2 Sheets—Sheet 1.

T. W. MORAN.

Barrel Filling Device.

No. 201,887. Patented April 2, 1878.

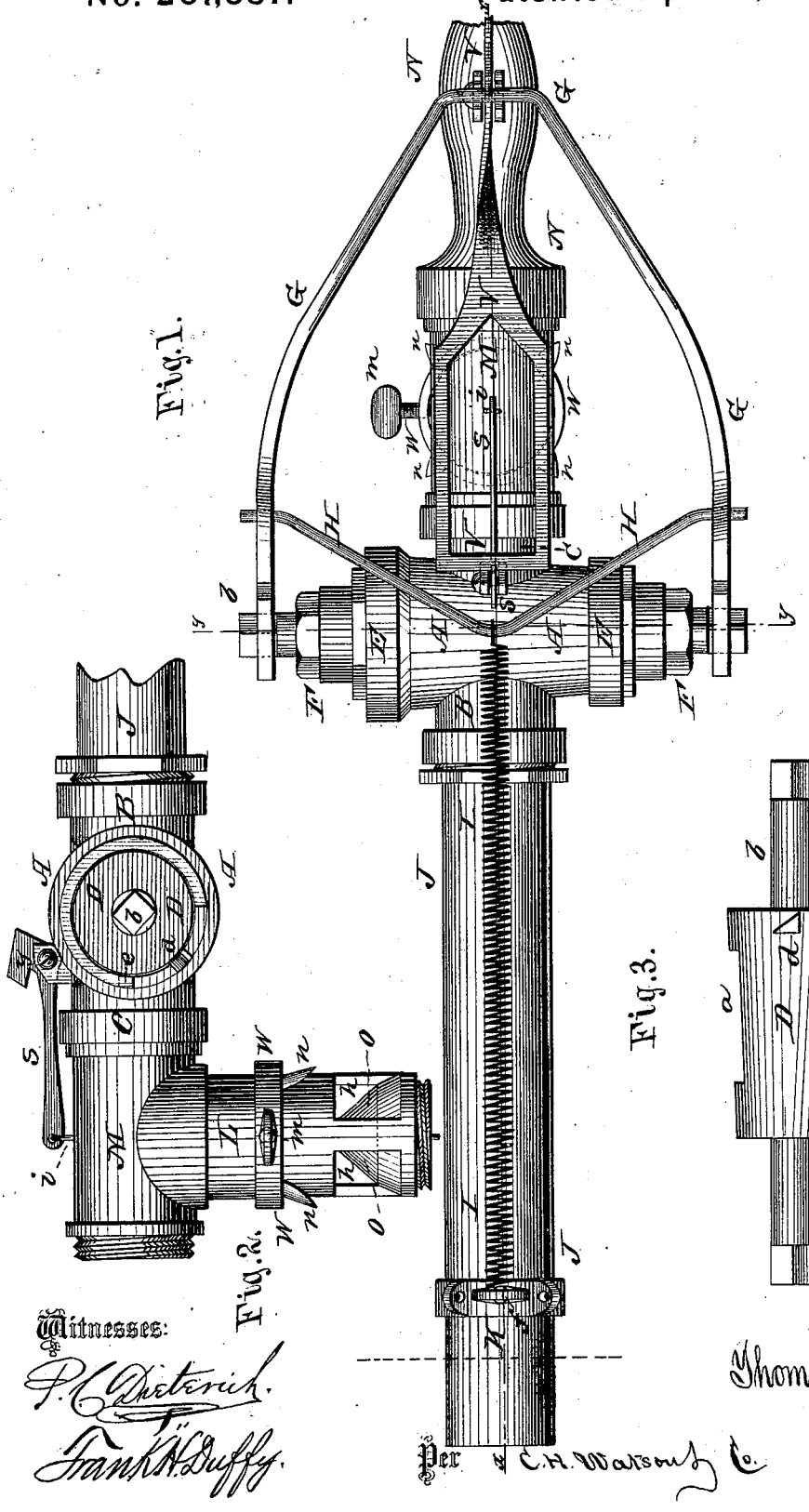

Fig. 1.

Fig. 2.

Fig. 3.

Witnesses:

P. C. Dieterich.

Frank H. Duffy.

Inventor:

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2 Sheets—Sheet 2.

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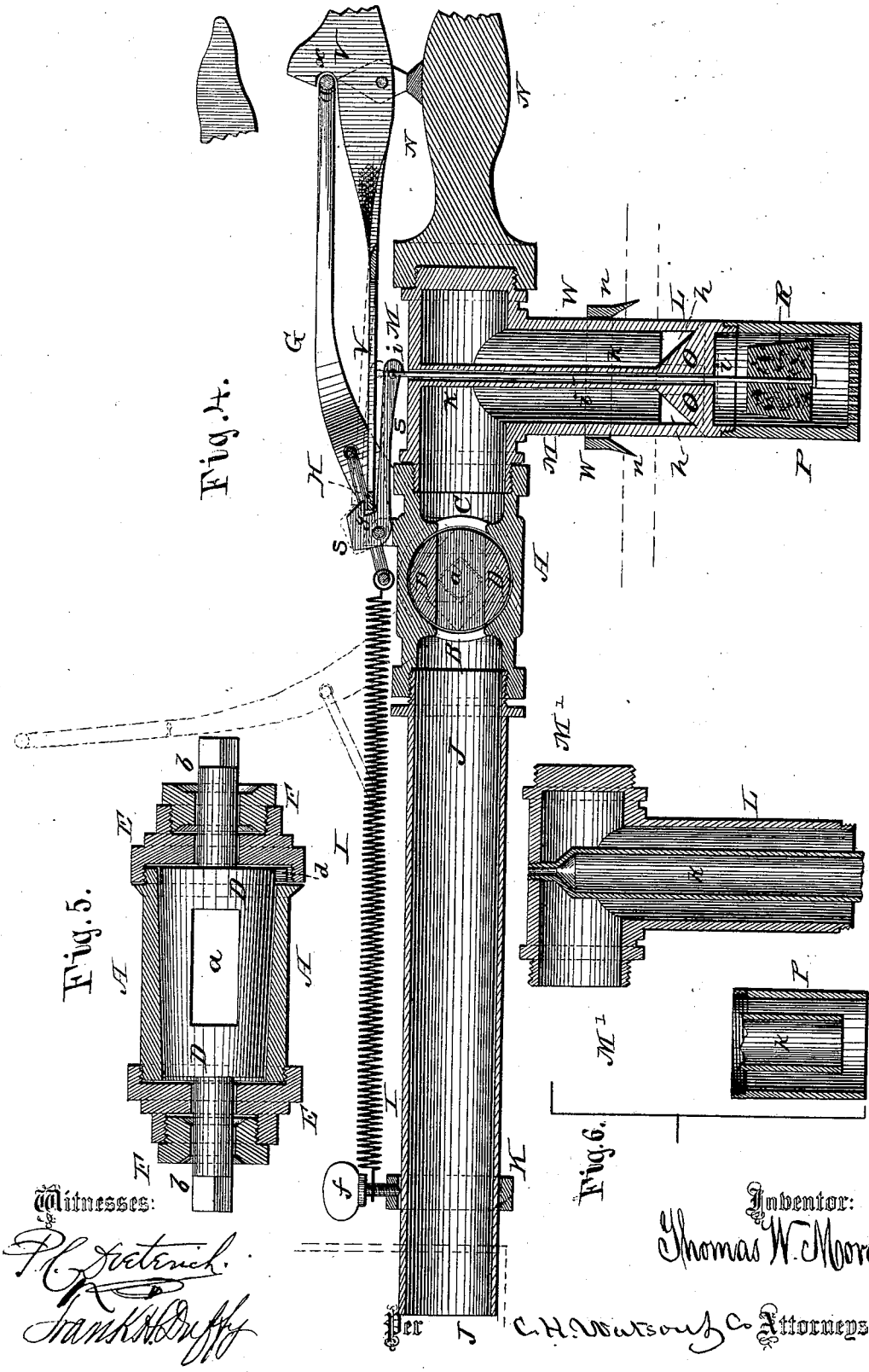

Fig. 4.

Fig. 5.

Fig. 6.

Witnesses:

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UNITED STATES PATENT OFFICE.

THOMAS W. MORAN, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN BARREL-FILLING DEVICES.

Specification forming part of Letters Patent No. **201,887**, dated April 2, 1878; application filed March 11, 1878.

To all whom it may concern:

Be it known that I, THOMAS W. MORAN, of Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Devices for Filling Barrels with Liquids; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to to make and use the same, reference being had the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of this invention consists in the construction and arrangement of a device for filling barrels with oils, whisky, and other liquids, as will be hereinafter more fully set forth.

In the annexed drawings, to which reference is made, and which fully illustrate this invention, Figure 1 is a plan view. Fig. 2 is a side elevation, with one of the heads removed. Fig. 3 is a side elevation of the key or valve. Fig. 4 is a central longitudinal section on line *x x*, Fig. 1. Fig. 5 is a central vertical section of the valve-casing on line *y y*, Fig. 1; and Fig. 6 is a modification of the T-head M.

A represents a cylindrical valve-casing, with inlet B and outlet C on opposite sides. D represents the cylindrical valve or key, with passage *a* through the same, and a stem, *b*, projecting from each end thereof. E E are heads screwed on the ends of the valve-casing A, and each head is provided with a stuffing-box, F, as shown.

The valve D is, near one end, provided with a V-shaped nib or projection, *d*, which catches in a V-shaped notch or shoulder, *e*, when the filler shuts off.

On the stems *b b* of the valve or key D are placed the ends of a bent lever or lever-frame, G, and in this is pivoted a bail, H, to which a spiral spring, I, is connected.

In the inlet B of the valve-casing is screwed a pipe, J, to form connection with the tank or reservoir; and on said pipe is a collar, K, adjusted thereon and fastened at any point by a set-screw, *f*.

In the outlet C of the valve-casing is screwed one arm of a T-coupling, M, upon the opposite arm of which is attached a handle, N, or any other suitable device for closing the same.

The middle arm of the T-coupling M is extended downward, forming a cage, L—that is to say, its end is closed and a series of openings, *h h*, are made in the sides thereof for the escape of the liquid into the barrel.

From the closed end of the cage L projects upward a cone, O, which directs the fluid through the openings *h h*, and from the apex of said cone extends a tube, *k*, up to the top of the T-coupling M.

On the lower end of the cage L is screwed a cup, P, having its bottom perforated with numerous holes, as shown; and within said cup is placed a cork float, R, from which a wire, *i*, extends upward through the cone O and tube *k*, and its upper end connected to a pivoted trigger, S. This trigger is intended to hold the rear end of the main trigger V, which is pivoted between ears on the handle N.

The operation of the device is as follows: The spring I is pulled back and the screw *f* taken out of the collar K. This screw is passed through the eye or ring in the end of the spring, and then screwed into the collar again, said collar being then adjusted and fastened at such a point on the tube as to give the proper tension to the spring. The lever or handle G is then pulled down forward with the notch at *x* in the main trigger V. The outer end of this trigger is then pressed upward, and the inner end thereof will then drop readily into the notch at *y* of the small trigger S. The filler is then set open, and the liquid passes from the tank or reservoir into the barrel, it being, of course, understood that the parts L and P are inserted through the bung-hole into the barrel.

On the cage L is a movable collar, W, with prongs *n n* and a set-screw, *m*, for fastening the same. These prongs rest on the barrel, and prevent the closing up the bung-hole, which might otherwise occur, so that the air could not escape.

When the barrel gets nearly full the liquid enters into the cup P and raises the cork or float R until the trigger S is lifted to release the main trigger V, when the spring I at once throws the handle G upward and closes the valve.

This device is very simple, and has no intricate machinery to get out of order or impede the flow of liquid through it. Consequently it will fill about one-fourth more liquid in the same given time and under the same pressure. When the liquid is flowing the valve is straight open, and hence cannot be affected by pressure, but works satisfactorily under any head or pressure.

The V-shaped nib or pin *d* catches in the V-shaped shoulder *e*, when the filler not only stops the key or valve at the proper time to effect a clean and full cut-off, but also forces the key in perfectly tight, and holds it so that any pressure which may be brought to bear cannot affect it or make it leak. The handle G is accessible to the operator at all times.

The double trigger may be so made as to divide any amount of friction and allow the use of any strength of spring, and at the same time be as easily and readily affected by the float when the liquid in the barrel reaches the designated point.

The tube *k*, surrounding the float-wire *i*, is soldered fast at both ends, so that it cannot leak.

For filling whisky and such liquids, when it is necessary the barrels should be entirely full, it is better to use the T-coupling M′ with the discharge through the end, and a small bottle as float.

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

1. The V-shaped pin *d* upon the valve D and the corresponding shoulder *e* on the valve-case, for the purposes herein set forth.

2. In combination with the valve D, the lever G, bail H, spring I, and adjustable collar K and set-screw *f* on the inlet-tube, for the purposes herein set forth.

3. The cage L, with side openings *h*, cone O, and tube *k*, for the purposes herein set forth.

4. The double trigger S V, in combination with the float, float-wire, and lever-frame, for the purposes herein set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

THOS. W. MORAN.

Witnesses:
B. F. D. FITCH,
J. B. PILLARD.