J. W. STANTON.

Apparatus for Extinguishing Fire.

No. 203,564. Patented May 14, 1878.

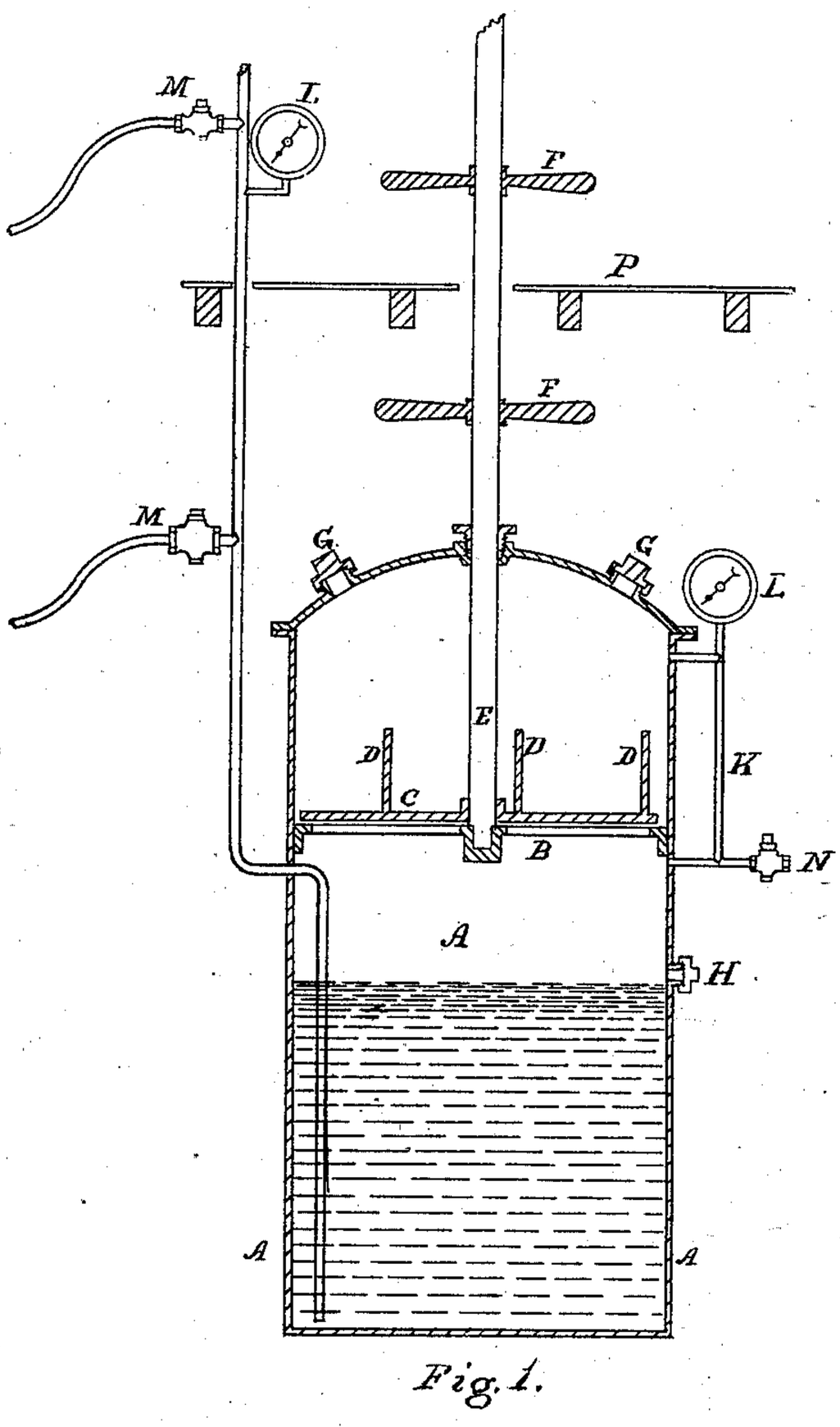

Fig. 1.

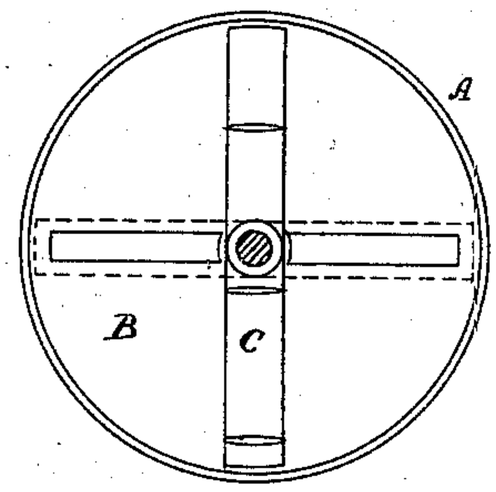

Fig. 2.

WITNESSES

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IMPROVEMENT IN APPARATUS FOR EXTINGUISHING FIRES.

Specification forming part of Letters Patent No. **203,564**, dated May 14, 1878; application filed May 2, 1878.

To all whom it may concern:

Be it known that I, JOHN W. STANTON, of Brooklyn, county of Kings, State of New York, have invented a new and useful Improvement in Apparatus for Extinguishing Fires, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to insure such an application of carbonic-acid gas for extinguishing fires, combined with water or any chemical fire-extinguishing liquid, as will extinguish a fire in the readiest manner.

A, Figure 1, is a cylinder for holding sulphuric acid and water. B is a slotted disk separating the upper chamber, in which is stored bicarbonate of soda; C, revolving slot cover or valve, with attachment of breakers or mixers D D D. E is an upright shaft, with arms F for rotating the cover C. The shaft E may extend from the apparatus, which may be placed in the basement or cellar of a building, up through the several stories, and be operated by the arms F from any floor. The shaft E, turning the cover C, permits the discharge of soda or other material for generating gas through the slots B into the acidulated water in the lower part of the cylinder A. G G are openings for filling chamber with soda or other material for generating gas. H is an opening for filling lower part of cylinder A with water and acid; K, an equalizing-pipe; L L, pressure-gages; M M, pipe and hose for discharging liquid upon fires. N is a pipe for discharging carbonic-acid gas into closed apartments or holds of vessels, for extinguishing fires, or transmission of pressure to other receptacles for holding liquids.

Fig. 2 is a top view of disk B, showing slots and cover C.

The operation is as follows: The lower part of cylinder A is filled to about two-thirds its capacity with acidulated water. The proper proportion of bicarbonate of soda to the acid used (say thirty pounds of soda to two gallons acid) is placed in upper part of cylinder on the slotted disk B, the revolving slot-cover C being in its place. The apparatus is then ready for use. On the occurrence of a fire the cover C is turned by the shaft E, the breakers D D D on the cover C breaking up the soda and causing the soda to fall through the slotted disk B into the acidulated water below, when the carbonic-acid gas is instantly generated and fills the pipes M M, and by turning the valves a stream can instantly be thrown onto the fire by the hose attached.

In case the apparatus is on board ship, a pipe would lead from cylinder A at N to the hold of the ship. A fire occurring, the gas would be generated as before, and by turning a valve at N would pass through the pipe into the hold, instantly extinguishing the fire.

Its application can be readily made for close compartments in buildings, mills, &c., in the same manner.

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

In a carbonic-acid-gas generator, the cylinder A, divided by the slotted disk B, combined with the cover C, having the breakers or mixers D D D, substantially as described, and for the purposes set forth.

JOHN W. STANTON.

Witnesses:
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