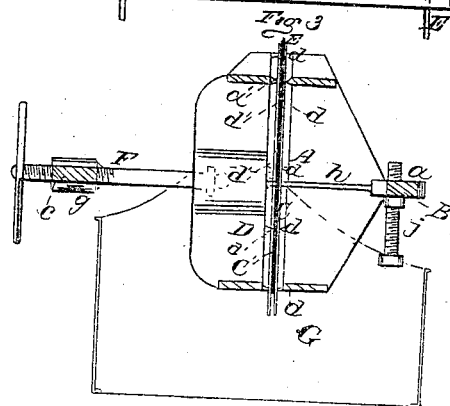
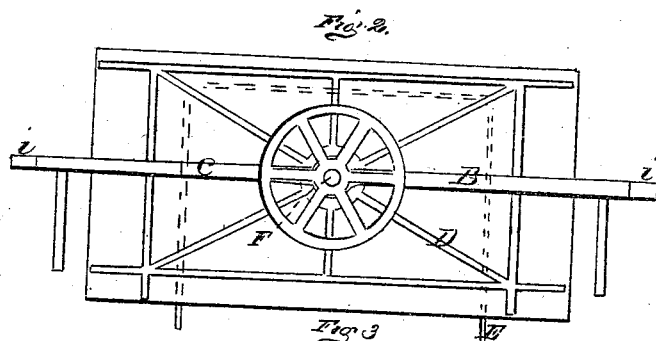
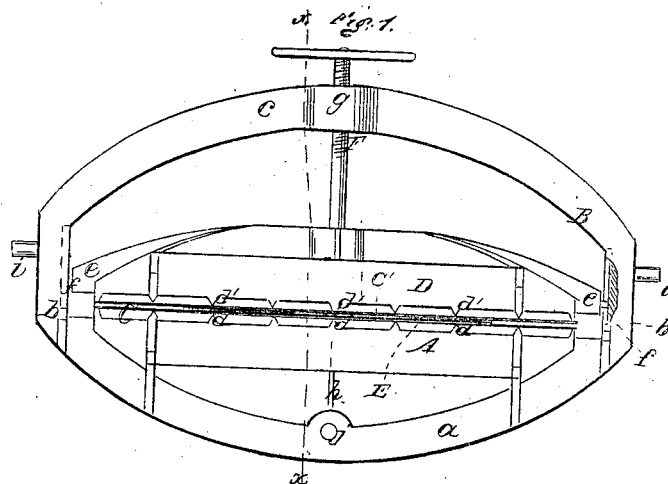


W.F. Draper
Stereotyping
No 51437
Patented Dec 12 1865



Witnesses:
C. L. Trull
S. M. Compton

Inventor
W. F. Draper
By *[Signature]*
Att'y

UNITED STATES PATENT OFFICE.

W. F. DRAPER, OF ANDOVER, MASSACHUSETTS.

IMPROVED DEVICE FOR CASTING STEREOTYPE-PLATES.

Specification forming part of Letters Patent No. 51,437, dated December 12, 1865.

To all whom it may concern:

Be it known that I, W. F. DRAPER, of Andover, in the county of Essex and State of Massachusetts, have invented a new and improved Device for Casting Stereotype-Plates; and I do hereby declare that the following is a full, clear and exact description thereof, which will enable others skilled in the art to make and use the same reference being had to the accompanying drawings, forming part of this specification in which—

Figure 1 is a side view of my invention; Fig. 2, a plan or top view of the same; Fig. 3, a transverse vertical section of the same, taken in the line *x x*, Fig. 1.

Similar letters of reference indicate like parts.

In the method of making or casting stereotype-plates, known as the "clay process," a mold or matrix is first made by spreading a putty or composition of clay and other ingredients upon a metallic plate, as iron, and taking an impression of the type by pressing the mold upon it. In order to obtain a stereotype-plate from this mold, the plate is heated till the mold is dry. A wire bent to form three sides of a parallelogram, is then laid around the mold on the plate, another plate is placed on the top of the wire, and all are held firmly together by clamps or other device, and, being set on edge, the space between the plates made by the wire is filled with melted metal which, when properly cooled, forms the stereotype-plate.

The object of my invention is, first, to hold the plates firmly together in contact with the wire or other equivalent device, and, second, to facilitate the turning of the plates on edge or at any desired inclination for casting, and, third, to allow the free application of water to the plates and flow of the same from them in the process of cooling.

To this end the invention consists of a frame having an open bed furnished with narrow or toothed bearings, and an open platen, also having narrow or toothed bearings, all arranged as hereinafter set forth.

A represents what I term an "open bed" cast with a suitable frame, B, composed of a bar, *a*, underneath, two side bars, *b b*, and a bar, *c*, above. (See Fig. 1.) The bed A is provided with teeth or narrow projections *d* on which a plate, C, rests.

D represents a platen which is of open or skeleton form, and is provided with end pieces, *e e*, which have pins *f* in their ends, said pins being fitted in grooves in the inner surfaces of the side bars, *b b*. This platen is also provided with teeth or narrow projections *d'*, against which another plate, C', similar to C leans, the wire E referred to in the preamble being between the two plates, and the plates and wire being held closely together in contact by a screw, F, which works in a female thread or nut *g*, at the centre of bar *c*.

The plate C is supported by a wire or rod *h*, extending from the centre of the bar *a*.

The bars *d d* of the frame B are each provided with a journal, *i*, and the frame is suspended on these journals over a water-trough, G, as shown in Fig. 3.

By this arrangement it will be seen that the plates may be turned up endwise, or to any degree of inclination to receive the melted metal between them, the frame and plates being held in position by a screw, *j*, or other device. The teeth or narrow projections or bearings *d d'* of the bed and platen serve to prevent the heat being conducted too rapidly off from the melted metal during the process of casting. The water, also, for cooling the plate, after being cast, may be readily applied to the plate, and the water is allowed to flow freely therefrom.

I claim as new, and desire to secure by Letters Patent—

The arrangement of the bed A, the frame B, journaled on centers *i*, the platen D, plates C C', and screw F, operating substantially as and for the purpose described.

W. F. DRAPER.

Witnesses:

STEPHEN BURRIS,
C. G. WARREN.