

E. A. Floyd,
Pump Lift.

N^o 48543.

Patented July 4, 1865.

Fig. 2.

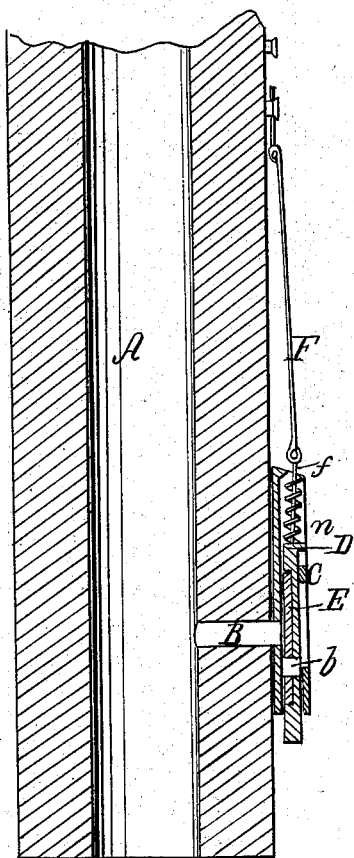
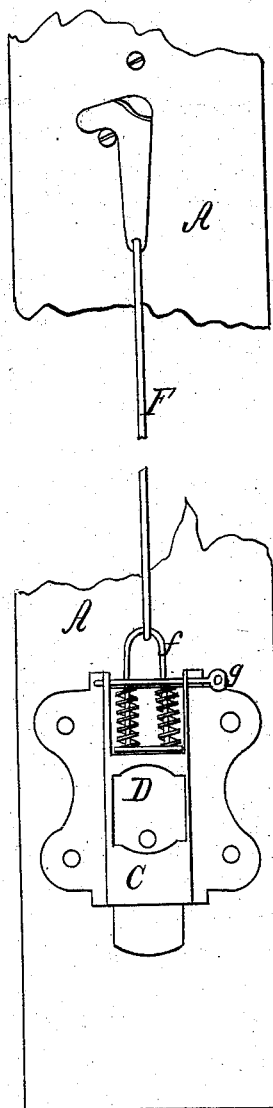


Fig. 1.



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EDWARD A. FLOYD, OF MACOMB, ILLINOIS.

IMPROVEMENT IN ESCAPE-VALVES FOR PUMPS.

Specification forming part of Letters Patent No. **48,543**, dated July 4, 1865.

To all whom it may concern:

Be it known that I, EDWARD A. FLOYD, of Macomb, in the county of McDonough, in the State of Illinois, have invented a new and useful Improvement in Pumps; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation of my improvement; and Fig. 2 is a vertical section, showing the construction of the same.

The nature of my invention consists in a device by means of which the water contained in a pump may be released and allowed to flow out to a point below the freezing-line, so that there need never be danger of bursting pump-pipes during cold weather.

That others may understand its construction and operation, I will particularly describe it.

A is the pump-pipe, and at any convenient point below the line of freezing I perforate it, as at B. Over this hole I secure the plate C, which has a vertical channel at the back, in which the slide D is placed, so that it covers the hole B. The said slide is recessed at the back, so as to accommodate an elastic water-proof packing, E, as a piece of thick leather or india-rubber, &c.

To the top of the slide D, I secure a cord or wire, F, which extends upward to a point within convenient reach of the hand, and is provided at its upper end with a hook or other

convenient means of holding it at any desired point. Around the wire F (or staple *f*, as shown) I place a spiral spring, *n*, the lower coil of which rests upon the slide D and the upper coil against a cross-pin, *g*, or other firm attachment, so that as the slide D is raised the spring is flexed and will cause the slide to return as soon as the moving power is removed.

The operation of my device is as follows: When the slide D is in its normal condition the slide or gate D covers with its elastic backing the hole B, so that there can be no escape of water through it; but if it is feared that during the time when the pump will not be used it will be liable to freeze in the upper part, the slide is raised by means of the wire F until the hole *b* through the slide D coincides with the hole B through the pipe of the pump, when it is evident the contained fluid will be allowed to escape, and all liability to burst will be obviated. Before the pump can be used again it will be necessary to lower the slide so as to cover the hole B again.

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

The slide D, constructed as shown and described, operated by the stem F and spring *n*, as and for the purpose herein set forth.

EDWARD A. FLOYD.

Witnesses:

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