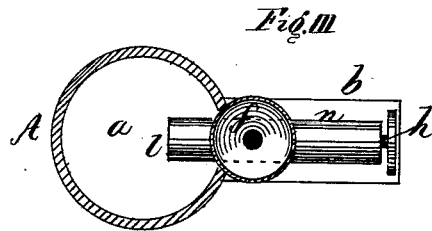
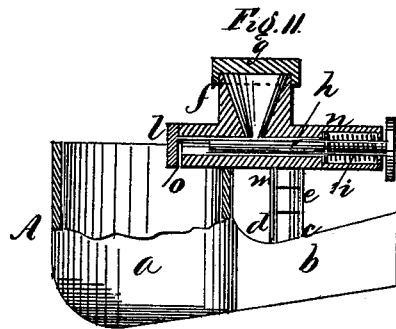
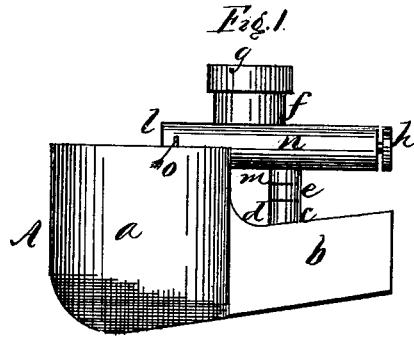


W. H. FISHER & H. U. KISTNER.
Tobacco-Pipe.

No. 198,285.

Patented Dec. 18, 1877.



Witnesses:
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Richard Lerner.

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UNITED STATES PATENT OFFICE.

WILLIAM H. FISHER AND HARRY U. KISTNER, OF SELIN'S GROVE, PA.

IMPROVEMENT IN TOBACCO-PIPES.

Specification forming part of Letters Patent No. **198,285**, dated December 18, 1877; application filed April 14, 1877.

To all whom it may concern:

Be it known that we, WILLIAM HENRY FISHER and HARRY ULSH KISTNER, both of Selin's Grove, Snyder county, State of Pennsylvania, have invented new and useful Improvements in Tobacco-Pipes; and we hereby declare that the following is a true and exact description of our invention, which will enable others to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon.

The object of our invention is to provide for a lighting attachment to a tobacco-pipe, by aid of which the pipe may always be lighted with ease and certainty, as well in the open air as indoors.

Referring to the drawings, Figure I is a side view of a tobacco-pipe embodying our invention. Fig. II is a sectional elevation, and Fig. III is a plan view, of the same.

A is the pipe, with bowl *a* and stem *b*. To the top of the stem *b*, at *c*, is formed the vertical lug *d*, with a right-handed screw-thread. To the top of this lug *d* is screwed the coupling *e*, which joins the lug *m* on the lower side of the horizontal tube *n*, which rests upon the top of the bowl *a*, and protrudes into the interior of the same.

About in the center and on the top of the horizontal tube *n* is placed the reservoir *f*, which

is provided with the loose cap *g*. Into the horizontal tube *n* is placed the piston *h*, around which is coiled the spring *i*, which habitually throws the piston into the tube. On the inner end of tube *n* is formed a guard, *l*. Between this guard and the mouth of the tube is a vertical slot, *o*.

The operation of our invention is the following: The reservoir is filled with igniting-balls, made of any suitable material which will ignite by concussion. The outlet of the reservoir *f* is made only large enough to admit one ball at a time dropping down into the tube *n*, when the piston is drawn out sufficiently to admit the ball. When the piston is allowed to recoil the ball is forced against the guard *l*, and will then be ignited by the concussion, the flame being communicated downward through slot *o* upon the tobacco in the bowl.

Having thus described our invention, we desire to claim—

The tube *n*, with reservoir *f*, guard *l*, slot *o*, piston *h*, spring *i*, and lug, in combination with bowl *a*, stem *b*, with lug *d*, and coupling *e*, substantially as and for the purpose set forth.

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Witnesses:

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