(No Model.)

W. TOEPFER.

TRAP DOOR FOR MALT KILNS.

No. 248,068. Patented Oct. 11, 1881.

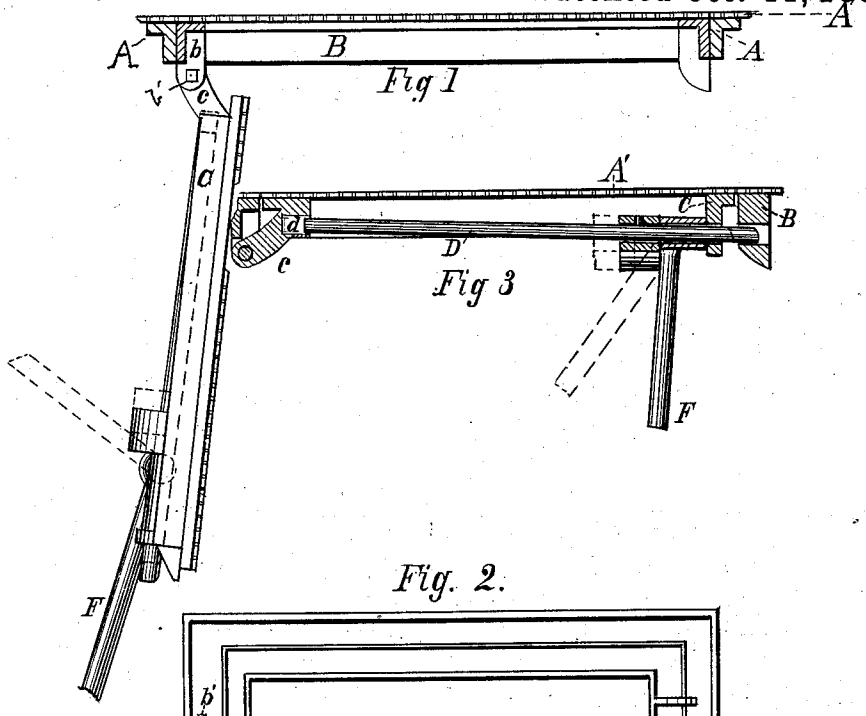
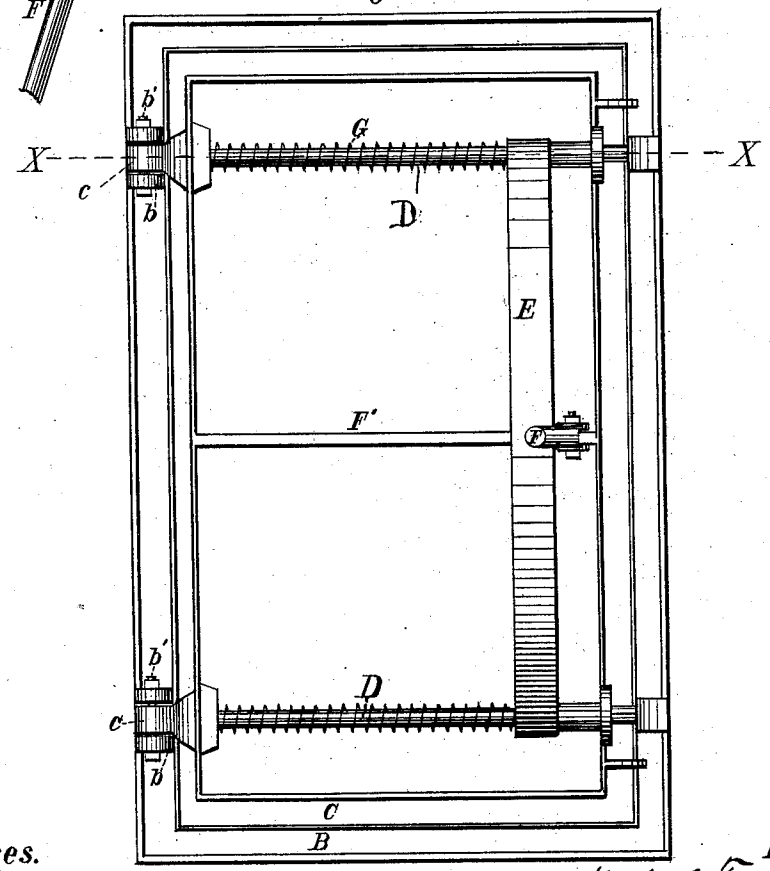


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

WENZEL TOEPFER, OF MILWAUKEE, WISCONSIN.

TRAP-DOOR FOR MALT-KILNS.

SPECIFICATION forming part of Letters Patent No. 248,068, dated October 11, 1881.

Application filed August 3, 1881. (No model.)

To all whom it may concern:

Be it known that I, WENZEL TOEPFER, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Trap-Doors for Malt-Kilns; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to malt-floors; and it consists in an improved trap-door for the same, as will hereinafter be fully described.

In the drawings, Figure 1 is an end view of my improved trap-door. Fig. 2 is a plan view of the same, and Fig. 3 is a cross-section on line *x x*, Fig. 2.

A A are two of the beams that support the perforated flooring A′ of the malt-room.

B is the casing of my improved trap-door, and this casing is riveted or otherwise secured to the floor between the beams A A.

C is the door proper, usually covered by perforated sheet metal, and carrying lugs *c*, by which it is hinged to lugs *b* on the casing by bolts *b′*.

The locking-bolts D have their rear bearings in cavities *d* and their front bearings in the front bar of the door-frame, and these, one at each end of the door, are connected by a bow, E.

A rod, F, is pivoted to a brace-bar, F′, on the door, and hangs down just in front of the bow E in such a position that when it is swung in the direction of the lugs *c*, or the center of a line drawn from one to the other, it will have a tendency to pry the bow E back, so as to cause it to withdraw the bolts D from their engagement with the frame B, as shown in Fig. 3, when the door will be free to swing down into the position shown in Fig. 1.

To return the bolts when the door has been closed, I surround each bolt with a spring, G, one end abutting against the frame about a cavity, *d*, and the other against an end of the bow E, keeping the bolts always in position to engage with the holes in the front of the casing; and as the lower edge of the casing is beveled when the door is closed, with a slight degree of force the bolts slip into their places without the aid of the lever F.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A trap-door for malt-houses, &c., having spring-bolts D, connected by a bow, E, in combination with a depending lever, F, as and for the purposes set forth.

2. The combination of bolts D, springs G, bow E, and lever F, in a trap-door for malt-houses, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 28th day of July, 1881.

WENZEL TOEPFER.

Witnesses:

FRANK TOEPFER,

STANLEY S. STOUT.