

I. J. SMITH.
OVERHEAD WASHER.
APPLICATION FILED NOV. 5, 1907.

919,970.

Patented Apr. 27, 1909,
2 SHEETS—SHEET 1.

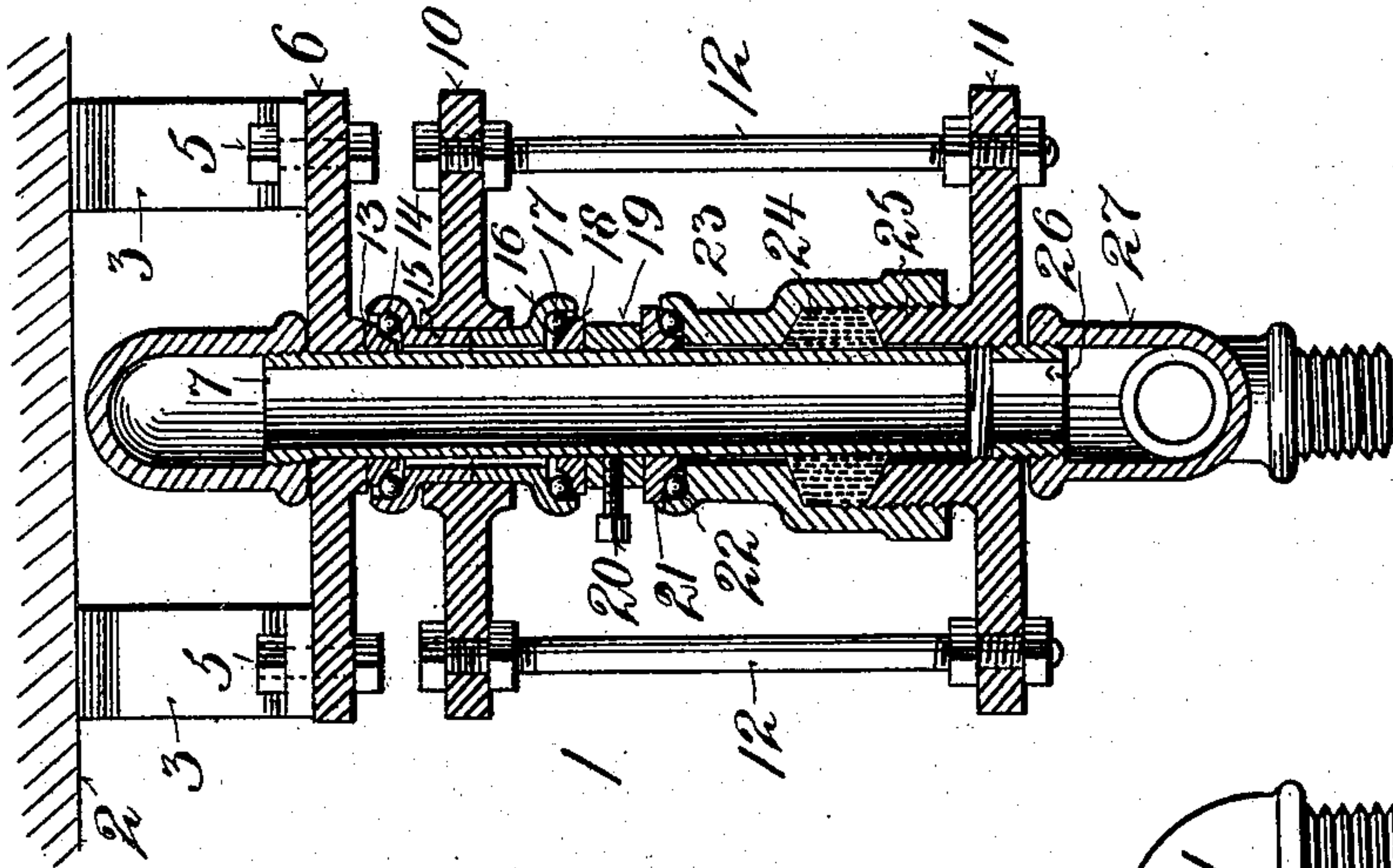


Fig. 2.

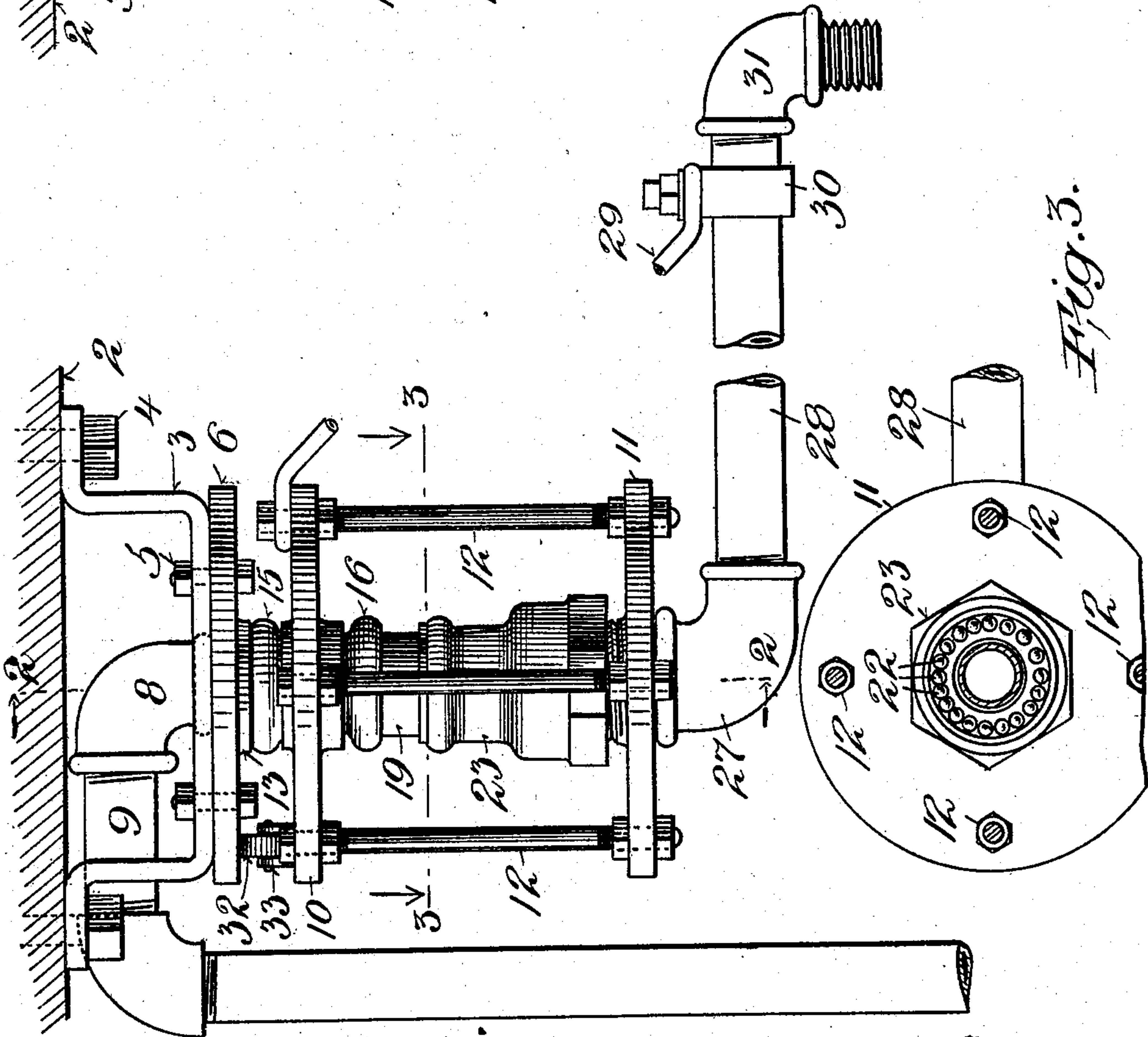


Fig. 3.

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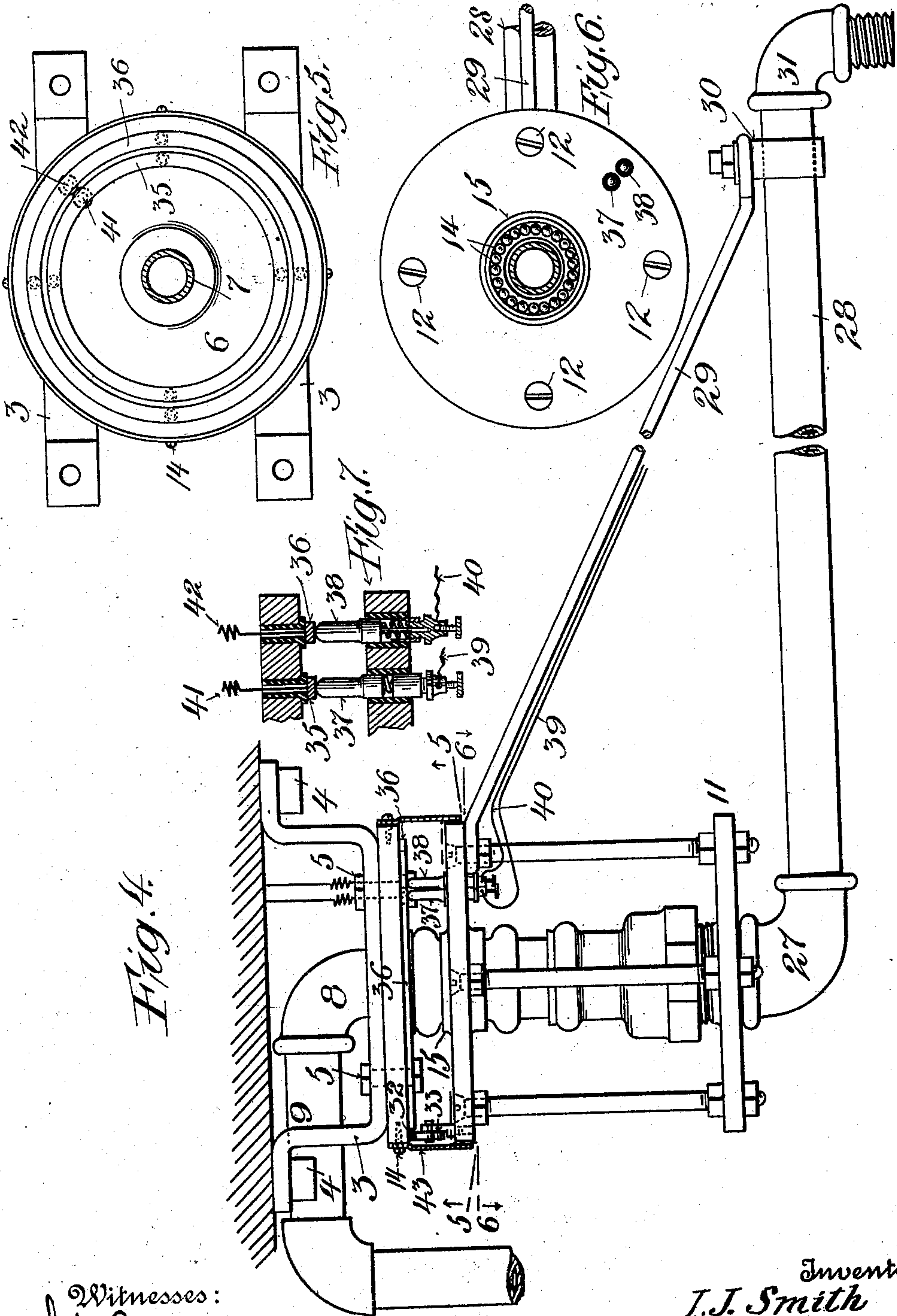
Fig. 1.

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UNITED STATES PATENT OFFICE.

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OVERHEAD WASHER.

No. 919,970.

Specification of Letters Patent.

Patented April 27, 1909.

Application filed November 5, 1907. Serial No. 400,757.

To all whom it may concern:

Be it known that I, IRVING J. SMITH, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Overhead Washers, of which the following is a specification.

The object of my invention is to provide an article or device of this class that will be adapted to be suspended above a vehicle while it is being washed and properly distribute both light and water, the former by means of a cluster of lamps, suitably mounted and supported by the washer, and the latter by means of a pipe, suitably mounted and connected. This object is accomplished by my invention as will appear below.

For a more particular description of my invention, reference is to be had to the accompanying drawings forming a part hereof, in which,

Figure 1 is a side elevation of my improved washer. Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1 looking in the direction of the arrows. Fig. 3 is a sectional view taken on the line 3—3 of Fig. 1, looking in the direction of the arrows. Fig. 4 is similar to Fig. 1 except that the electrical connections are shown. Figs. 5 and 6 are sectional views taken on the line 5—5 and 6—6, looking in the direction of the arrows. Fig. 7 shows a detail of the electrical connections.

Throughout the various views of the drawings, similar reference characters designate similar parts.

My improved washer 1 is preferably suspended from a ceiling 2 by suitable brackets 3 which are held by bolts 4 or in any other suitable way. A second set of bolts 5 fix a disk 6 to the brackets 3 and a pipe 7 is screwed in a hole in the center thereof. This pipe 7 has an elbow 8 screwed to its upper end which acts as a lock nut and this elbow 8 is connected by a pipe 9 with any suitable source of water supply. The pipe 7 extends vertically and downwardly through two disks 10 and 11 respectively, which are held in proper relation by means of suitable bolts 12 and nuts thereon. These disks 6, 10, and 11 are all of the same size and parallel to each other at all times. The two lower disks 10 and 11 are supported by cups, balls and cones on the pipe 7. Both the cups and the disks 10 and

11 turn freely on the pipe 7 and their movement is accelerated by means of the usual balls or other anti-friction devices.

The pipe 7 has next the disk 6 a cone 13 which rests against balls 14 which run in the cup 15 held in the center bore of the disk 10 and a similar cup 16 is also in said bore and downwardly disposed to contain balls 17 which run on a cone 18 that is supported on a collar 19 fixed on the pipe 7 by a set screw 20. A cone 21 is forced against the collar 19 by balls 22 that run in a cup 23 which is enlarged at its lower end to receive a packing 24 and is screw threaded to receive and fit corresponding threads on a collar 25 of the disk 11. The upper end of the collar 25 and the shoulder in the cup 23 are flared to force the packing 24 against the pipe 7 as shown in Fig. 2.

The cones and cups above described are all concentrically mounted on the pipe 7 and the packing 24 is forced sufficiently to form a tight joint. By adjusting the collar 19 and the cup 23, a proper position of all parts may be maintained and due compensation made for wear.

A stud pipe 26 extends downwardly from the threaded bore of the disk 11 and on this pipe 26 is secured an elbow 27 from which extends a horizontally disposed pipe 28 which is supported by tie rods 29 from one of the bolts 12 to a bracket 30 near the free end of the pipe 28. An elbow 31 connects the pipe 28 with a rubber hose or other water distributing means, not shown. The weight of the pipe 28 is counterbalanced by a wheel 32 mounted in bearings 33 on the disk 10 opposite the pipe 28 and this wheel 32 runs on the lower surface of the disk 6 at all times. This prevents any tension on the pipe 28 from bending the pipe 7 or causing any binding on this pipe or any leakage through the joint where the packing 24 is located.

The disk 6 has two concentric and insulated rings mounted thereon numbered 35 and 36 respectively, and these rings 35 and 36 have continual contact with brushes 37 and 38 mounted on the disk 10 and insulated therefrom. These brushes 37 and 38 are connected to wires 39 and 40 running down the tie rod 29 to any suitable illuminating means, not shown. Conductors 41 and 42 charge the rings 35 and 36 with electricity. Suitable guards 43 such as a cylinder hung by

screws 44 from the disk 6 protect the electric connections and prevent all danger of fire or injury to one operating the washer.

From the foregoing it is obvious that the
5 pipe 28 will always follow the movements of the operator in washing a vehicle and supply him with water and the conductors will supply electricity for light and other purposes and the light will always be thrown where
10 needed.

Having thus described my invention, what I claim is,

1. In an overhead washer, a top disk and means for fixedly holding the same, a pipe
15 fixed in said disk, two disks rotatively mounted on said pipe and held in fixed relation by bolts, and a second pipe connected with one of said disks.

2. In an overhead washer, a top disk and
20 means for fixedly holding the same, a pipe fixed in said disk, two disks rotatively mounted on said pipe and held in fixed relation by holding means, and a horizontally disposed pipe supported from said disks.

25 3. In an overhead washer, a top disk, two disks and means for holding the same in fixed relation, a pipe fixed on said top disk and

passing through said two disks and on which they are mounted, a horizontally disposed pipe supported from said two disks and a
30 wheel mounted on one of said disks and running on said top disk to act as a counter weight for said horizontally disposed pipe.

4. In an overhead washer, a top disk and a pipe fixed therein, two disks on said pipe and
35 means for holding them in fixed relation, a horizontally disposed pipe supported by said two disks, conducting rings on said top disk and brushes on one of the other disks which engage said rings.

5. In a washer, a top disk, a pipe fixed
40 therein, a pair of disks on said pipe and means for holding them in fixed relation, a horizontally disposed pipe supported by said two disks, electrical contacts between said
45 top disk and one of the others, and means to guard said electrical connections.

Signed at New York in the county of New York and State of New York.

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Witnesses:

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