

No. 898,295.

PATENTED SEPT. 8, 1908.

C. WILSON.

FIRE ALARM AND EXTINGUISHER.

APPLICATION FILED NOV. 21, 1907.

2 SHEETS SHEET 1.

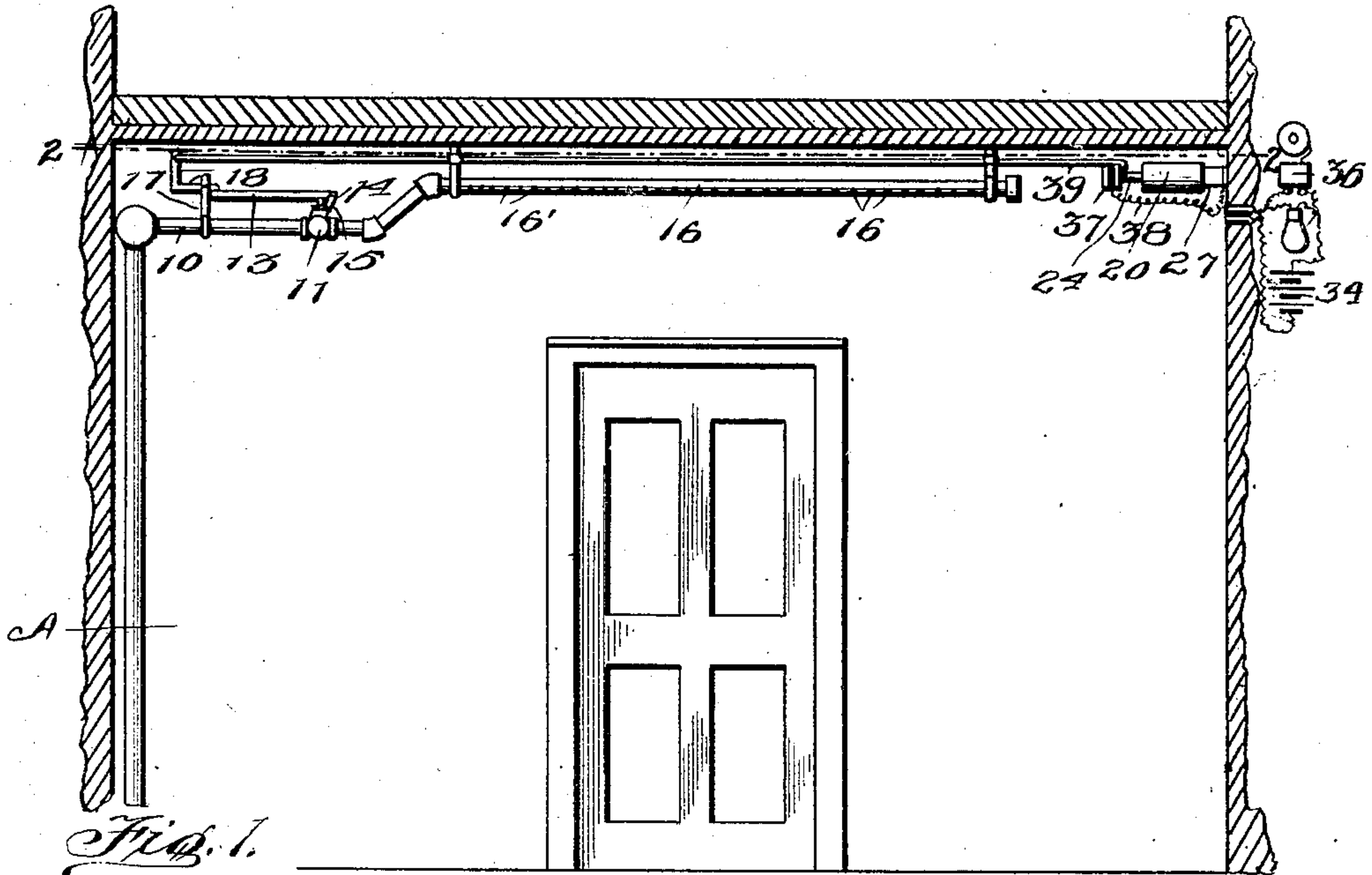


Fig. 1.

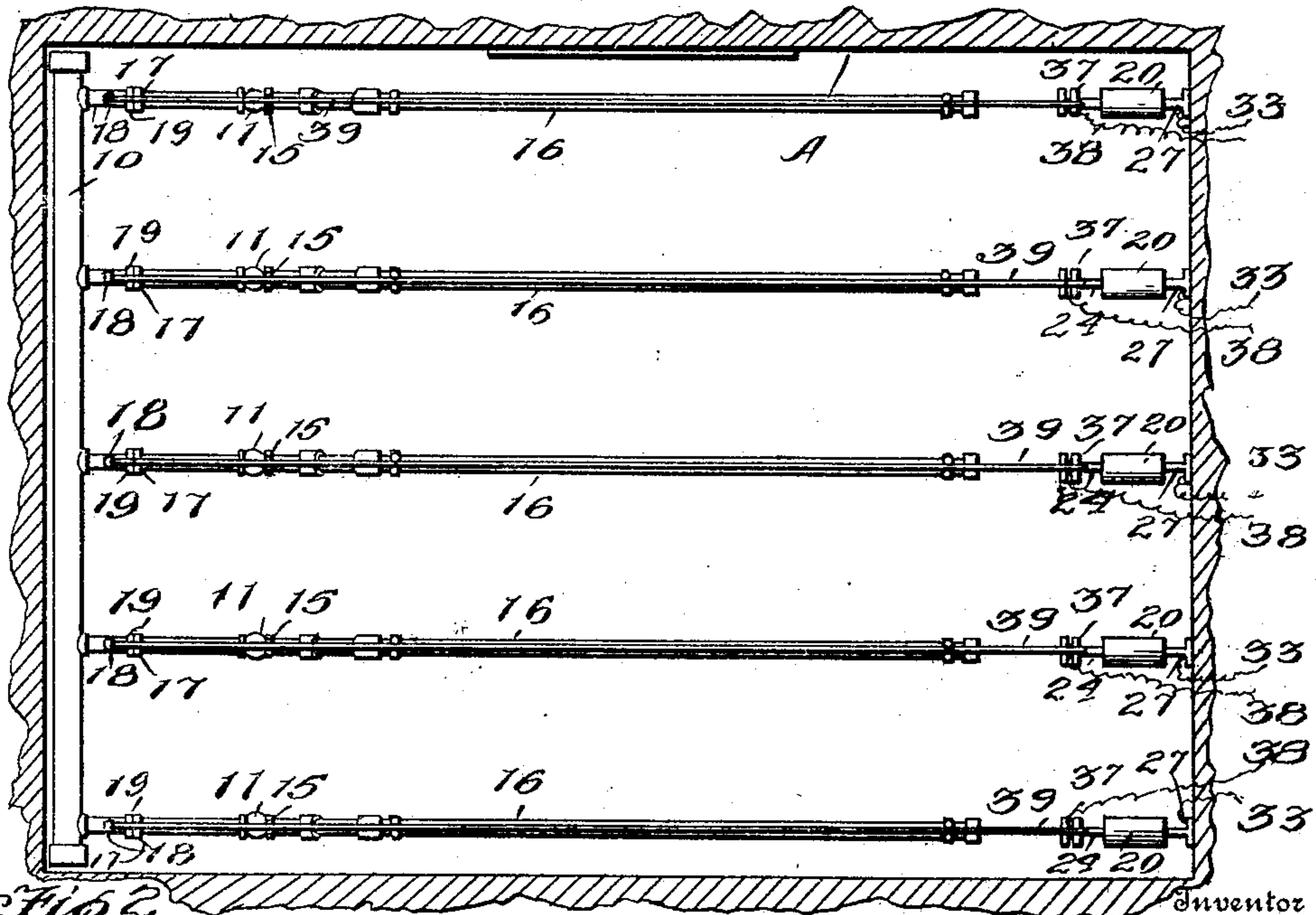


Fig. 2.

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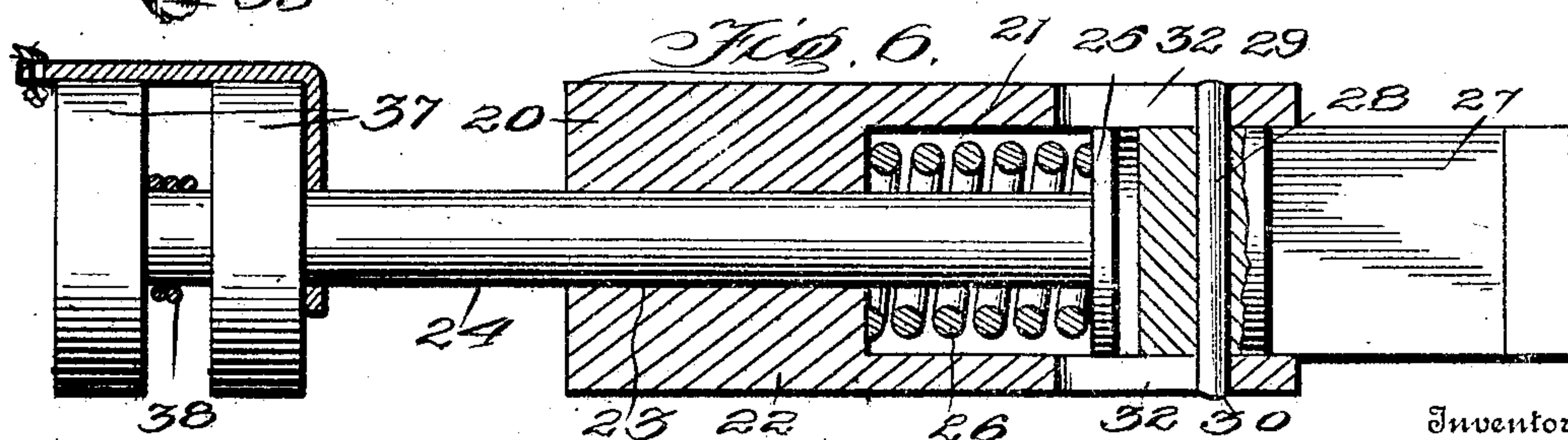
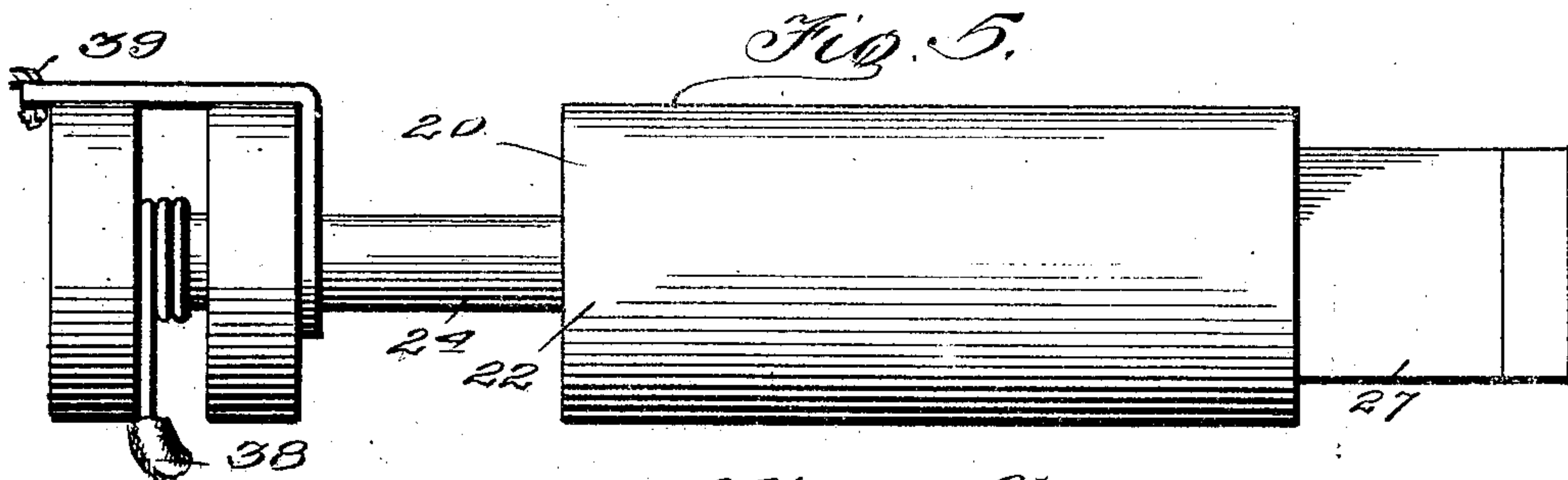
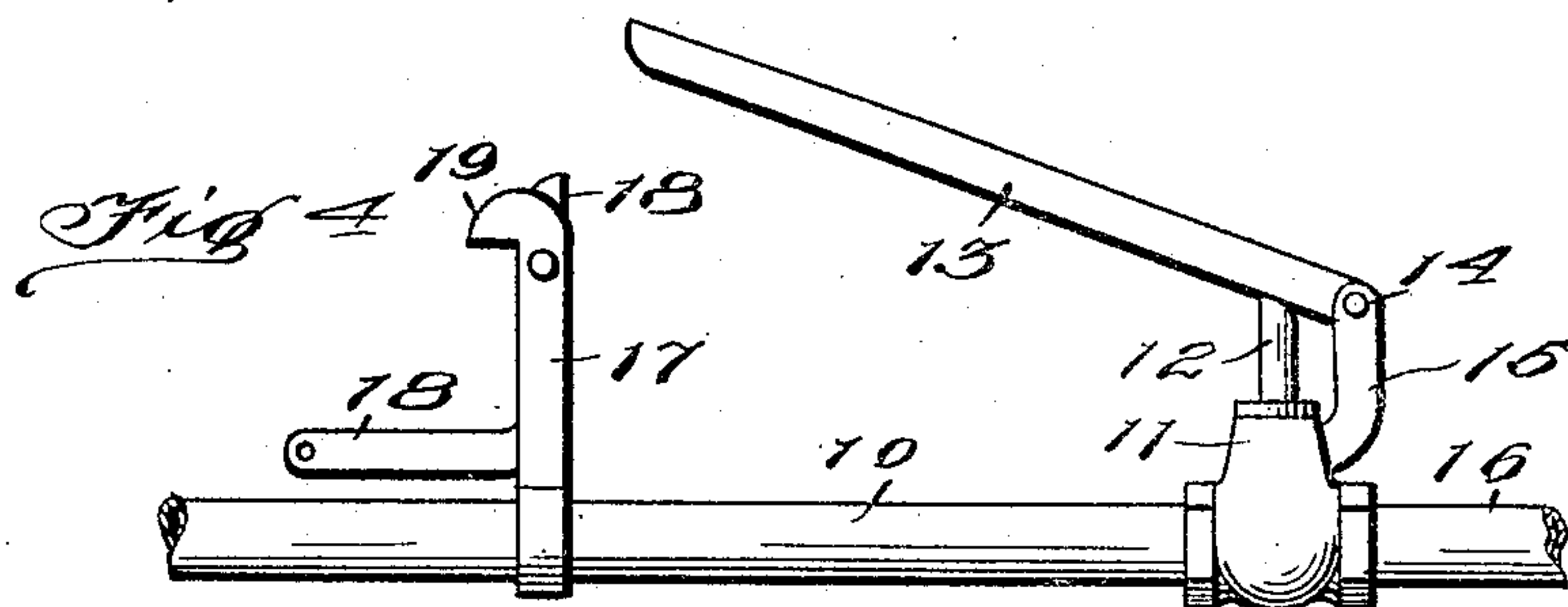
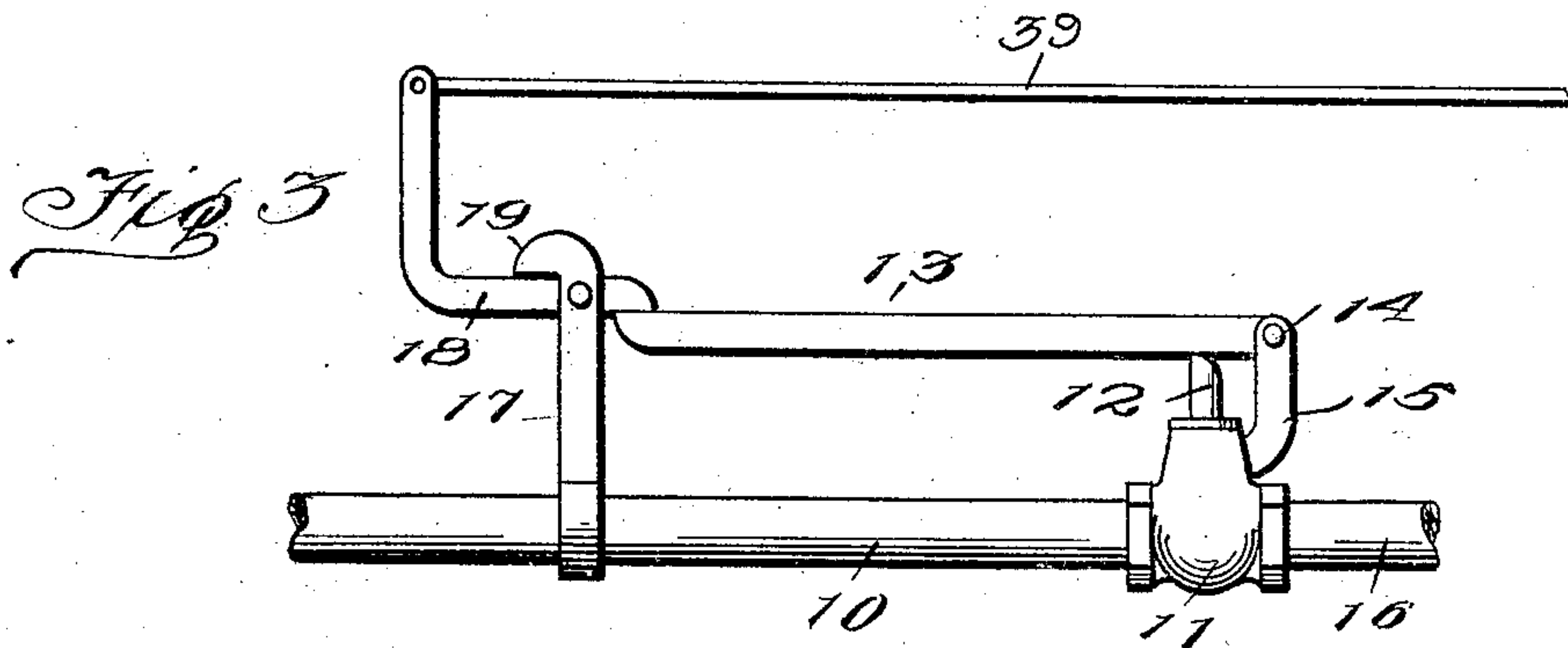
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

CLARK WILSON, OF HACKETTSTOWN, NEW JERSEY.

FIRE ALARM AND EXTINGUISHER.

No. 898,295.

Specification of Letters Patent.

Patented Sept. 8, 1908.

Application filed November 21, 1907. Serial No. 403,176.

To all whom it may concern:

Be it known that CLARK WILSON, a citizen of the United States, residing at Hackettstown, in the county of Warren and State of New Jersey, has invented certain new and useful Improvements in Fire Alarms and Extinguishers, of which the following is a specification.

This invention relates to fire alarms and extinguishers and has for its object to provide an apparatus of this character which may be readily and cheaply installed in public buildings, residences and like places and which will simultaneously alarm occupants in the buildings and extinguish the fire.

Other objects and advantages will be apparent from the following description and it will be understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a sectional view of a portion of a building showing my improved fire alarm and extinguisher installed therein, Fig. 2 is a horizontal sectional view on the line 2—2 of Fig. 1, Fig. 3 is a side elevational view of the valve and its operating mechanism showing the valve in a closed position, Fig. 4 is a similar view showing the valve in an open position, Fig. 5 is a side elevational view of the alarm mechanism, Fig. 6 is a vertical longitudinal sectional view therethrough.

Referring now more particularly to the drawings, there is shown a portion of a building A in which my improved fire extinguisher and alarm is installed.

In the drawings, there is shown a water supply pipe 10 which is preferably located beneath the ceiling and adjacent the walls of rooms, hallways or the like, and connected to this water-pipe, there are shown valves 11. These valves 11 are provided with vertically disposed valve stems 12, to which are pivotally mounted operating levers 13. The levers 13 are also pivoted at one end as shown at 14 to posts 15 which are carried by each valve 11. The valves 11 are connected to discharge pipes 16 and these pipes are preferably arranged at the ceilings of a room as shown. The pipes 16 are provided with upwardly extending posts 17, and pivotally mounted to each of these posts there are shown levers 18. The levers 18 are arranged

to extend over one end of each lever 13 of the valve stems 11 for holding the valves in a closed position normally. The posts 17 are provided with stops 19 which are arranged to limit the upward movement of the levers 18.

Adjacent the valves 11, there are shown non-conducting blocks 20, and these blocks are provided with a hollow portion 21 which opens outwardly of the block at one end and which terminates at its opposite end within a point of the opposite end of the block. This arrangement is such that a portion of the block is enlarged as shown at 22 and in this enlargement there is formed a longitudinally disposed passage 23. A plunger rod 24 is disposed with a portion in the passage 23 and a portion within the hollow portion 21 of the block, as shown. The rod 24 is provided with a plunger head 25 which is disposed within the portion 21 of the block, and arranged between the enlargement 22 and the inner face of the plunger 25 there is shown a coil spring 26. The blocks 20 are each provided with a contact piece 27, and this contact piece is arranged with a portion within the hollow portion 21 of the blocks 20. Each contact piece 27 is provided with a transverse pin 28, and this pin has portions 29 and 30 disposed in passages 32 which are formed in the walls of the block 20. The contact piece 27 is connected by a wire 33 to a battery 34 which may be located at a convenient point in the building or outside thereof if found desirable, and this battery is connected by way of a wire 35 to a bell 36 or other suitable alarm. The plunger rod 24 is provided with jam nuts 37 between which there is secured a wire 38 which also leads to the battery 34. A cord 39 has one of its ends attached to the plunger rod 24 and this cord is arranged in a suitable manner around the room of the building, and this cord thus serves to hold the plunger head 25 out of engagement with the contact 27. The other end of the cord is thus arranged to hold the lever with one end engaged above one end of the lever 13 whereby the valves 11 are held in a closed position. The pipes 16 are perforated as shown at 16' and by means of these perforations it will be seen that water may be forced through the same when the valves 11 are in an open position.

Upon burning of a building, the flames of a fire travel upwardly and toward the ceiling, and when the flames come in contact with the cord 39, the cord will of course be

burned, and the plunger rod 24 will thus be released to cause the plunger head 25 to contact with the piece 27 and the alarm will thus be sounded. The cord 39 will of course release the lever 13 also and the water which is admitted to the valves 11 under pressure will open the valves and the water will thus be discharged from the perforations 16' which are formed in the pipes 16.

10 What is claimed is:

The combination with water distributing pipes including valves therefor, operating levers for the valves, means engaged with said levers for normally holding the valves

closed, non-conductive blocks, a plunger 15 slidable within each block, a contact piece carried by each block, an electrical source, connections between the contact and the source, a bell in circuit with the source, connections between each plunger and the bell, 20 and inflammable cords connected with each plunger and each lever respectively.

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

CLARK WILSON.

Witnesses:

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JAMES FISHER.