

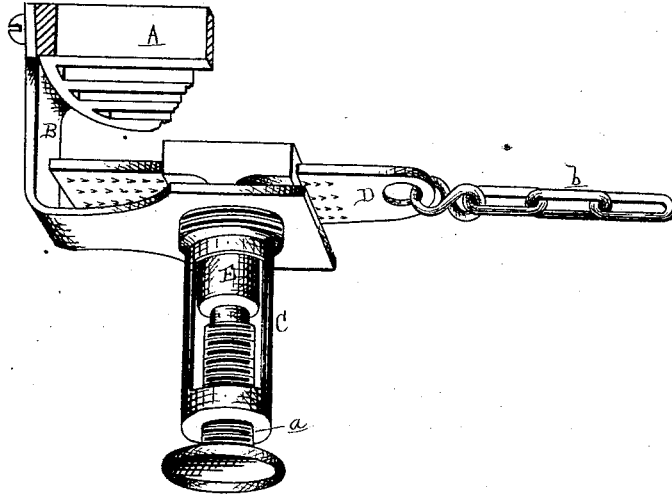
F. BEAUFAIT.

Fire-Kindler for Steam Fire-Engines.

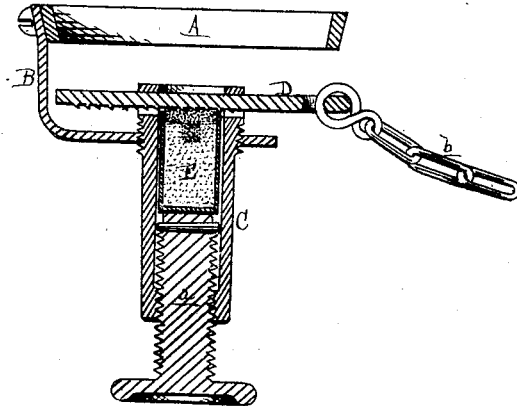
No. 163,723.

Patented May 25, 1875.

*Fig. 1.*



*Fig. 2.*



Attest:  
Edward Purshel  
Wm J. Kern

Inventor:  
F. Beaufait  
By Atty  
Wm S. Sprague

# UNITED STATES PATENT OFFICE.

FRANK BEAUFIT, OF DETROIT, MICHIGAN, ASSIGNOR TO HIMSELF AND  
JAMES BATTLE, OF SAME PLACE.

## IMPROVEMENT IN FIRE-KINDLERS FOR STEAM FIRE-ENGINES.

Specification forming part of Letters Patent No. **163,723**, dated May 25, 1875; application filed  
December 11, 1874.

*To all whom it may concern:*

Be it known that I, FRANK BEAUFIT, of Detroit, in the county of Wayne and State of Michigan, have invented an Improved Automatic Fire-Lighter for Steam Fire-Engines, of which the following is a specification:

The object of my invention is to provide an attachment to the boiler of a steam fire-engine under the grate thereof, by means of which the fuel will automatically be kindled in the boiler-furnace of the engine as it moves out of the house.

The invention consists in a port fire-carrier located under the grate, and in combination therewith a serrated plate to be attached to the floor of the engine by a cord or otherwise to ignite the moving port fire-match.

Figure 1 is a perspective view of the device as attached to a boiler of a fire-engine. Fig. 2 is a central longitudinal vertical section of the same.

In the drawing, A represents a portion of the grate under the furnace of the upright boiler of a steam fire-engine, under the fore part of which is secured, by means of a bracket-plate, B, a vertical tube, C, in the shape of a cylinder having a screw, *a*, tapped in its lower end, while its upper end is a T-head, having a horizontal longitudinal slot through

it, in which is inserted a friction-plate, D, serrated on the under side, and which plate is connected at its rear end by a cord or chain, *b*, to the floor of the engine-house, or to some object behind the engine when it is in the position usually occupied in the house. The cylinder has a slot on one side, through which to introduce a short thick port fire-match, E, after the screw is run down, after which the screw is turned up until the phosphorous-tipped upper end is in contact with the friction-plate. When the engine leaves the house to proceed to a fire the match will be ignited by the friction-plate, and a flame from twelve to fifteen inches high will be projected up between the grate-bars into the fuel long enough to ignite it thoroughly, thereby saving valuable time.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, with a fire-grate, of the match-tube, the friction-plate, and the screw, the same being adapted to receive and ignite a friction port-fire, as specified.

FRANK BEAUFIT.

Witnesses:

H. S. SPRAGUE,  
WM. P. SPAULDING.