

(Model.)

D. N. SMITH, A. M. SEYMOUR & J. B. RAYNOR.
Oil-Can Spout.

No. 228,132.

Patented May 25, 1880.

Fig 1.

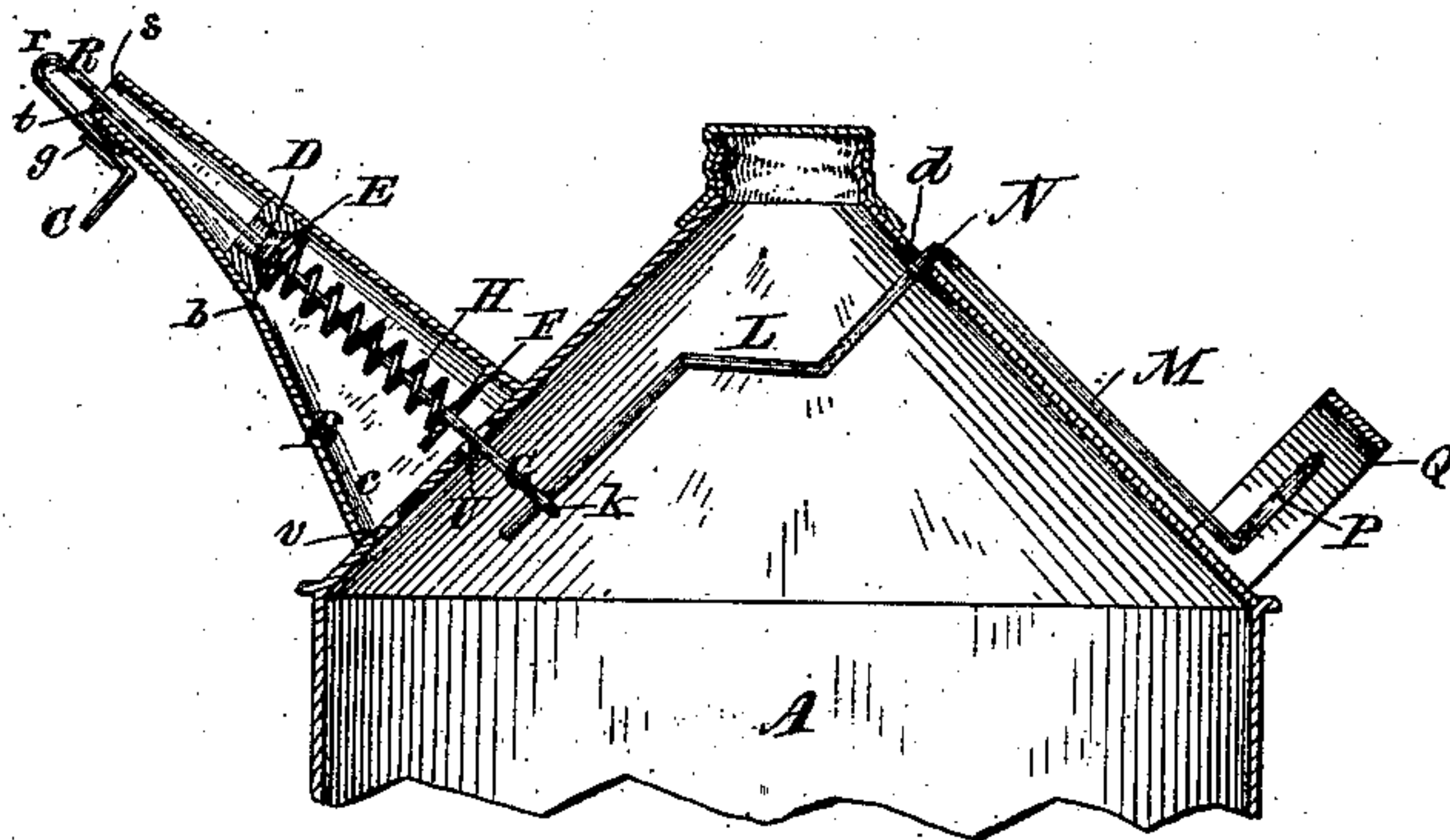


Fig 2.

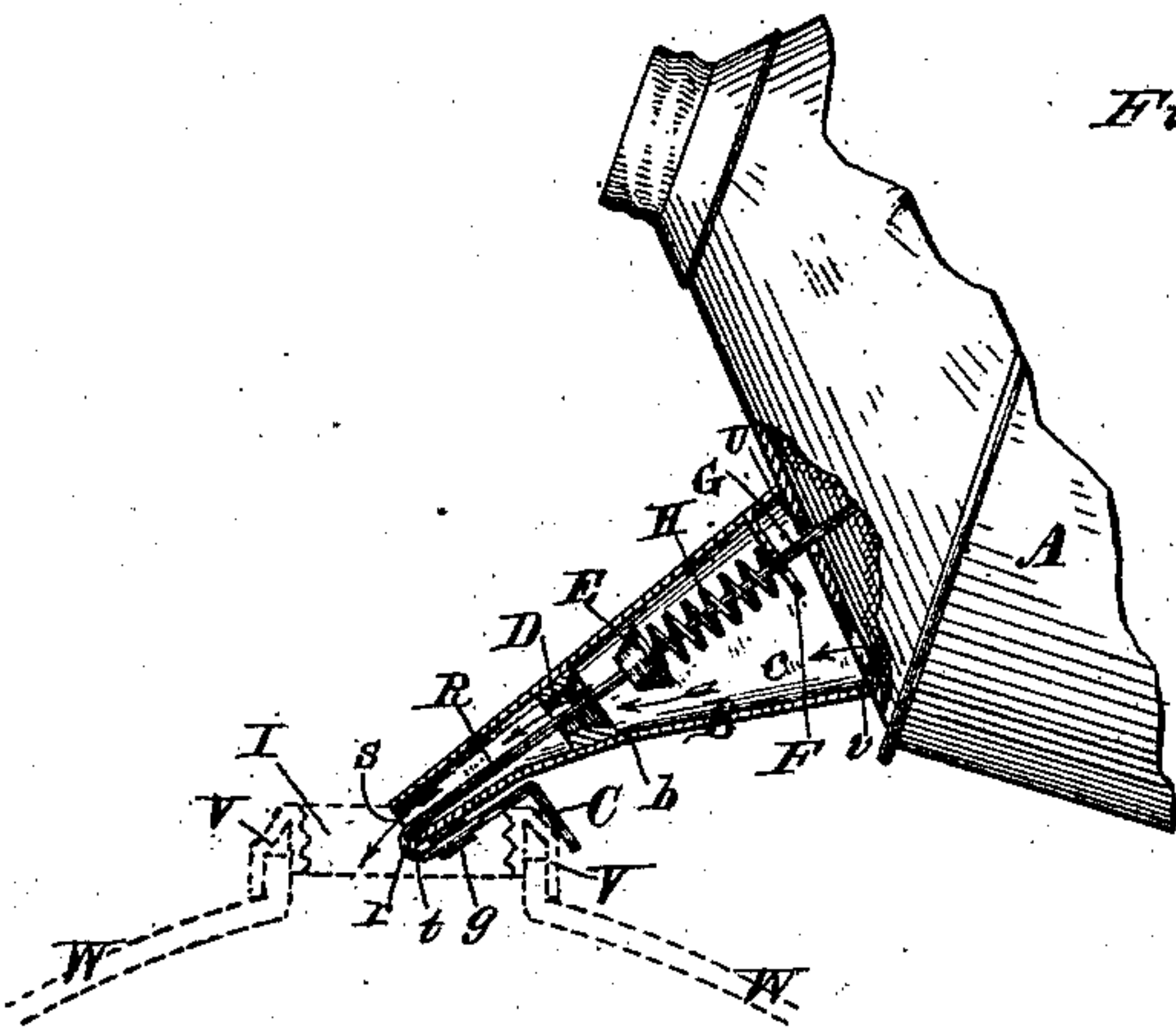
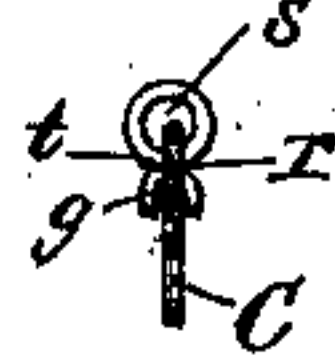


Fig 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

DAVID N. SMITH, ARBA M. SEYMOUR, AND JOHN B. RAYNOR, OF
MAZO MANIE, WISCONSIN.

OIL-CAN SPOUT.

SPECIFICATION forming part of Letters Patent No. 228,132, dated May 25, 1880.

Application filed March 26, 1880. (Model.)

To all whom it may concern:

Be it known that we, DAVID N. SMITH, A. M. SEYMOUR, and JOHN B. RAYNOR, of Mazo Manie, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Oil-Can Spouts; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The invention has relation to the class of cans for holding and supplying oil in which the spout is provided with an outlet-valve.

The object of the invention is to facilitate the discharge of the oil by providing a rest for the spout during decanting, and so connecting the rest with the valve that the valve shall automatically open when the rest is used; also, by providing a freer channel for the oil up to the valve; and, further, to supply the valve with a better retracting system, and to protect the same from injury and limit its motion.

The invention consists in the extension of the valve-stem above the valve to a sufficient length, providing it with a shoulder at its free end for application to the rim of the receiving-vessel, locating the shoulder on the under side of the spout near its orifice, and immediately bending the stem over the under lip of the orifice. Between the shoulder and the lip the stem runs in a guide. The bend of the stem is so located beyond the lip that when the stem is pushed down as far as the bend will allow the valve will be opened to just the extent desired.

It consists, also, in the employment for the retraction of the valve of a single lever, to which the wall of the can opposite the spout serves as a fulcrum, one leg of the lever being within the can-body, hooked to the valve-stem, and the other leg being without the can-body, terminating in a thumb-piece.

It consists, also, in the employment of a stop-guard over the thumb-piece.

In the accompanying drawings, wherein the same letter indicates the same part wherever it occurs, Figure 1 is a longitudinal vertical section through top and spout, showing the

valve closed. Fig. 2 is a section of the spout, showing the valve automatically open and the shoulder resting on the receiver. Fig. 3 is a front-end view of the spout, showing the outer end of the valve-stem.

A is the body of the can. B is the spout, which is constructed with a straight back and an elongated base. It narrows rapidly from its junction with the can to the point *b* about midway of its length, and thence slightly to the orifice *s*. The enlargement indicated at *c* is thus secured. At the angle of the walls formed by this construction, at *b*, is located the valve-seat D, perforated longitudinally for the passage of the oil.

E is a conical valve, bearing upon the seat D, and closing its perforation by being projected against the seat by the spiral spring H, which lies back of the valve within the spout along its upper wall, having for its seat the shelf F, which lies within the spout and projecting from its upper walls.

G is the lower stem of the valve E, and, passing axially through the spiral spring H, through the shelf F, and through the wall of the can at U into the body of the can, terminates near U in a loop, *k*, to receive the end of the leg L of the lever L M. The lever L M is a single bar passing through the opposite wall of the can through a hole, N, near the top. The bent leg L descends from N within the can to its engagement with the valve-stem G, and the leg M descends from N along the outside of the can to a convenient point, where it terminates in a thumb-piece or trigger, P.

The lever L M swings upon the can-wall in the hole N as a fulcrum. It is provided at N, within the can, with a disk or nut, *d*, to prevent its slipping.

Q is a bow or basket-guard of metal, fastened to the can over the thumb-piece P, to protect it from accidental injury, to limit its sweep, and to furnish a guide and purchase to the hand of the operator.

R is the upper stem of the valve E. It is a rod joined to the valve at its apex, extended up and out of the spout at its mouth *s*, bent downward and backward at *r* over the under lip *t* of the spout, and bent downward again to form the shoulder C.

The spout is provided with a guide, *g*, in which the stem R rides between the shoulder

C and the bend at *r*, and by which it is protected from lateral displacement. That part of the can-wall which is covered by the base of the spout exhibits two perforations—one at 5 U, near the roof of the spout, for the passage of the stem G, and one somewhat larger at *v*, near the floor of the spout, for the passage of the oil into the enlargement *c* of the spout beneath the spring H, on its way to the outlet of the 10 spout.

The spring-valve E operates to keep the spout closed and to protect the oil from loss and injury. When a supply is desired from the can the operator may retract the valve by pressing the thumb-piece P against the bow Q, 15 whereupon the lever L M swings upon its fulcrum at N, the leg I is carried toward a perpendicular position, and the valve-stem G yields to the traction exerted at *k*. The valve 20 may also be opened by pressure upon the shoulder C.

Fig. 2 represents the can tipped in the act of discharging oil into a vessel, W W, at its mouth I, the valve being automatically lifted 25 from its seat by the impingement of the shoulder C of the valve-stem R against the rim V of the vessel W W. In this operation not only does the application of the shoulder C to the rim of the port of the receiving-vessel open 30 the valve, but at the same time the can and spout are guided to position and supported and steadily retained in position by the shoulder, and the stream of oil is directed and steadied.

35 We are aware that it is not new to construct oil-cans of this class with a valve arranged to be pushed open by pressure upon the point of a valve-stem protruding from the orifice of the spout.

40 We are also aware that in the English Patent No. 1,149, A. D. 1865, to Sibley, the spring

outlet-valve of an oil-can is pushed open by pressure upon a shoulder terminating the valve-stem. In the Sibley invention, however, 45 for the purpose of guiding the stem, the spout is made with an opening in its side, in which the bend of the stem slides as the valve is opened or closed. This disposition of the stem is objectionable, as the oil escapes through the opening before it reaches the proper orifice. 50

In our invention we employ to guide the stem a trough attached to the spout, and we are thus enabled to use a spout without the side opening.

What we claim is— 55

1. In combination with an oil-can having a spout provided with a spring outlet-valve opened by a thumb-piece on the exterior of the can, the bow Q, operating as a guard to protect the thumb-piece and as a stop to limit 60 its motion, substantially as described.

2. In an oil-can, the combination, with the spring outlet-valve and with its stem, of the bent lever L M, having its fulcrum upon the edge of the opening through which it passes 65 into the can, all constructed and operating substantially as and for the purpose described.

3. In combination with an oil-can spout having no lateral notches or openings, and provided with a spring outlet-valve having the 70 valve-stem R and the shoulder C, the trough *g*, attached to the spout and adapted to guide the stem R, all substantially as described.

In testimony that we claim the foregoing we have hereunto set our hands this 13th day 75 of February, 1880.

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JOHN B. RAYNOR.

Witnesses:

ALBERT H. SCHILDT,
H. SCHILDT.