

P. RYAN.

Combined Torch and Fire-Lighters.

No. 135,592.

Patented Feb. 4, 1873.

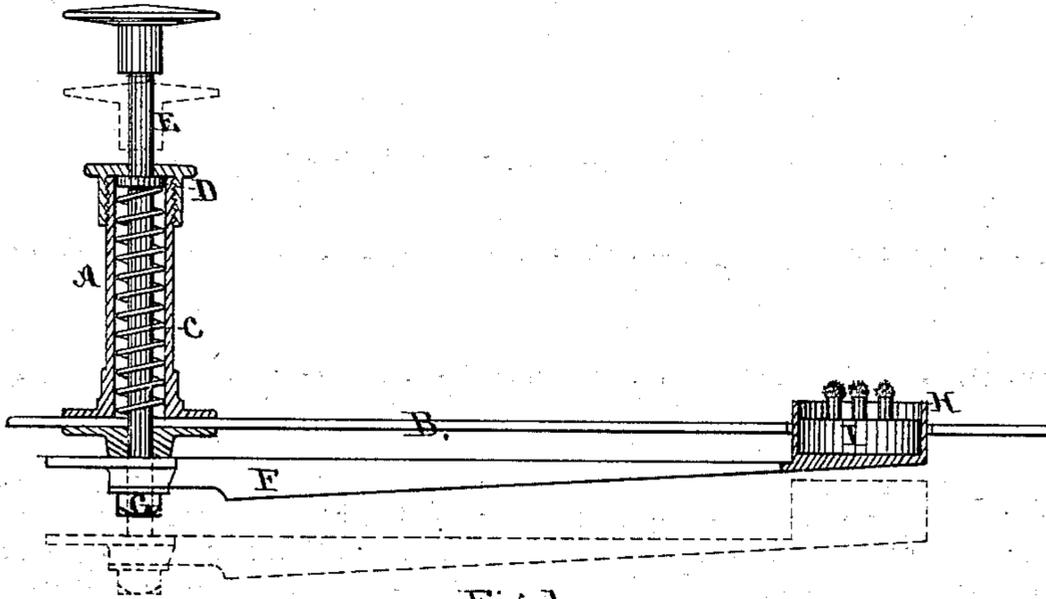


Fig. 1.

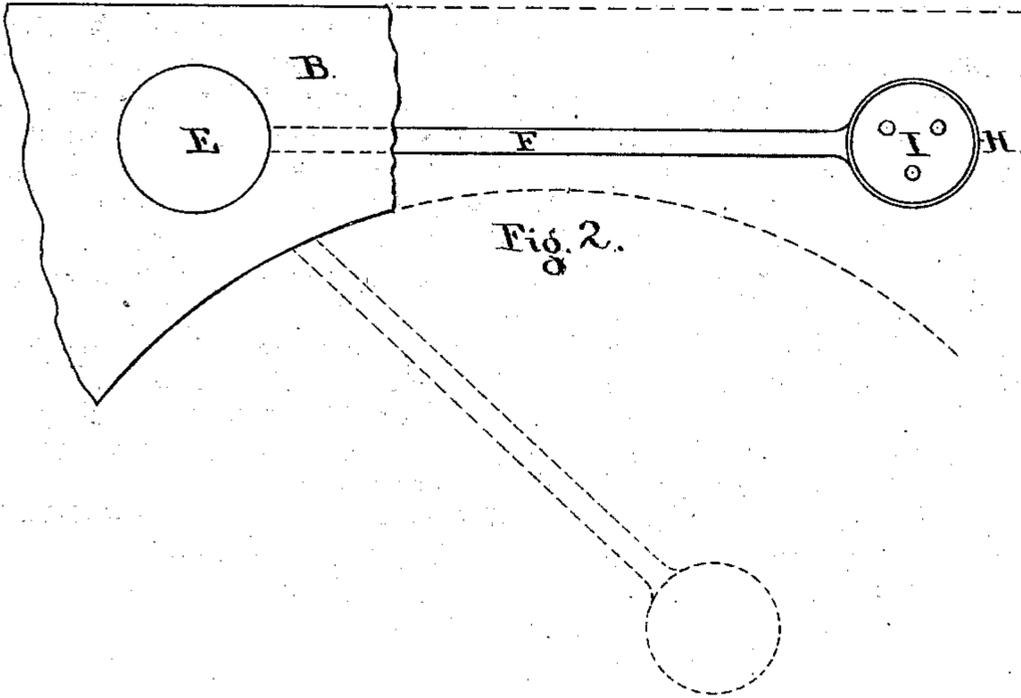


Fig. 2.

Witnesses.

William H. Long  
*[Signature]*

Inventor.

*Philip Ryan*

# UNITED STATES PATENT OFFICE.

PHILIP RYAN, OF ALBANY, NEW YORK.

## IMPROVEMENT IN COMBINED TORCH AND FIRE LIGHTERS.

Specification forming part of Letters Patent No. 135,592, dated February 4, 1873.

*To all whom it may concern:*

Be it known that I, PHILIP RYAN, of the city and county of Albany and State of New York, have invented a Combined Torch and Fire Lighter, of which the following is a full and exact description, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a vertical section, and Fig. 2 a plan view.

My invention consists of a torch attached to the end of an arm secured to a plunger, and so arranged as to be used as an ordinary torch, or for lighting the fires of steam fire-engines while under way.

The chamber A is secured to the foot-board B, or other convenient parts of the apparatus. It contains a spiral spring, C, which presses against the collar D of the plunger E, and sustains the weight of it and its attached parts. The arm F has one of its ends screwed to the plunger beneath the foot-board, and is further secured by means of the check-nut G. The other end of the arm is provided with a chamber, H, for receiving the torch I, which can be readily removed from its chamber for

the purpose of trimming it, or for use as a hand-torch when required.

The torch, being lighted and ready for use, is depressed by forcing down the plunger E, as indicated by the dotted lines in Fig. 1, so as to carry it entirely beneath the foot-board. It can then be thrown around beneath the furnace-grate, in the position shown by the dotted lines in Fig. 2, and there coming in contact with the prepared kindlings, may be retained until the fire is fully ignited, when it can be returned to its opening through the foot-board to serve as an ordinary torch.

By means of my invention the fires of steam fire-engines may be lighted while the apparatus is under any degree of speed without the difficulty usually encountered in effecting it.

What I claim as my invention is—

The combination of the plunger E, spring C, and arm F with the torch I, when arranged to operate as and for the purpose herein specified.

Witnesses:

PHILIP RYAN.

WILLIAM H. LOW,

S. J. HAIGHT.