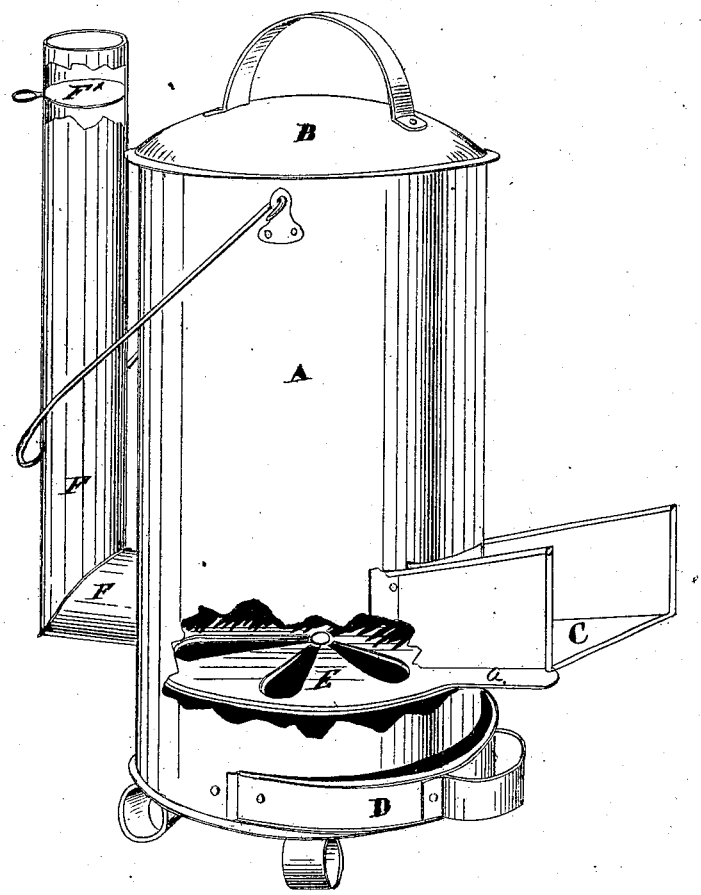
M. CONNER.

Soldering-Iron Heater.

No. 108,762. Patented Nov. 1, 1870.



ATTEST

Saml J. Spray

Frederick Eberts

INVENTOR

Michael Conner

per Attorney

Thos J. Sprague

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

MICHAEL CONNER, OF PLYMOUTH, MICHIGAN.

Letters Patent No. 108,762, dated November 1, 1870.

IMPROVEMENT IN TINSMITHS' FURNACES.

The Schedule referred to in these Letters Patent and making part of the same.

To whom it may concern:

Be it known that I, MICHAEL CONNER, of Plymouth, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in a Tinsmith's Furnace; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, and being a part of this specification; said drawing being a perspective view of my device, partially broken away to show its interior arrangement.

The nature of this invention relates to an improvement in tinsmiths' furnaces for heating soldering-irons, and it consists in the arrangement of its several parts, whereby greater economy in the consumption of fuel is attained, as more fully hereinafter set forth.

In the drawing—

A represents an ordinary sheet metal cylinder, provided with a cover, B, and hearth, C, in front of the opening through which the irons are inserted; D is an ash-drawer under the grate—all of which are of the usual construction.

E is a rotary or mill-grate, in two sections, each provided with a series of radial openings; the lower section is secured to the walls of the cylinder above the ash-drawer, while the upper is pivoted to the lower, on which it receives an alternating rotary motion from a hand-lever projecting through the wall of the cylinder under the hearth.

F is the flue, which issues from the rear wall of the cylinder, opposite the hearth and on a plane therewith; in the flue is the usual damper, F', to check the combustion of the fuel when necessary.

By taking the flue out at this point, a horizontal draft is secured, which causes the lower strata only of the fuel to ignite, and at the point where heat is required, thereby saving a considerable amount thereof, as compared with furnaces of the ordinary consideration, in which the exit of the smoke and gases of combustion being at or near the top, the entire fuel contained in the cylinder is ignited. In this furnace, when the stratum of fuel on the grate and about the irons is consumed, the ashes are shaken into the ash-drawer by vibrating the grate, which brings down a fresh supply of fuel, caused by the settling of the mass above.

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

In a tinsmith furnace, the grate E and flue F constructed and arranged with relation to the cylinder A, cover B, and hearth C, as described and shown, and as and for the purposes set forth.

M. CONNER.

Witnesses:

SAMUEL J. SPRAY,

FREDERICK EBERTS.