

(No Model.)

C. T. MURRAY.
APPARATUS FOR STEREOTYPING.

No. 436,372.

Patented Sept. 16, 1890.

Fig. 1.

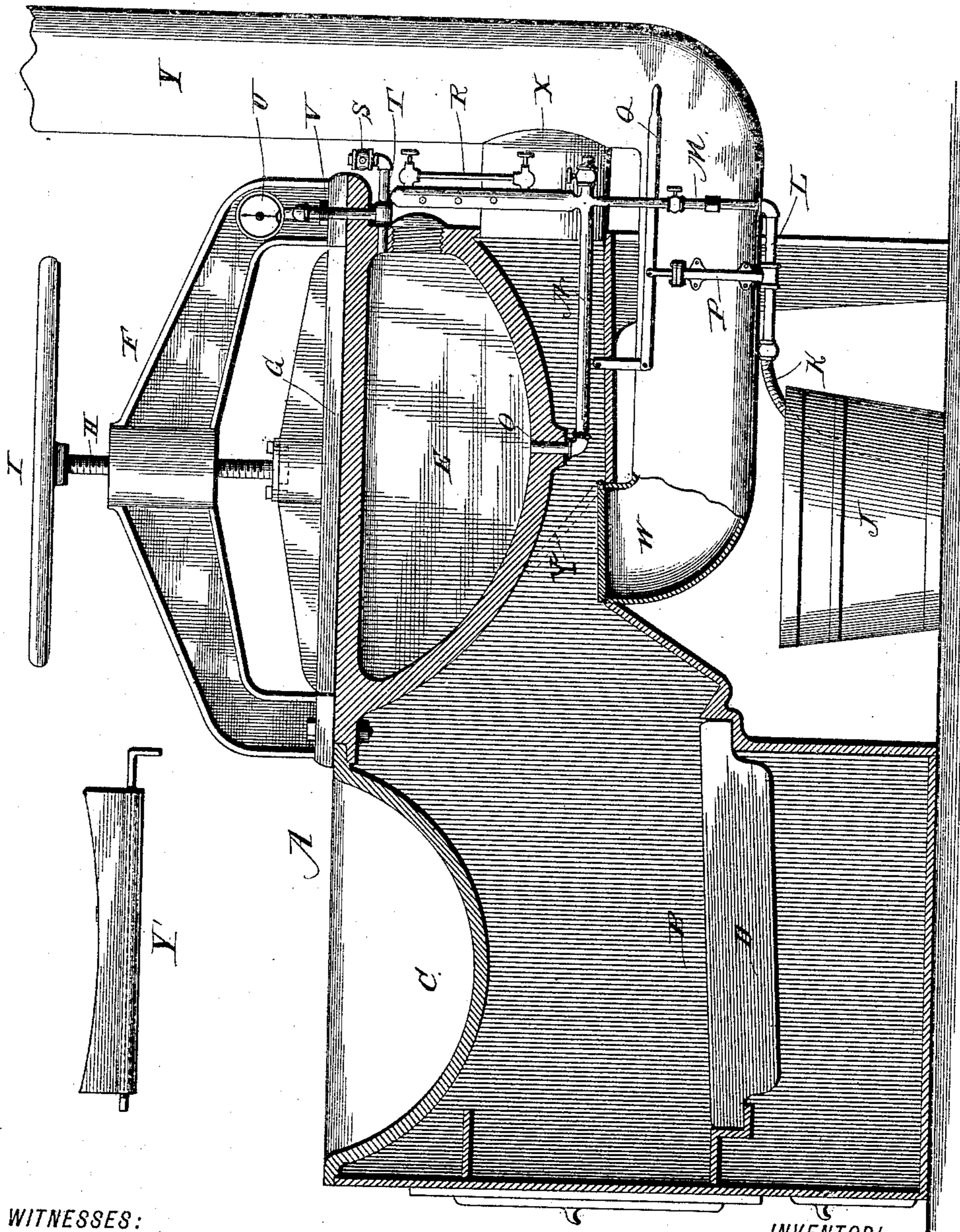


Fig. 2.

WITNESSES:

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CHARLES T. MURRAY, OF KANSAS CITY, MISSOURI.

APPARATUS FOR STEREOTYPING.

SPECIFICATION forming part of Letters Patent No. 436,372, dated September 16, 1890.

Application filed May 3, 1890. Serial No. 350,437. (No model.)

To all whom it may concern:

Be it known that I, CHARLES T. MURRAY, of Kansas City, Jackson county, Missouri, have invented certain new and useful Improvements in Apparatus for Stereotyping, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to an improvement in an apparatus for stereotyping; and it consists in the novel construction, combination, and arrangement of the several elements hereinafter set forth, and pointed out in the claims.

In the drawings, Figure 1 is a sectional elevation of a machine embodying my invention, the section being taken longitudinally thereof; and Fig. 2 is a detail view of a damper made use of in constructing the machine.

The object of my invention is to combine, in very compact form, a melting-pot, a furnace, and a combined steam-boiler and drying-platen and yoke and screw therefor and all proper attachments for each of these parts, whereby steam may be generated direct within said platen or steam-table, obviating the necessity of a separate steam-boiler, as will now be described.

A represents the improved machine as a whole, the same being provided with a suitable furnace B and proper attachments, with a melting-pot C mounted over said furnace in or upon the framing of the machine and grate-bars D or other fuel-supporting devices.

The combined steam-boiler or steam-table E is supported in the rear of the melting-pot; or, if desired, I may dispense with said melting-pot in this machine and then locate the boiler and steam-table directly over the fire-box of the furnace. Said boiler and table E is supplied with the usual upper platen and yoke F, screw H, and hand wheel or lever I for operating said upper platen in the usual manner, and said boiler is fitted with all necessary means for supplying it with water—such, for instance, as a removable bucket or other vessel J; or, if desired, water may be supplied direct from the water-pipes of the building and through a proper series of pipes and rubber hose—such as K, L, M, N, and O—with which is connected a suitable hand-pump P, fitted with a hand-lever Q, which latter operates the piston of said pump. The

upper end of the pump piston-rod is attached to said hand-lever, and the inner end of the hand-lever is fulcrumed to a vertical rod pivoted to the framing of the machine. R is a suitable glass water-gage or other means for showing the height of water in said boiler, and the lower end of the water column carrying said glass gage is connected to the pipes M N for the purpose mentioned. The combined boiler and drying-platen is also provided with a safety-valve S for escape of surplus steam generated during use and connecting-pipe T. A steam-gage U is also provided for the usual purpose and connected to the boiler by pipe V.

The yoke F is located longitudinally with respect to the machine directly above the combined steam-boiler and steam-platen, whereby the insertion of stereotype-plates beneath the upper platen is permitted from either side of the machine. The machine is also provided with a flue or pipe W, leading from the forward end of the boiler to the smoke-pipe Y at the rear or side, and with a second flue or outlet X, opening into said smoke-pipe at the rear of the boiler, and a suitable damper-plate Y' is fitted over the mouth of said pipe W, and has its edge cut out to the contour of the under surface of said boiler, so as to fit thereon snugly when the damper-plate is turned upward, as indicated by dotted lines, and so cut off the passage of heat rearward under the boiler, permitting same to pass down and out through said pipe W without imparting heat to the boiler, and vice versa. When said damper is down, the pipe W is closed thereby, causing the products of combustion to pass under the boiler and out to smoke-pipe by way of X. The normal position of said damper is closing the pipe W, and when the pressure of steam in boiler E rises too high said damper should be raised to prevent further heating of said boiler.

Having thus described my invention, what I claim is—

1. In a stereotyping apparatus, a casing, a hollow drying-platen constituting a boiler located therein, a fire-box, a smoke-flue, and a water-supply pipe connecting with said hollow platen, substantially as described.

2. In a stereotyping apparatus, the combina-

tion of a drying-platen and steam-generator,
a furnace having a suitable frame, a melting-
pot, and operating attachments, all mounted
in or upon the integral frame of the furnace,
5 substantially as set forth.

3. In a stereotyping apparatus, a furnace-
chamber, a melting-pot, and a hollow drying-
platen located therein, a pipe W, connecting
with the forward end of the furnace-chamber
10 and leading to the smoke-flue, a pipe X, lead-

ing from the rear end of the furnace-cham-
ber, and a damper Y', for cutting off the draft
through either of said pipes W or X, as de-
sired, substantially as set forth.

In testimony whereof I affix my signature in 15
presence of two witnesses.

CHARLES T. MURRAY.

Witnesses:

J. E. HIGDON,

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