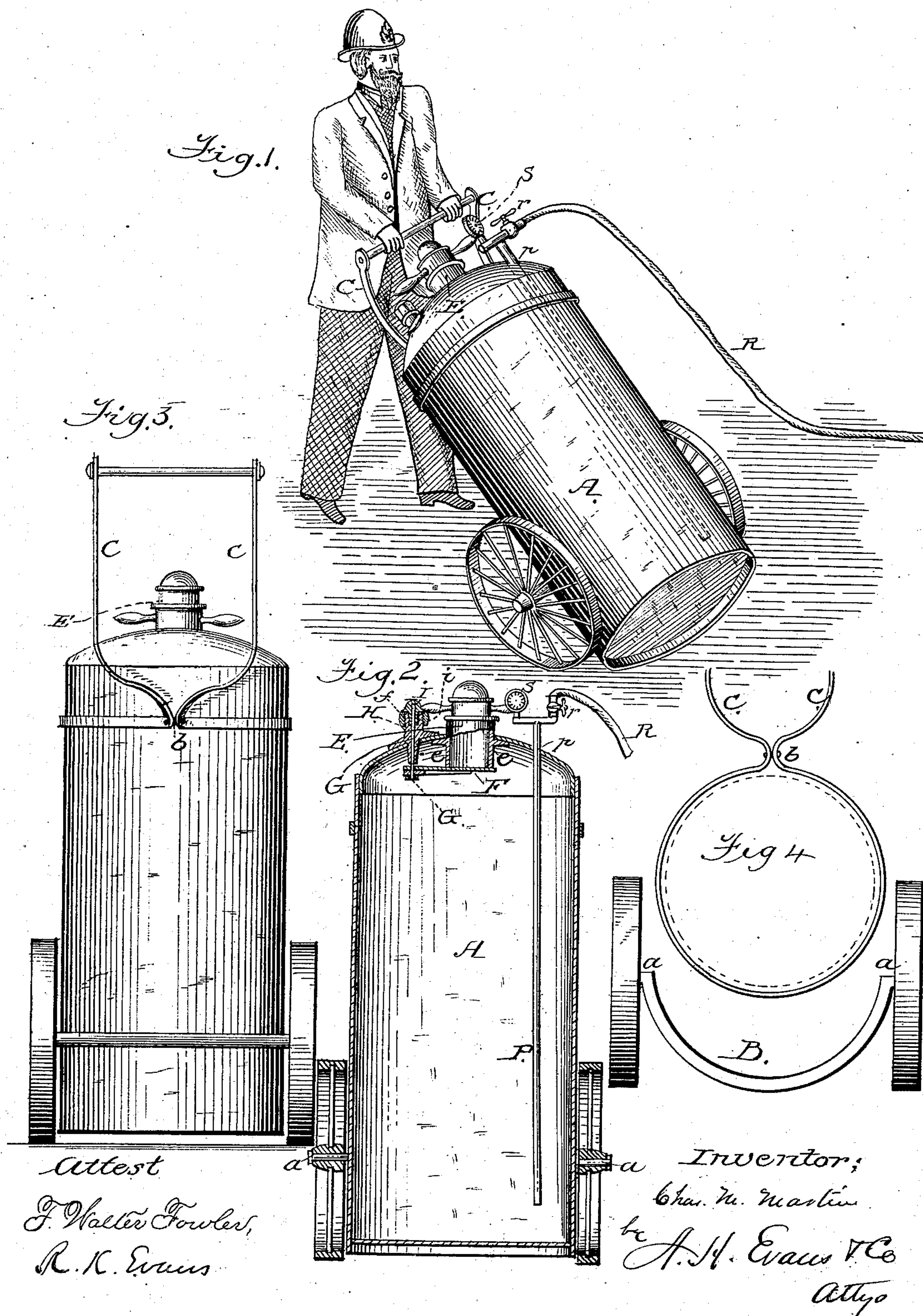


(No Model.)

C. M. MARTIN.
Fire Extinguisher.

No. 237,195.

Patented Feb. 1, 1881.



UNITED STATES PATENT OFFICE.

CHARLES M. MARTIN, OF NEW YORK, N. Y.

FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 237,195, dated February 1, 1881.

Application filed November 17, 1880. (No model.)

To all whom it may concern:

Be it known that I, CHARLES M. MARTIN, of the city and State of New York, have invented certain Improvements in that class of Fire-
5 Extinguishers known to the trade as "Warehouse-Engines," being mounted on wheels and intended for indoor use, of which the following is a specification.

My invention has for its object to cheapen
10 the construction of said engines and render them more certain of operation by avoiding all possible perforations of the cylinder; and my invention consists, first, in a novel construction and application of an axle for the
15 wheels; second, in a novel construction and application of a handle to manipulate; and, third, in a novel construction of devices for mixing the chemicals and preventing the escape of gas from the cylinder around the opening through which passes the shaft which operates the mixing devices, as hereinafter more
20 fully described and claimed.

In order that those skilled in the art may make and use my invention, I will proceed to
25 describe the manner in which I have carried it out.

In the accompanying drawings, making a part of this specification, Figure 1 is a rear elevation of a warehouse-engine, showing my
30 improvements. Fig. 2 is a vertical sectional view of the same. Figs. 3 and 4 are details to be referred to.

In the said drawings, A is the cylinder of a fire-extinguisher of the class named, below the
35 longitudinal center of which I apply, by brazing directly to the cylinder, a semi-circumferential axle, B, having journals *a a*, upon which fit the hubs of the wheels. By making this axle of the shape shown and brazing it directly to the cylinder throughout its extent I
40 am enabled to avoid the drilling of holes in the cylinder, which has heretofore been necessary to provide axle-fastenings in this class of machines.

It will be observed that in handling this extinguisher, as the body of the cylinder is always in a diagonal position when in transit, the cylinder rests in a cradle formed by the axle, and the strain of the weight does not
45 come upon the brazed fastening.

To avoid riveting to the cylinder I construct the handle C of a single bar of metal, encircling at its center cylinder A, brought together in the rear of the cylinder, fastened by
55 a rivet, *b*, and the ends bent abruptly upward,

flared outwardly, and curved into the desired shape to receive at *d d* a cross-bar, D, to facilitate the propulsion.

In the center of the top of the cylinder is a dome, E, to contain the soda, its top being secured by any well-known means, and having a projecting lip, *e e*, extending down within the cylinder, the edge of which bears snugly against a rotating valve or plate, F, sustained and operated by a rod, G, which passes through
60 a stuffing-box, H, inserted in the cylinder-head adjacent to the dome E. The tube containing the stuffing-box is provided on the outer surface of the upper end with a male screw-thread, *f*, to receive the thread of a screw-
65 cap, I, which is provided with a packing-ring, *i*, which fits over the squared end of the valve-operating shaft G, thereby giving additional security against the escape of gas around the valve-rod.
70

The discharging-pipe P ascends from near the bottom of the cylinder, passes through its top at *p*, and is provided with a T-connection, as shown, on one end of which is the pressure-gage S, and at the other end is applied the
75 hose R, there being an intervening valve, *r*.

This class of machines in actual practice is designed to be kept under constant pressure, generated at the time of charging. Consequently a minimum of perforations or breaks
80 of any description in the cylinder reaches a maximum of effectiveness in the operation of the machine.

Having thus described my invention, what I claim as new, and desire to secure by Letters
85 Patent, is—

1. The cylinder of a fire-extinguisher, A, in combination with the semi-circumferential axle B, brazed to said cylinder, substantially as set forth.
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2. In combination with the cylinder of a fire-extinguisher, the handle C, constructed as described, consisting of a single bar of metal encircling the cylinder, fastened at *b*, and the ends bent upward and flared outwardly to receive cross-bar D, substantially as described.
95

3. A fire-extinguisher's cylinder provided with a dome, E, valve F, valve-rod G, and stuffing-box H, in combination with the screw-cap I, covering rod G, and provided with packing-
100 ring *i*, all constructed, arranged, and operated as set forth.

Witnesses: CHAS. M. MARTIN.

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JNO. L. CONDRON.