

(No Model.)

2 Sheets—Sheet 1.

F. B. MANY & F. J. HARRISON.
CAN FILLING APPARATUS.

No. 450,467.

Patented Apr. 14, 1891.

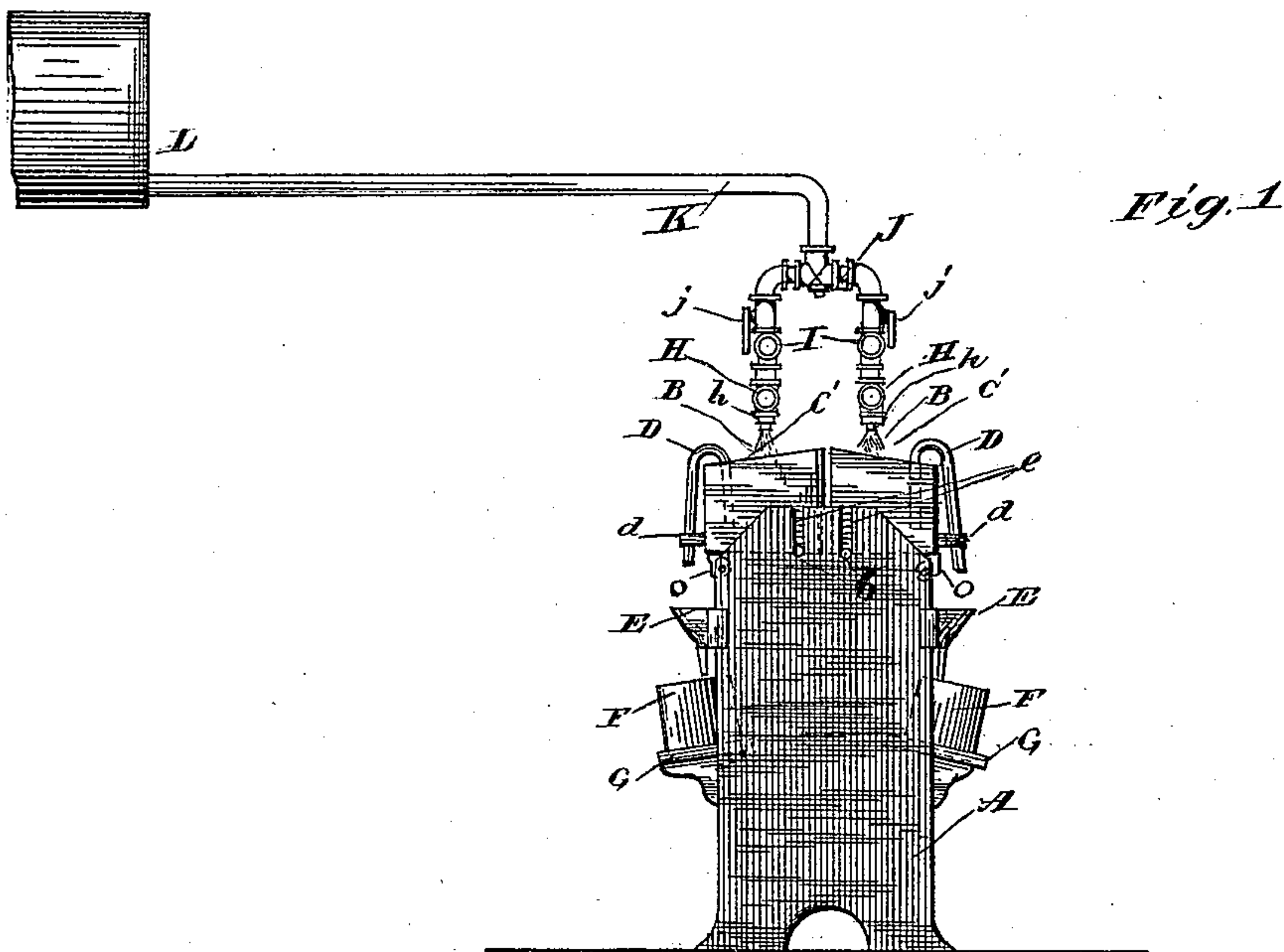


Fig. 1

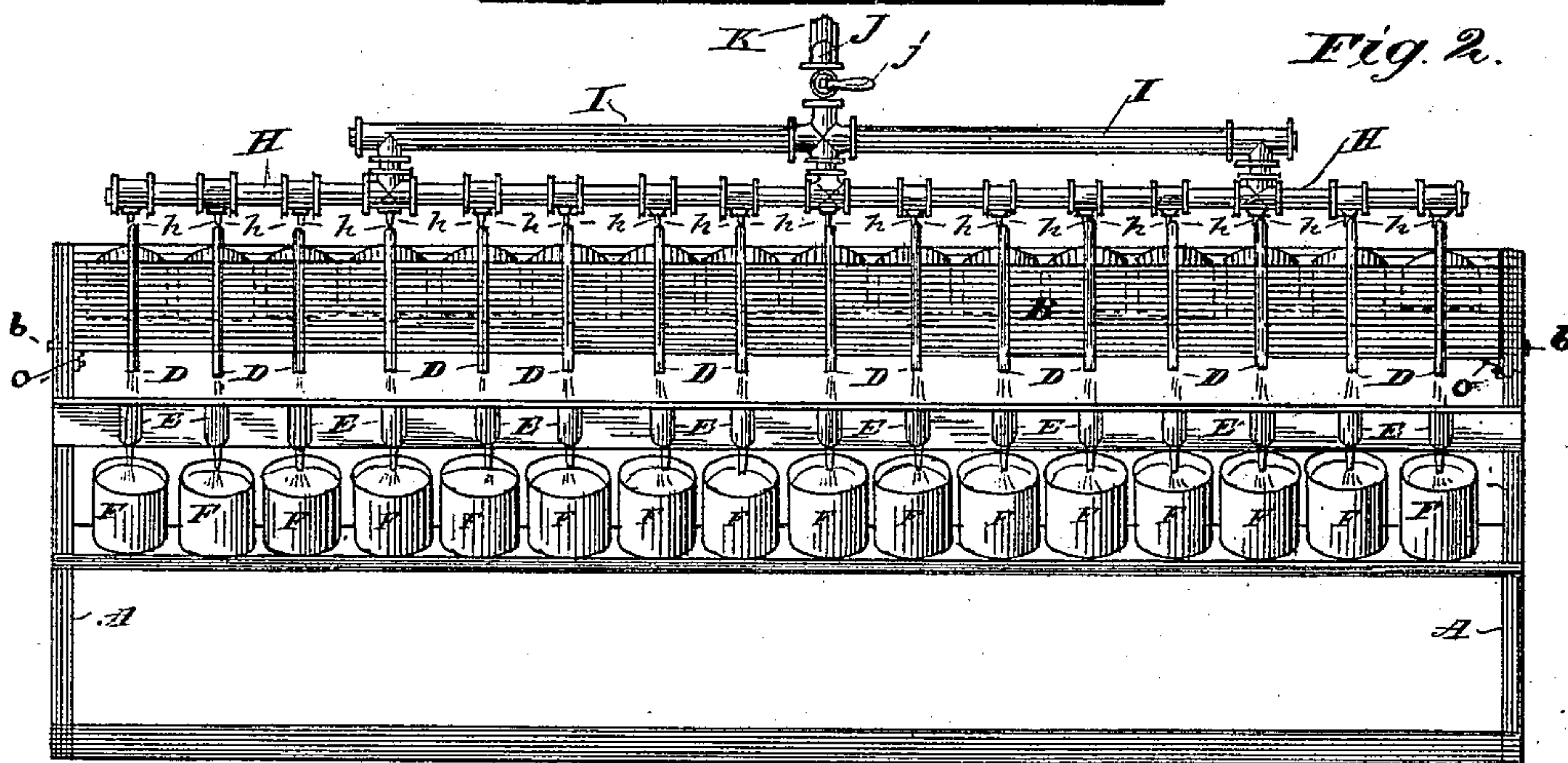


Fig. 2.

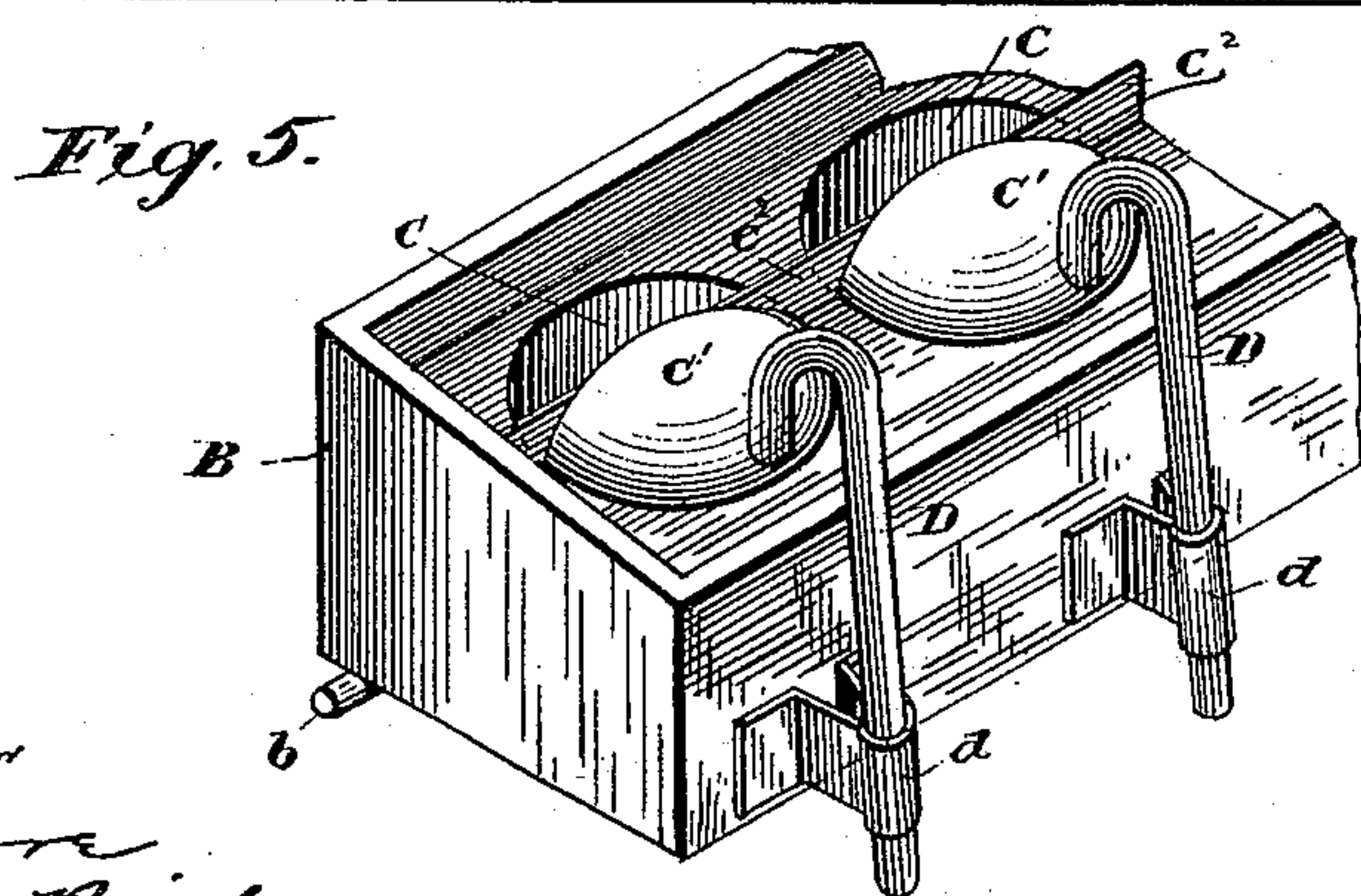


Fig. 5.

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2 Sheets—Sheet 2.

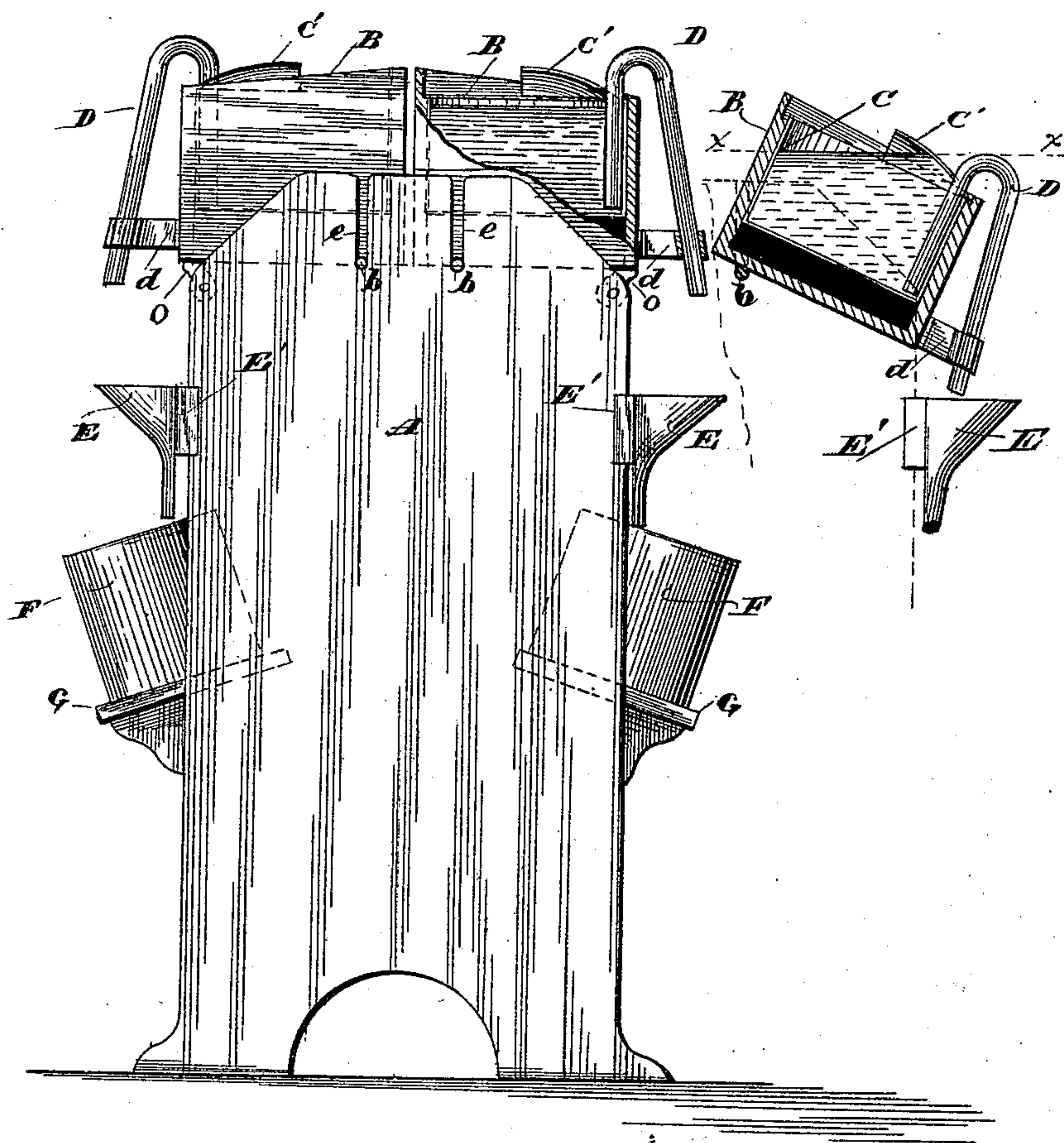
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Fig. 3.

Fig. 4.



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UNITED STATES PATENT OFFICE.

FRANK B. MANY AND FREDERICK J. HARRISON, OF CLEVELAND, OHIO.

CAN-FILLING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 450,467, dated April 14, 1891.

Application filed September 29, 1890. Serial No. 366,457. (No model.)

To all whom it may concern:

Be it known that we, FRANK B. MANY and FREDERICK J. HARRISON, citizens of the United States, and residents of Cleveland, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Can-Filling Apparatus, of which we hereby declare the following to be a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in apparatus for filling cans with gasoline, naphtha, or other volatile fluids when a large number of cans are to be filled at the same time.

The objects of the invention are to enable the operator to fill simultaneously a large number of cans with little opportunity for evaporation or escape of fluid and in a minimum space of time.

Our invention consists in the apparatus hereinafter described, with the details of construction and arrangement of parts as described herein, shown in the accompanying drawings, and more specifically pointed out in the claim.

In the drawings, Figure 1 is an end elevation of my can-filling device arranged for two sets of cans and fillers. Fig. 2 is a front elevation of the same, showing the arrangement of the filling-pipes. Fig. 3 is an enlarged end elevation showing one of the filling-tanks partly in section. Fig. 4 is a sectional view of the filling-tank tilted into the position for filling the cans, and Fig. 5 is a perspective view of the end of one of the troughs.

A in the drawings represents a main frame or stand upon which are pivotally supported at either end the filling troughs or frames B by means of the pivotal rods *b* in slots *e e* in the frame. These troughs or frames B run the whole length of the frame A and inclose each a row of metal reservoirs C, which are filled simultaneously with fluid from the pipe-nozzles *h* above. Each reservoir C is provided with a siphon D in front, the shorter arm being immersed in the reservoir and reaching to the bottom so as to drain it completely. A row of funnels E is arranged with flaring tops to take the liquid from the siphons D and convey it to the cans F, a

cross-bar E' and shelf G being arranged to support the funnels and cans. In the vertical position, as shown in Fig. 3, the bend of the siphon is too far above the surface of the liquid to cause a flow from the reservoir; but by tilting the frame B, as shown in Fig. 4, the bend in the siphon is brought to the same level as the fluid, and the contents are immediately caused to flow through the siphon into the funnel E.

To permit the trough B and the reservoir C to be tilted without spilling the fluid, a hood C' is placed over the front of the reservoirs, and a raised web C² connects the hoods C' continuously across the length of the trough. The front of the troughs is cut away for convenience of access to the reservoirs, while the raised back is also lined with metal.

The arrangement of the supply-pipes is clearly shown in Figs. 1 and 2, H being a continuous pipe over each trough provided with as many nozzles as there are reservoirs in each trough. I is a pipe with three or more connections for filling the lower pipe H. J is a cross-pipe connecting the two side pipes, and *j j* are cocks for admitting or shutting off the fluid from the reservoirs. K is the main supply-pipe, and L the reservoir.

The device shown is especially adapted to filling reservoirs for street-lamps, which are designed to burn for varying durations of time, and for this reason a number of reservoirs are required to fill each can with the amount of fluid necessary to maintain the lamp. To accomplish this result the reservoirs are made of varying depths, as shown in dotted lines in Fig. 2 at *b*, the deepest reservoir being at one end of the trough and the shallowest at the other end. The shallowest pans fill first, and any overflow from these runs into the open space between the back of the trough and hoods C and assists in filling the other reservoirs, and there is no waste.

Catches, as O O, upon the frame A support the troughs in a vertical position until it is desired to lift them, when they can be released and returned into position, after which the trough may be again elevated.

The advantages of this device are obvious, since a large number of cans can thereby be filled at once with little effort, and the exact

amount given each can desired to maintain a light for the required length of time.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In a can-filling device, a main fluid-reservoir, a supply-pipe K, leading from the reservoir, and a system of auxiliary feeding-pipes consisting of the cross-pipes J, operating valve

or valves j, horizontal intermediate pipes I, connecting-pipes i, and lower feed-pipes H, provided with nozzles h at regular short intervals.

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