

G. LANGE.

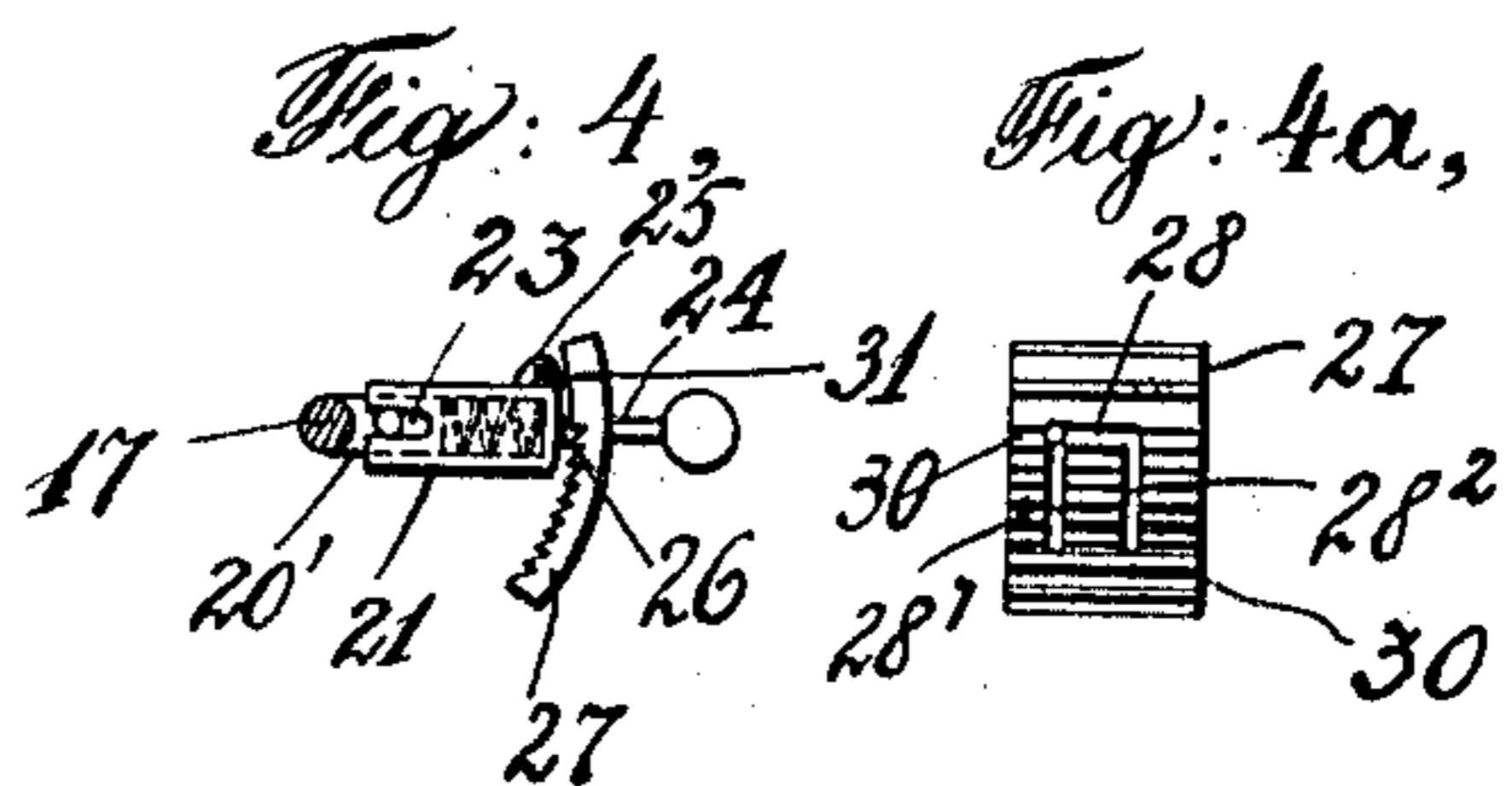
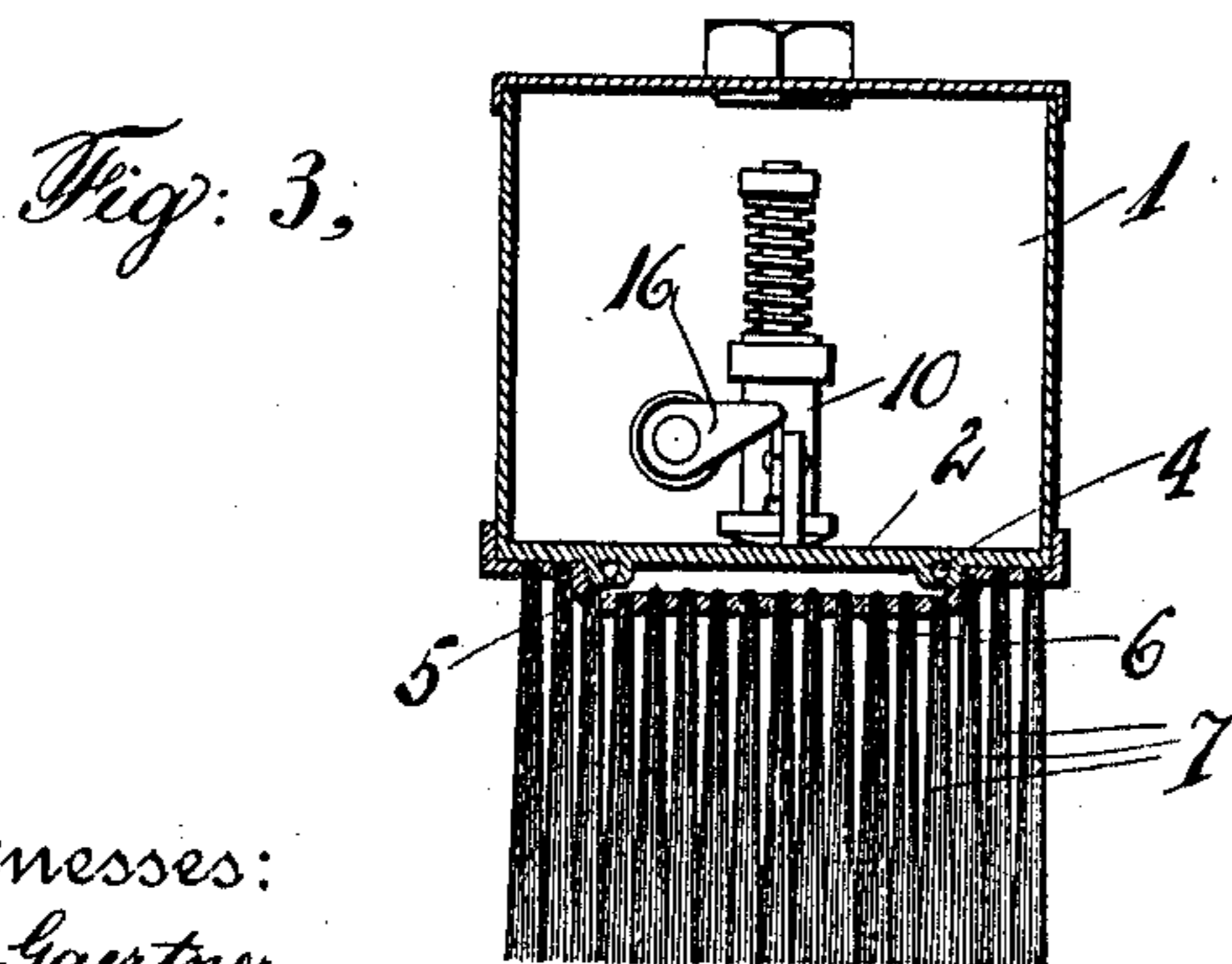
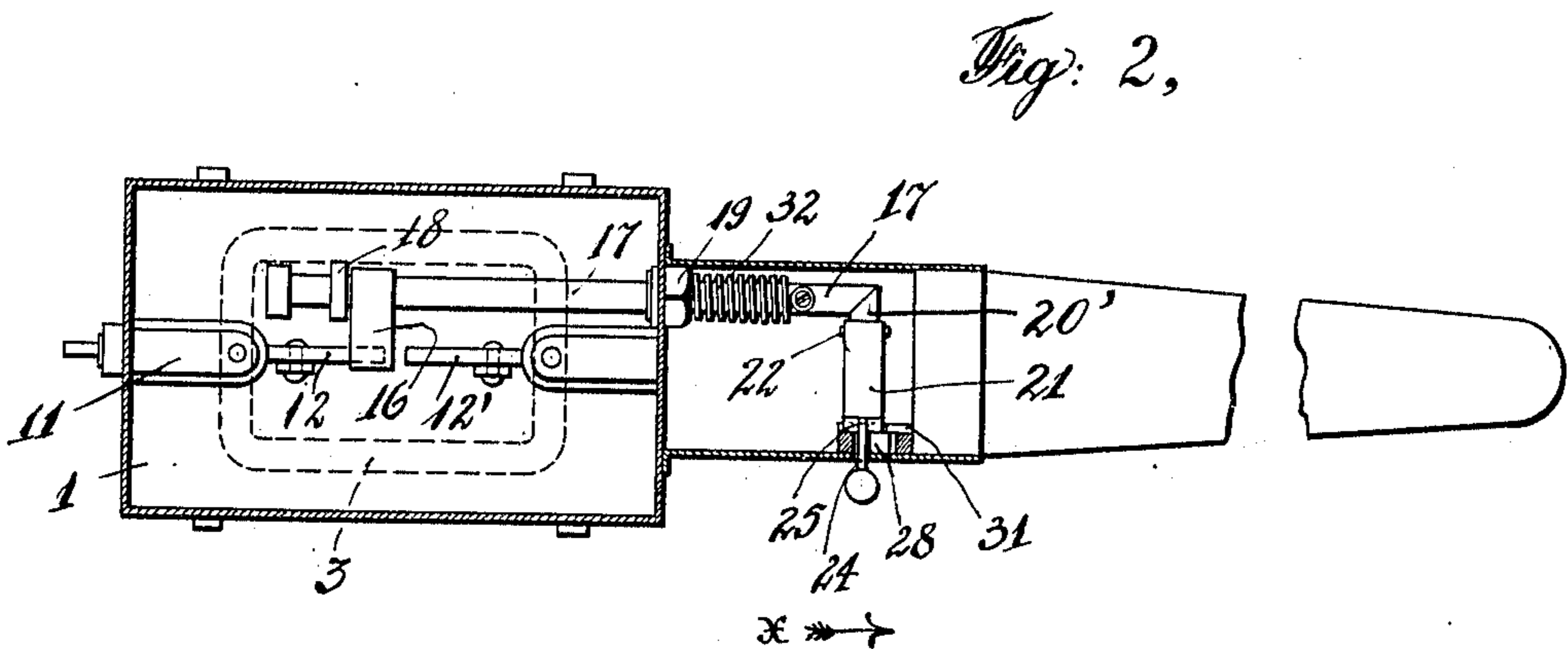
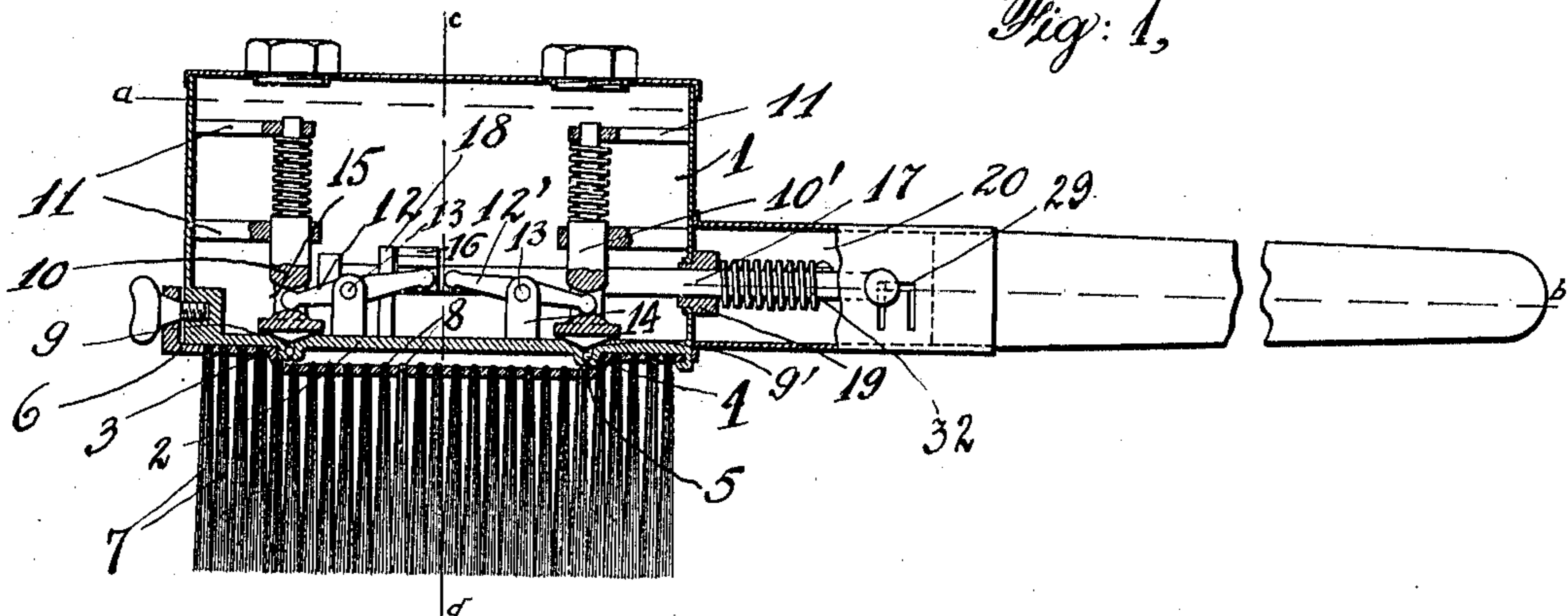
BRUSH.

APPLICATION FILED MAR. 16, 1909.

945,238.

Patented Jan. 4, 1910.

2 SHEETS—SHEET 1.



Witnesses:
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2 SHEETS—SHEET 2.

Fig: 5,

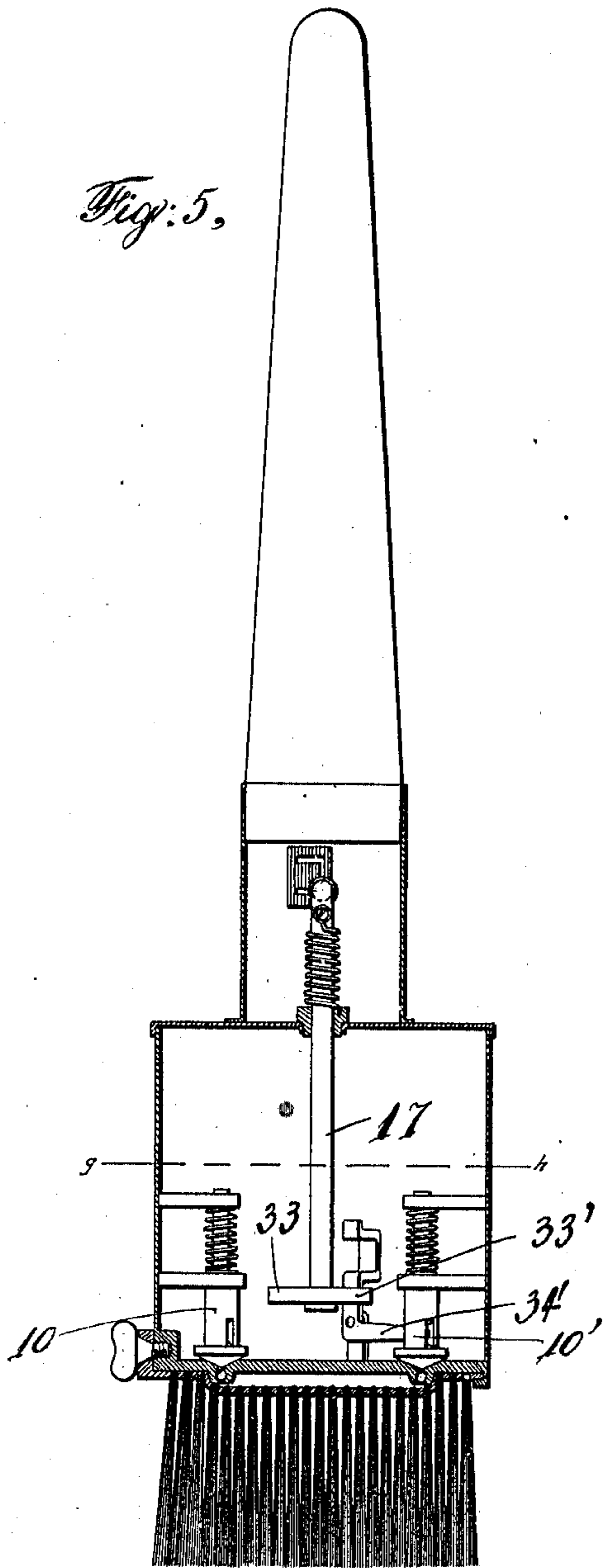


Fig: 6,

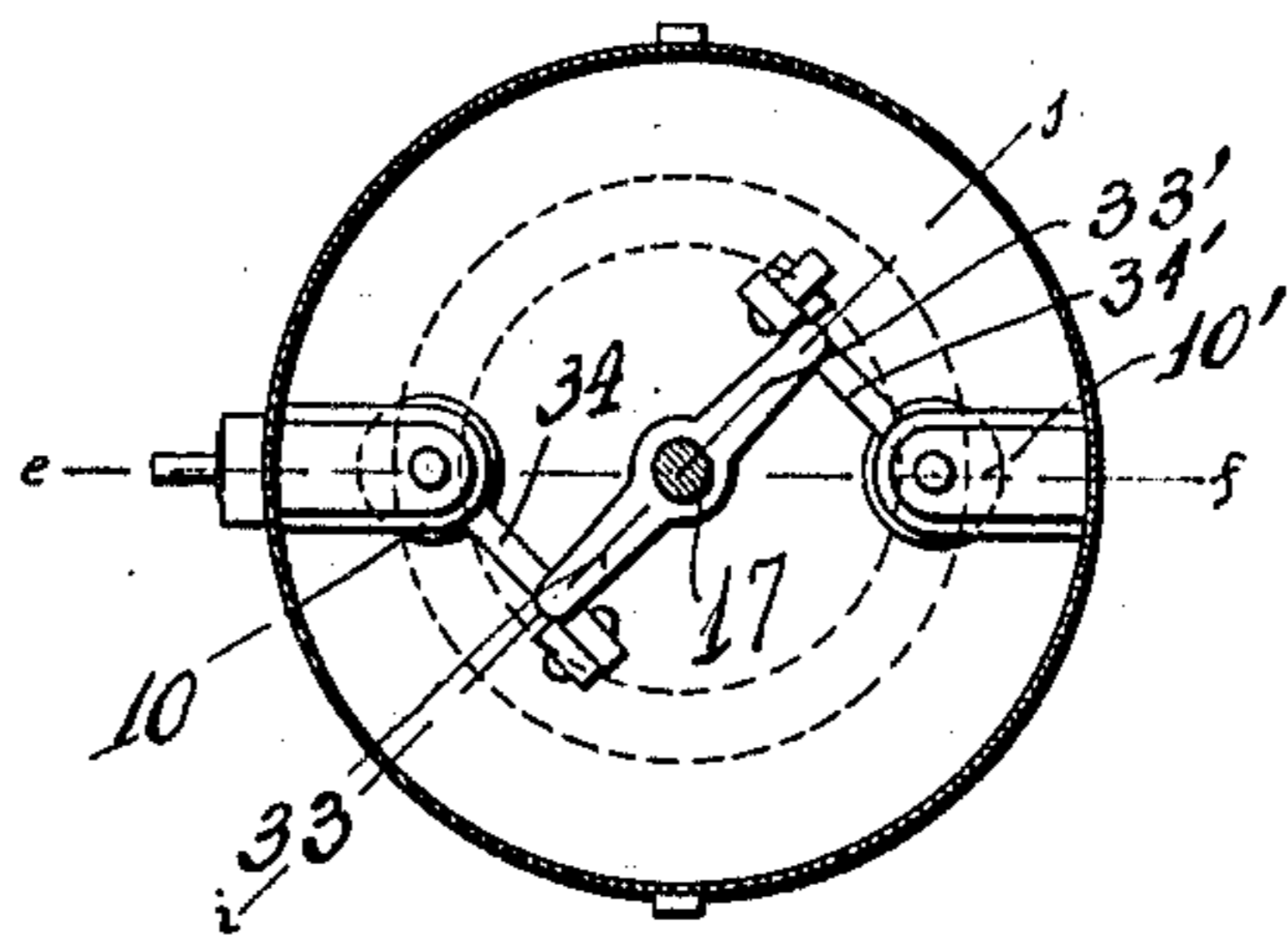
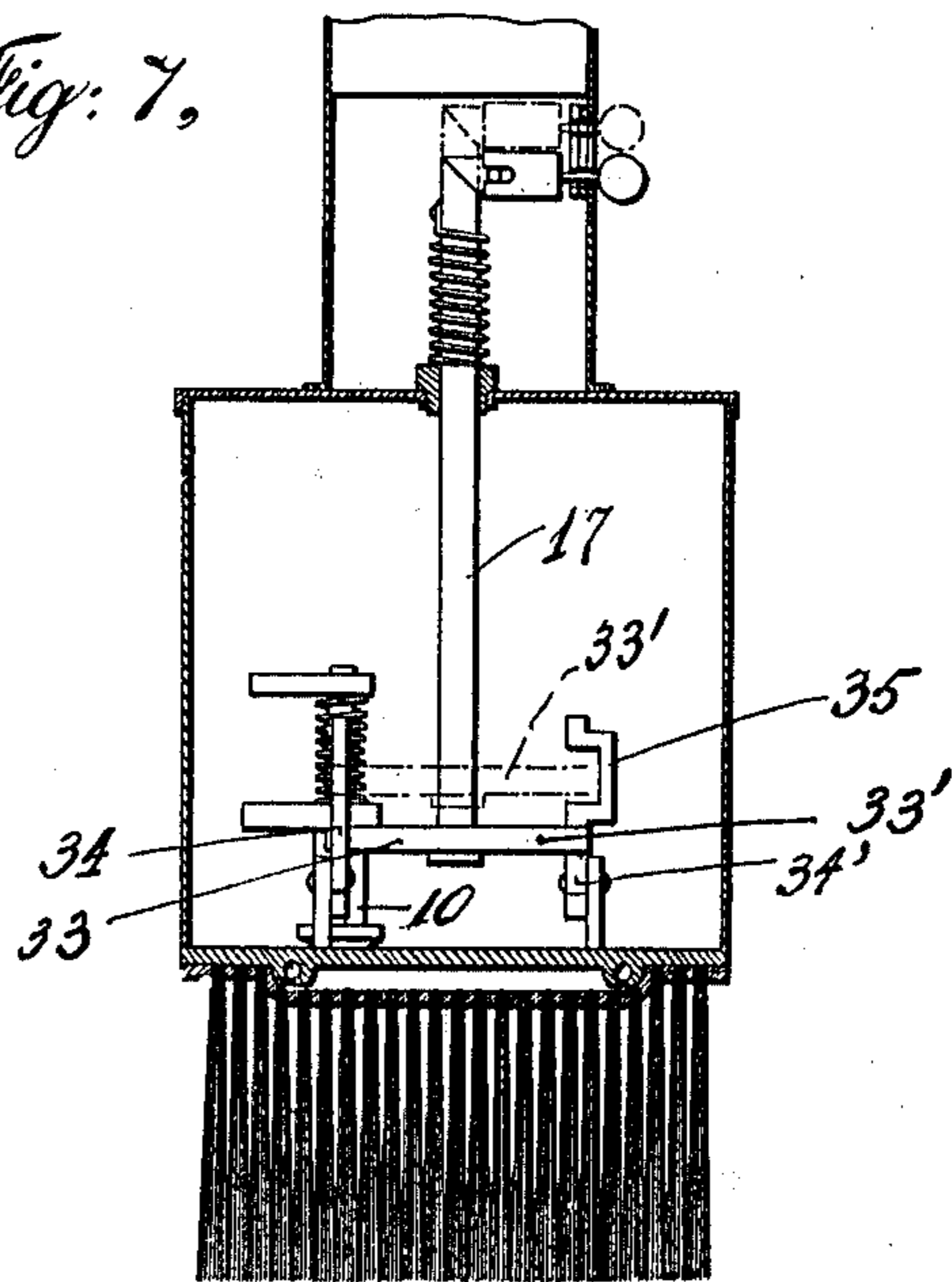


Fig: 7,



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UNITED STATES PATENT OFFICE.

GEORGE LANGE, OF BOSTON, MASSACHUSETTS.

BRUSH.

945,238.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed March 16, 1909. Serial No. 483,832.

To all whom it may concern:

Be it known that I, GEORGE LANGE, a subject of the German Emperor, residing at Jamaica Plain, Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Brushes, of which the following is a specification.

The present invention pertains to brushes, particularly to shoe polishing brushes, painters' brushes and the like, and has for its object to provide a brush which is formed with a reservoir containing shoe blackening, paint or varnish, as the case may be, and which is so constructed that by the manipulation of some suitable means arranged within the handle of the brush, valves are opened permitting a quantity of the matter contained in the reservoir to flow out and to be distributed in the hair of the brush. Such brushes which may be called "fountain brushes" allow a continuous uniform supply of paint, varnish or blackening to the hair thereof, and dispense with separate varnish, paint, or blackening receptacles.

In order to make my invention more clear the same is illustrated in the accompanying drawing, in which—

Figure 1 is a longitudinal vertical section of a brush suitable as a shoe polishing brush or the like; Fig. 2 is a sectional plan view on line *a—b* of Fig. 1; Fig. 3 a cross section on central line *c—d* of Fig. 1; Figs. 4 and 4^a details thereof; Fig. 5 is a longitudinal section of a modified construction suitable as a painter's brush or the like taken on line *e—f* of Fig. 6. Fig. 6 a cross section thereof on line *g—h* of Fig. 5, and Fig. 7 a similar section as Fig. 5 taken on line *i—j* of Fig. 6.

1 denotes a reservoir or receptacle adapted to contain shoe blackening or the like, the bottom 2 of which is formed on its outside with a rectangular bead 3 containing a channel 4 having perforations 5. Removably secured in any convenient manner to the receptacle and fitting over the bottom 2 thereof is a plate 6 to which the hair tufts 7 are attached in ordinary manner. This plate is also provided with perforations 8 which register with those of the channel. On the inside of the bottom 2 one or more outlets 9, 9' are formed which are normally closed by spring actuated valves 10, 10' slidably borne in brackets 11. Double armed levers 12, 12' fulcrumed at 13 in brackets 14 are adapted

to engage with their outer arms into recesses 15 of the valve bodies in such a manner that upon the depression of their inner arms their outer arms will be raised and effect the opening of the respective valves 10, 10'. The operation of these double armed levers is effected by an arm 16 secured to a rod 17 which is slidably and rotatively borne in a bracket 18 and a packing cup 19 of the receptacle 1.

The outer end of the rod, which projects into the hollow handle 20 secured to the receptacle, has an angularly bent portion 20'. The latter carries a hollow part 21 with which it is slidably connected by means of a pin 22 projecting through slots 23 in part 21 (Fig. 4). The outer end of the part 21 is formed with a grasp 24 and projections or teeth 25 and 26. Secured inside of the handle and in front of the part 21 is a cylindrically curved block or plate 27 which has a U-shaped slot 28 that registers with a similarly shaped slot 29 in the wall of the handle to which it is attached. Along the sides of the vertically extending portions 28', 28² of the slot 28 the block 27 is provided with sets of teeth 30 and at its front with a stop 31. The grasp 24 of the part 21 projects outward through the slots 28 and 29.

The rod 17 under the action of a spring 32 has the tension to be normally projected inward with its arm 16 turned upward beyond contact with the lever 12.

When it is desired to feed the hair with the liquid contained in the receptacle, the grasp 24 is first pressed inward, whereby the tooth 25 is released from the stop 31, and then turned in the portion 28' of the slot, whereby the rod 17 is swung against the tension of its spring, causing the arm 16 to act on the lever 12, raising the valve 10 and permitting the liquid to flow out through the outlet 9, into the channel 4, whence through the perforations 5 and 8 it is supplied to the hair.

When a more rapid flow of the liquid is required the two valves 10, 10' can be simultaneously opened. This is accomplished after the release of the grasp 24 by shifting the latter longitudinally in the slot 28 in the direction of the arrow *x*, whereby the rod 17 is displaced longitudinally until its arm 16 lies over both levers 12 and 12' and by then turning the grasp in the portion 28² of

the slot 28, whereby the arm 16 is swung down to actuate both said levers and to raise simultaneously both valves 10 and 10'.

The sets of teeth 30 of the block 27 and the projection or tooth 26 of the part 21 serve for the adjustment of the valves to permit of a larger or smaller quantity of the liquid being supplied to the hairs.

In the modification illustrated in Figs. 5—7, the construction is substantially the same as that in the first example. Here, however, the rod 17 carries a double armed lever 33, 33', which with both arms is adapted simultaneously to operate the swinging levers 34 and 34'. These swinging levers are equivalents of the levers 12, 12' in the first example. The lever 34' is provided with a lateral angular bend 35 which when the rod 17 is shifted outward (upward with relation to Fig. 5), the arm 33' of the double armed lever will be brought out of contact with the angular lever 34', so that the turning of the rod 17 will cause the opening of the valve 10 only, while the other valve 10' remains closed. The operation of the construction in this example is otherwise the same as the first one.

It is understood that various modifications may be made in the construction shown and described without deviating from the principle of my invention.

What I claim and desire to secure by Letters Patent is:—

1. The combination with a brush, of a liquid receptacle having a channel communicating with the brush and outlets leading into said channel, valves for closing said outlets, levers engaging said valves, a rod rotatively and slidably borne in said receptacle, means secured to said rod and adapted according to the position of the rod to act either upon one or simultaneously upon both said levers, and means for operating said rod.

2. The combination with a brush, of a liquid receptacle having a channel communicating with the brush and outlets leading into said channel, valves for closing said outlets, a hollow handle secured to said receptacle, a spring actuated rod slidably and rotatively borne in the receptacle and having a bent end extending into the hollow handle, means on said rod to control the valves, a spring actuated piece secured to

said bent end, a grasp extending from said piece outward, and means on said piece for adjusting the position of the rod.

3. The combination with a brush, of a liquid receptacle having two outlets, valves for closing said outlets, a hollow slotted handle secured to said receptacle, levers engaging said valves, a spring actuated rod rotatively and slidably borne in said receptacle and having a bent end extending into said hollow handle, an arm secured to said rod and adapted according to the position of the rod to act either on one or simultaneously on both of said levers, means for operating said rod and means for adjusting the position of the same.

4. The combination with a brush, of a liquid receptacle having a channel communicating with the brush and outlets leading into said channel, valves for closing said outlets, levers engaging said valves, a rod rotatively and slidably borne in said receptacle, means secured to said rod and adapted according to the position of the rod to act either upon one or simultaneously upon both said levers, a block having a U-shaped slot, teeth on said block, projections connected with the rod to engage said teeth for the adjustment of the position of the rod.

5. The combination with a brush, of a liquid receptacle having a channel communicating with the brush and outlets leading into said channel, valves for closing said outlets, a hollow handle having a slot secured to said receptacle, a spring actuated rod slidably and rotatively borne in the receptacle and having a bent end extending into the hollow handle, means on said rod to control the valves, a spring actuated piece secured to said bent end, a block having a U-shaped slot, teeth on said block, a grasp secured to the said spring actuated piece and projecting outward through the slots in the block and handle, and projections on said spring actuated piece to engage the teeth in the said block for the adjustment of the position of the rod.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE LANGE.

Witnesses:

HARRY C. BYRNE,
FRANK E. CONEFF.