

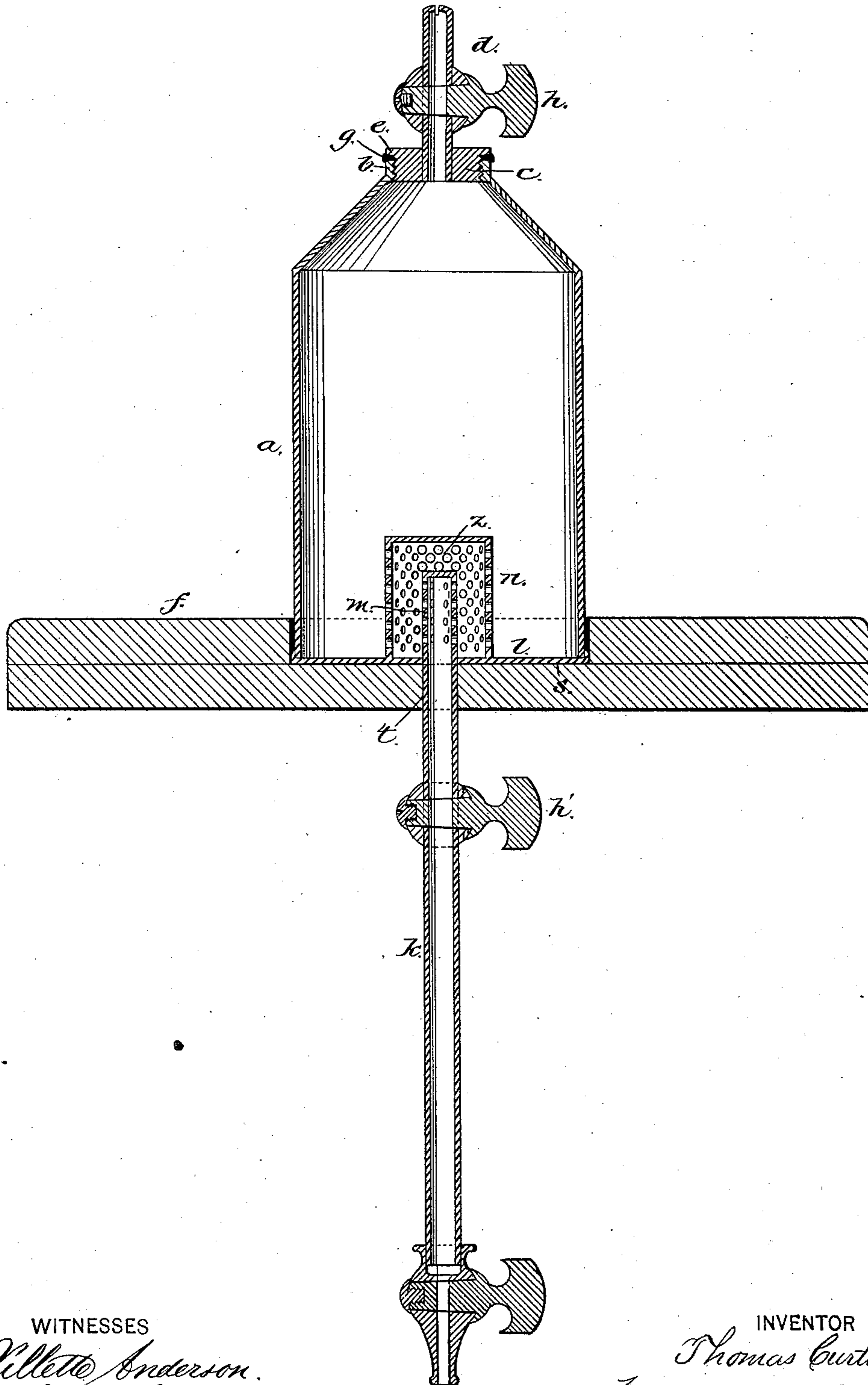
(No Model.)

T. CURTIS.

INEXTINGUISHABLE SELF IGNITING SIGNAL LAMP.

No. 253,350.

Patented Feb. 7, 1882.



WITNESSES

Willet Anderson.
Philip C. Masi.

INVENTOR

Thomas Curtis.
by Anderson & Smith
Lis ATTORNEYS

UNITED STATES PATENT OFFICE.

THOMAS CURTIS, OF OCALA, FLA., ASSIGNOR OF ONE-HALF TO D. O. CRANE
AND A. A. THOMAS, OF WASHINGTON, DISTRICT OF COLUMBIA.

INEXTINGUISHABLE SELF-IGNITING SIGNAL-LAMP.

SPECIFICATION forming part of Letters Patent No. 253,350, dated February 7, 1882.

Application filed November 19, 1881. (No model.)

To all whom it may concern:

Be it known that I, THOMAS CURTIS, a citizen of the United States, resident at Ocala, in the county of Marion and State of Florida, have invented certain new and useful Improvements in Inextinguishable Self-Igniting Signal-Lamps; and I 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 drawing, and to letters or figures of reference marked thereon, which forms a part of this specification.

This invention has relation to lamps for use in burning compositions of calcium and phosphorus; and it consists in the construction and novel arrangement, in connection with the hollow body or reservoir, of the upper or burner tube, having a stop-cock and screw-connection, the lower tube having its end extended into the reservoir and perforated, the perforated wall in the reservoir around the inside end of the lower tube, and the stop-cock in said tube, all as hereinafter set forth, and especially pointed out in the claim appended.

In the accompanying drawing, the letter *a* designates the zinc body or receiver of the lamp, which is usually constructed with a conical upper portion, terminating in an open neck, *b*, which is threaded to receive the screw-stem *c* of the burner *d*. This stem is formed with an annular shoulder, *e*, next the thread, and an annular packing, *g*, is placed between this shoulder and the neck *b*, in order that the joint may be perfectly air-tight. In the burner *d* is placed a stop-cock, *h*.

Fixed in the bottom of the body *a* is the inlet-tube *k*, which extends downward from the bottom *l*, and is provided with a stop-cock, *h'*. The upper end, *m*, of this tube projects within the receptacle *a*, and is perforated with a number of small holes usually, as indicated in the drawings. Around this end of the tube is lo-

cated a perforated wall or guard, *n*, which is secured to the bottom of the receiver and serves to prevent small pieces of the composition from falling into the tube. It also forms a chamber, *z*, around the end *m* of the tube, into which water is admitted.

A float, *f*, made of cork, wood, or other suitable material, is used in connection with the receiver. The float is made with a central aperture, *t*, for the lower stem or tube, *k*, and a seat, *s*, is usually formed in the float to keep the lamp steady.

The lamp is prepared for use by removing the burner from the neck and filling the receiver through the opening in the top as full as possible. The burner is then screwed on, and both stop-cocks being closed, the lamp is ready for use. It is important that the lamp should be perfectly air-tight. When it is to be used it is placed on the water and both stop-cocks opened. It will then show a flame, which will continue until the material is exhausted. The flame of this composition being unquenchable by wind or water, the lamp will be found invaluable for use on the water where shipping interests are concerned.

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

The air-tight lamp-body *a*, having the screw-neck *b*, packing *g*, screw-burner *d*, and stop-cock *h* at its upper end, and at its lower end the downwardly-extending inlet-tube *k*, its perforated upper end, *m*, within the receiver, the perforated inclosing-wall *n* of the chamber *z* around said end, and the lower stop-cock, *h'*, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS CURTIS.

Witnesses:

ZE. BUTT,

SAML. E. MARSHALL.