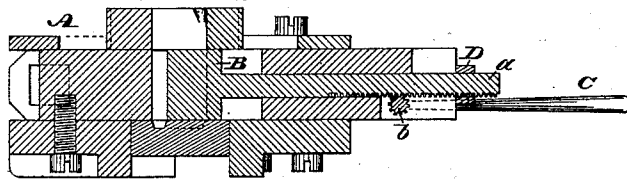
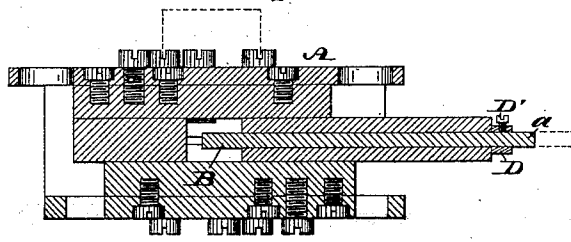
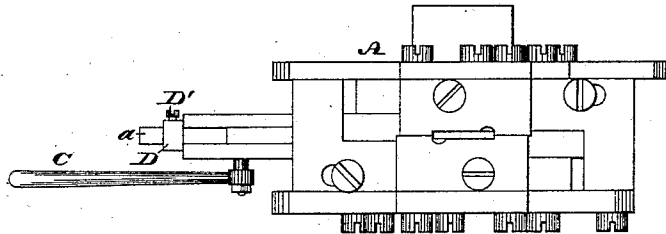
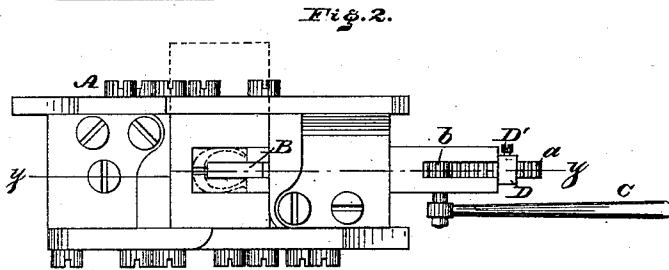
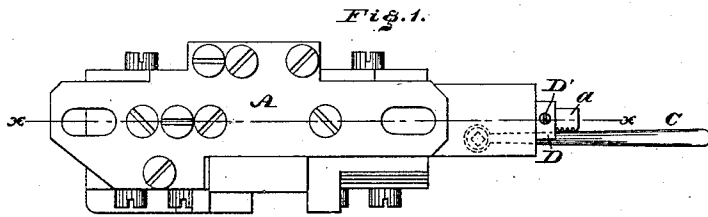


(No Model.)

R. GNICHWITZ.  
TYPE CASTING MOLD.

No. 314,827.

Patented Mar. 31, 1885.



Witnesses:

R. P. Grant,  
H. F. Kircher

Inventor:  
Rudolph Gnichwitz,  
by John A. Dierschell  
Attorney

# UNITED STATES PATENT OFFICE.

RUDOLPH GNICHWITZ, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE MACKELLAR, SMITHS AND JORDAN COMPANY, OF SAME PLACE.

## TYPE-CASTING MOLD.

SPECIFICATION forming part of Letters Patent No. 314,827, dated March 31, 1885.

Application filed January 22, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, RUDOLPH GNICHWITZ, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Type-Casting Molds, which improvement is fully set forth in the following specification and accompanying drawings, in which—

10 Figure 1 is a top view of a type-casting mold embodying my invention. Figs. 2 and 3 are views of opposite sides thereof. Fig. 4 is a vertical section in line *xx*, Fig. 1. Fig. 5 is a horizontal section in line *yy*, Fig. 2. Fig. 15 6 is a perspective view of one of the types produced. Fig. 7 illustrates the use of said type.

Similar letters of reference indicate corresponding parts in the several figures.

20 The object of my invention is the formation of a type or die, within which other type may be set; and the invention consists in providing a type-casting mold with means whereby the type or die may be produced with a recess to receive said other type.

25 Referring to the drawings, A represents parts of a type-casting mold, which, excepting the features of my invention, is of usual construction. In one of the sides or ends of the mold I form an opening, and into the same 30 is fitted a core, B, the inner end of which is adapted to enter the matrix-space, and shaped relatively to the recess to be formed within the confines of a type or die, that in the present case being quadrilateral, the recess being 35 designed to have other type set by the compositor within the same, as shown in Fig. 6, the resultant printing as an example being exhibited in Fig. 7.

40 In order to operate the core the shank thereof is formed with a rack, *a*, with which meshes a pinion, *b*, whose shaft, properly mounted on the mold, has connected with it a lever, C,

which being operated causes the core to move in and out of the matrix-space. It will be seen that, when the mold is closed and the core 45 moved in, the inner end of the latter occupies a position within the matrix-space. When the metal is introduced into the matrix-space, it flows around the core so as to leave the recess hereinbefore referred to in the type as 50 cast. The core may now be withdrawn and the mold is opened, whereby the type drops from the mold, after which the mold is again closed and the core properly located, so that the type-casting may be continued. 55

In order to adjust the core to the length of recess to be formed there is fitted to the shank of the core a stop, D, which is held in position by a set-screw, D', and adapted to be 60 moved nearer to or farther from the end of said shank, so as to adjust the degree of penetration of the core in the matrix-space.

The means of moving the core may be varied. Instead of the rack and pinion I may use a lever pivoted to the mold and core, an 65 eccentric fitted within an opening in the core and connected with a lever, a handle attached directly to the core, or other devices, each of which may operate to move the core in and 70 out.

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

1. A type-casting mold provided with an adjustable core, substantially as and for the purpose set forth. 75

2. In a type-casting mold, a core for forming a recess in type provided with means, substantially as described, for adjusting the same in the matrix-space, as stated.

RUDOLPH GNICHWITZ.

Witnesses:

JOHN A. WIEDERSHEIM,  
A. P. GRANT.