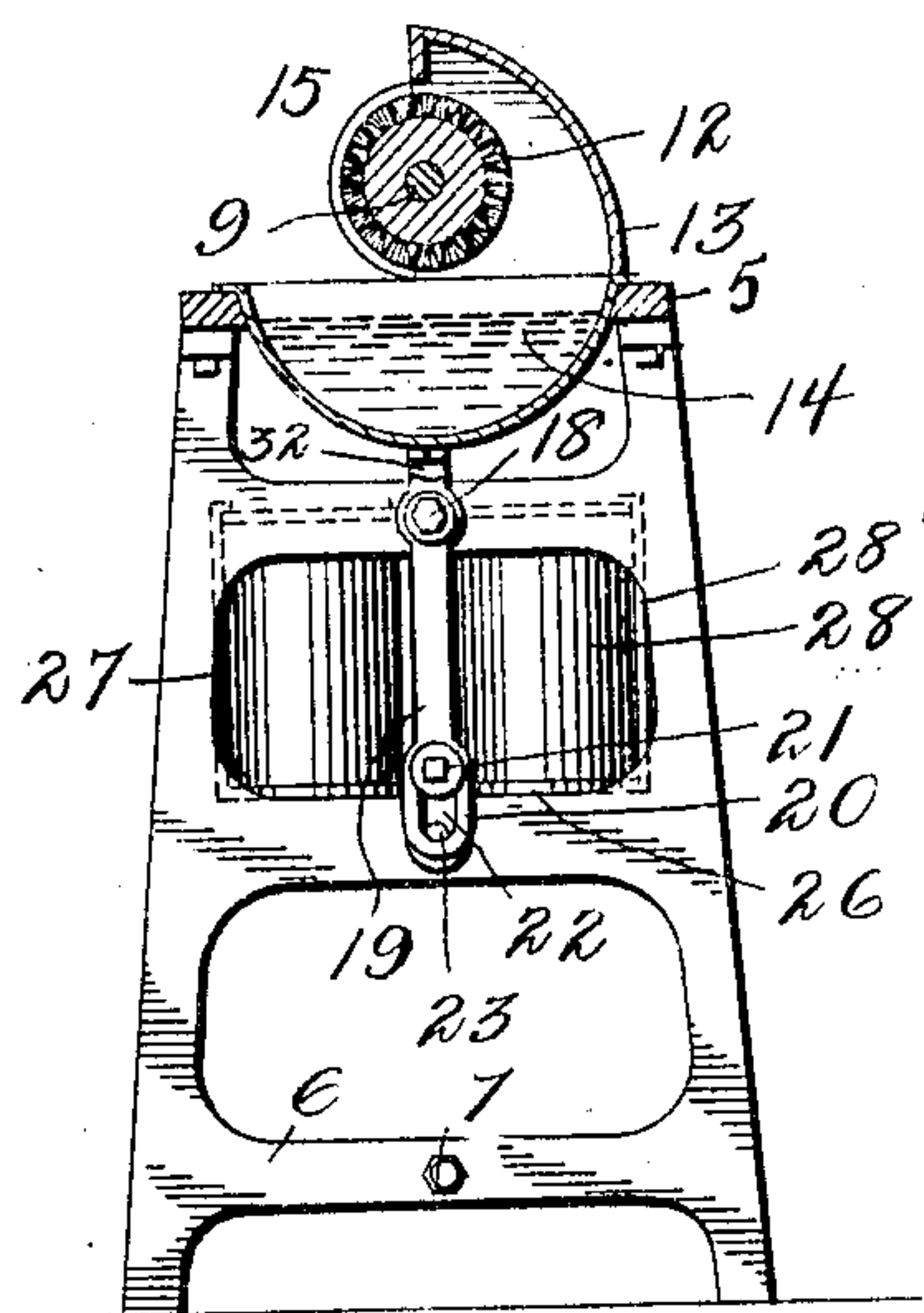


Fig. 2.

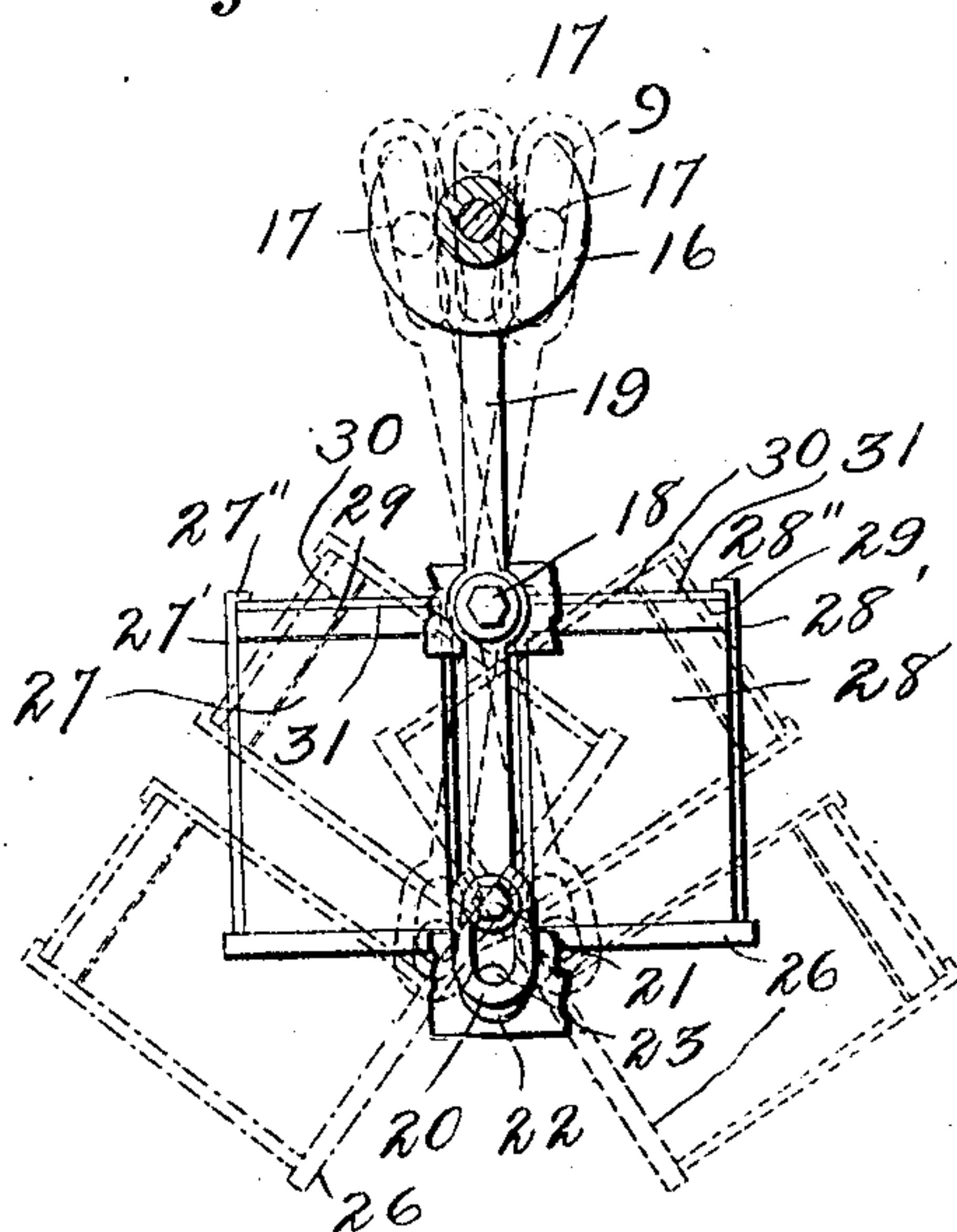


Fig. 3.

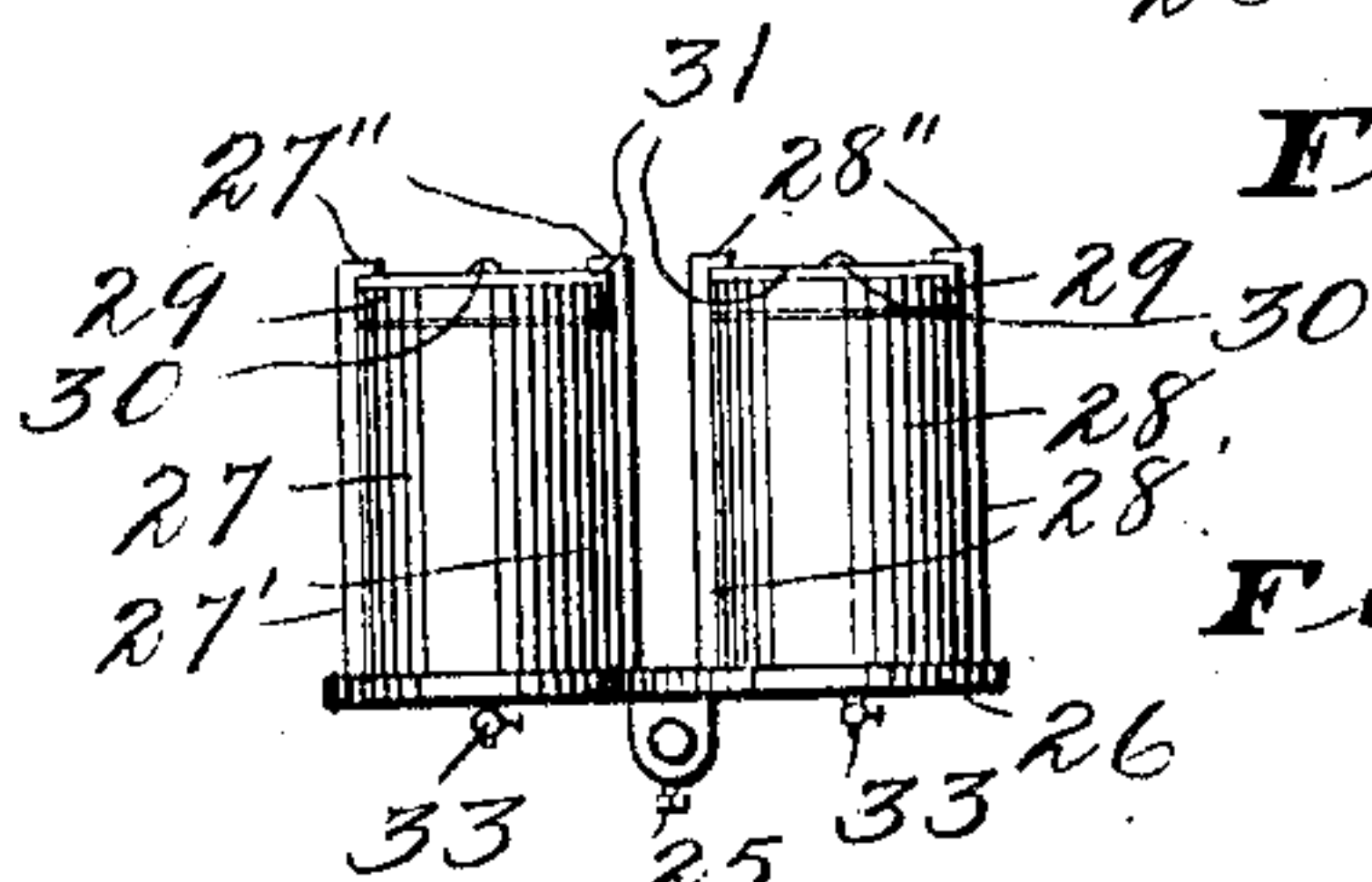


Fig. 4.

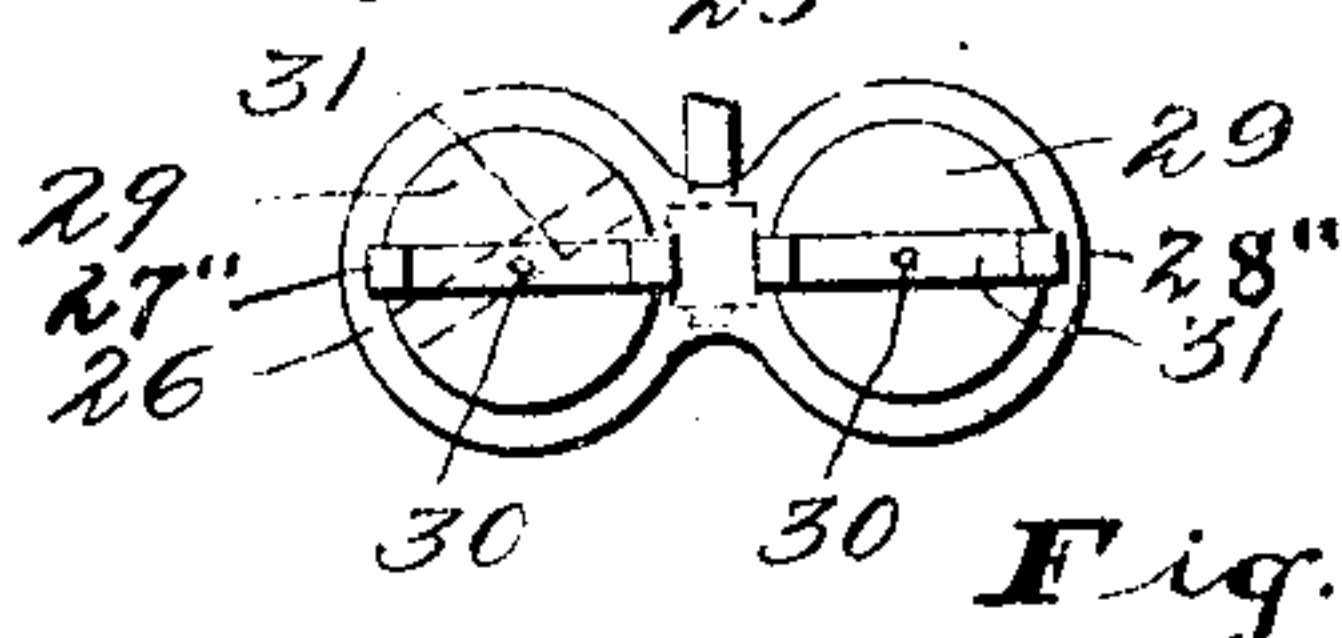


Fig. 5.

WITNESSES

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UNITED STATES PATENT OFFICE.

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CLEANING-MACHINE.

No. 871,414.

Specification of Letters Patent.

Patented Nov. 19, 1907.

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To all whom it may concern:

Be it known that we, ERNEST C. KECKELEY and ANDREW KOSSMANN, citizens of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Cleaning-Machines, of which the following is a specification.

Our invention relates to cleaning machines and has for its object the provision of a device of this character adapted to effectively clean small articles such as gloves.

A further object of the invention is the provision of a machine of the character set forth, provided with a revolving brush and bodily moving receptacles, together with connections between the brush shaft and said receptacles, which are adapted to impart movement to the receptacles from the brush shaft.

Further objects and advantages of the invention will be set forth in the detailed description which now follows.

In the accompanying drawing: Figure 1 is a front elevation of a cleaning machine constructed in accordance with the invention, Fig. 2 is a transverse vertical section upon line *x x* of Fig. 1 with a drain cock hereinafter described, broken away, Fig. 3 is an enlarged transverse vertical section upon line *y y* of Fig. 1, Fig. 4 is an elevation of the cleaning cans hereinafter described, and, Fig. 5 is a plan view of said cans.

Like numerals designate corresponding parts in all of the figures of the drawing.

The herein described cleaning machine consists of a frame comprising a top plate 5 and vertical supports 6. These supports are spaced apart and braced by a tie rod 7. Rotatively mounted in bearings 8 carried by the top plate 5 is a brush shaft 9, upon one end of which are mounted fast and loose pulleys 10 and 11. A brush 12 is secured upon the shaft 9 and rotates in a hood or casing 13, the lower portion of which is adapted to receive a cleaning liquid indicated at 14. The hood or casing is open at one side as indicated at 15 to permit access to be had to the brush when it is desired to present articles to said brush for the purpose of brushing or cleansing the same. A crank disk 16 which is mounted upon one end of the brush shaft 9 carries a wrist pin 17. Pivoted at 18 to one of the vertical supports 6 of the frame is a link 19 having enlarged slotted ends 20.

The upper slotted end of the link 19 engages the wrist pin 17 of the crank disk 16. The lower slotted end of the link 19 engages a wrist pin 21 which is carried by a crank arm 22. This crank arm is secured to a stub shaft 23 which passes through an elongated bearing 24 of the frame. Secured to the outer end of the stub shaft 23 by a set screw 25 is an oscillatory plate or table 26 which serves to support cleaning and rinsing receptacles 27 and 28. Vertical standards 27' and 28' carried by the tilting plate 26 are provided with inturned ends 27'' 28''. The cans are provided with tops 29. Pivoted to these tops at 30 are latch arms 31 which are adapted to swing in a horizontal plane, in such manner that their ends may be moved beneath the inturned portions 27'' 28'' of the vertical standards 27' 28'. This movement of the latch arms 31 serves to simultaneously lock the tops upon the cans and to lock the cans upon the tilting plate 26. Drain cocks 32 and 33 serve to drain the liquid from the casing 13 or from the cans as may be desired, said drain cocks 33 being ordinary stop cocks which are threaded into the bottoms of the cans and project through openings, not shown, in the oscillatory plate 26.

The movement imparted to the cleaning and rinsing cans has been diagrammatically illustrated in Fig. 3, the central position of said cans being illustrated in full lines. The position of the cans at their limit of movement toward the right, has been illustrated in dotted lines, while their position at their limit of movement toward the left has been illustrated in dot and dash lines. The position of the link 19 has been correspondingly illustrated.

From the foregoing description, it will be seen that the herein described machine provides a simple and efficient device for imparting movement to a brush and to the cleaning cans from a single shaft.

In operating the machine, the soiled articles are placed in the can containing the cleaning fluid and the machine is then set in motion, the gloves and the cleaning fluid being rapidly agitated for any desired length of time. The gloves are then removed from the cleaning can and subjected to the second step of the process, that of brushing. A suitable implement is introduced into the fingers of the glove and said glove is then held against the brush which is rapidly ro-

tated by applying power to the fast pulley 10. The glove may be dipped into the receptacle containing the cleaning fluid 14 at any time and any fluid dropping from the glove or brush will be caught by said receptacle. 5 The bristles of the brush are of sufficient stiffness to efficiently remove the dirt from the stitched portions of the glove, but are not of such stiffness as would tend to mar or injure the glove by scratching the same. In 10 cleaning the back and other portions of the glove upon the brush, the hand may be inserted therein to facilitate the presentation of said glove to the brush. The purpose of the brush in operation, is to remove the dirt 15 from the stitched portions, which it will be found is quickly and efficiently accomplished. After the gloves have been brushed, they are placed in the rinsing can, which is filled with 20 a rinsing fluid and are there agitated for any desired length of time, or until the articles are thoroughly rinsed, after which they may be removed from said can and allowed to dry.

It is to be understood that gloves may be 25 treated simultaneously at the three stages of the operation just described, that is, gloves may be agitated in the cleaning can while gloves just removed from said can are being cleaned by the brush and gloves which have 30 previously been cleaned by the brush, are being rinsed in the rinsing can.

It is obvious that the present invention saves considerable time and labor when used for the purposes set forth, but while the elements shown and described are well adapted 35 to serve the purposes for which they are intended, it is to be understood that the invention is not limited to the precise construction set forth, but includes within its purview such changes as may be made within the 40 scope of the appended claims.

What we claim, is:

In a cleaning machine, the combination with a supporting frame, of a shaft journaled in said frame, a table mounted upon said 45 shaft, cans mounted upon said table, a crank secured to the shaft, a link pivoted intermediate its ends and having slotted ends, a wrist pin carried by the crank and adapted to engage in one of the slotted ends of the link, a 50 rotative shaft, a disk mounted upon said rotative shaft, and a wrist pin carried by said disk and adapted to engage in the other slot at the end of the link.

In testimony whereof we affix our signatures in presence of two witnesses. 55

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Witnesses:

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