

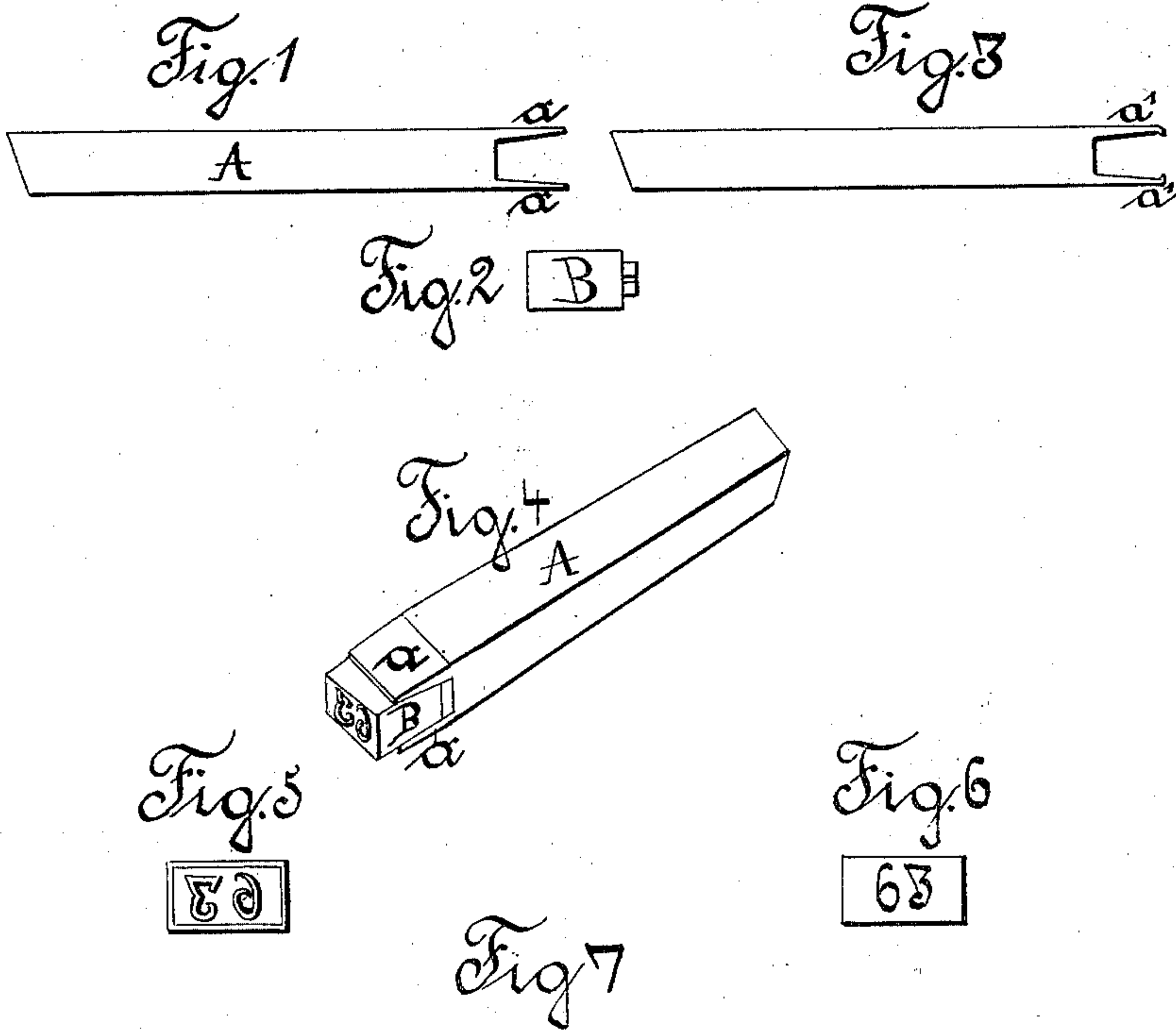
No. 705,228.

Patented July 22, 1902.

W. A. FORCE.  
PRINTING DIE.

(Application filed Jan. 2, 1902.)

(No Model.)



5	10								
15	20								
25	30								
35	40								
45	50								

Witnesses:

*Nathaniel Mann*  
*P. Martin.*

*William A. Force,* Inventor

by *Schreiter & Mathews,*  
his Att'ys



# UNITED STATES PATENT OFFICE.

WILLIAM A. FORCE, OF NEW YORK, N. Y.

## PRINTING-DIE.

SPECIFICATION forming part of Letters Patent No. 705,228, dated July 22, 1902.

Application filed January 2, 1902. Serial No. 88,134. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM A. FORCE, of the city, county, and State of New York, have invented certain new and useful Improve-  
5 ments in Printing-Dies, of which the following is a full, clear, and exact specification, reference being had to the accompanying drawings, wherein—

Figure 1 is a side elevation of my improved  
10 metallic handle for type-blocks; Fig. 2, a side elevation of a type-block to be inserted in the die; Fig. 3, a similar view like Fig. 1, showing a modified construction of the flanges for holding the type-block; Fig. 4, a perspective  
15 view of the complete die; Fig. 5, an end view thereof looking from the left; Fig. 6, an end view thereof looking from the right, and Fig. 7 a plan view of a die-box with the dies inserted therein.

20 My invention relates to dies for printing, and more particularly to dies used in the checking and controlling system in hotels, restaurants, and other similar establishments for printing the amounts of the purchases or  
25 sales upon the checks and check-sheets; and it consists more particularly of the construction of a metallic handle A for such dies, into which the type-block B (shown in Fig. 2) is inserted, as shown in Fig. 3.

30 The object of my invention is to provide a handle for type-blocks to be used in printing the figures denominating the value or marks of articles sold, wherein the type-block is safely and reliably held in its position and  
35 the weight of the handle is utilized to exert pressure or force upon the die for inking the die and printing the figures.

The type-blocks B are made of rubber, such rubber type-blocks having the advantage that  
40 they can be used for printing of figures, marks, &c., without requiring such heavy pressure to be exerted thereon as metallic type-blocks. They also accommodate themselves to an uneven or soft surface, whereas if printing with  
45 metallic types care must be taken that the surface to be printed upon is hard and even. The handles for such type-blocks as were heretofore in use have also the disadvantage that the glue or cement used for affixing the  
50 type-blocks to the handles is disintegrated by the corroding chemicals contained in the ink

used for printing, and then of course the type-block drops from the handle. Thus it frequently happens that some of the type-blocks become detached from the holder just  
55 as the die is being used, and this results in delays and disruptions in the service. My invention tends to remedy these defects in two ways: first, by making the body of the handle of metal of such weight that by plac-  
60 ing the die upon the surface to be printed upon the weight of the handle exerts approximately sufficient pressure upon the die to produce the imprint of the die; second, by providing two comparatively-thin flanges *a*  
65 on two opposite sides of the handle, which flanges, as shown in Fig. 3, may be provided with gripping edges *a'*, whereby the type-block is safely held in the handle without the use of any cement. Another advantage of such  
70 heavy metallic handles is in that the dies when set in the die-box, as shown in Fig. 7, with their printing-surfaces resting upon an ink-pad are inked by being pressed by the weight of the handle upon the ink-pad, and  
75 thus are constantly kept in readiness for printing. It is not necessary to press them upon the ink-pad when about to be used, and their surfaces are kept constantly clean, any clog-  
80 ging of the type by abrasion of the surface being avoided. On the rear ends of the die-handles there are engraved the same figures as appear on the printing-block, so that when  
85 the dies are set in the die-box, as shown in Fig. 7, the checker has before him the numbers of the dies plainly visible, which enables him to readily and rapidly pick out any particular die required.

In making the dies I proceed as follows: First, the handles A are cast of suitable metal  
90 in the shape shown in Fig. 1. They may also be made of sheet metal by folding a requisitely-shaped blank into a casing, and then some metal or alloy of desired specific gravity is filled into the body of the handle, where-  
95 upon the joints of the casing are soldered and the flanges *a* and edges *a'* shaped. These casings can also be made of metallic tubes, cut into requisite lengths, by forming them as required, splitting the ends thereof, and  
100 folding the split ends as required to close the casing after the metal is filled in.



The rubber type-blocks B are produced in the well-known manner, and after they are inserted between the flanges *a* the latter are compressed together, whereby the type-blocks  
5 are secured to the die.

I claim as my invention—

1. A metallic handle for type-blocks provided with flanges, set in position to embrace a type-block, and adapted to be brought into  
10 rigid, unyielding engagement with the block when pressed together.

2. A metallic handle for type-blocks, provided with flanges, having gripping edges on their ends, the flanges being set in position  
15 to embrace a type-block and adapted to be

brought into rigid, unyielding engagement with the block when pressed together.

3. The combination with a metallic handle, having flanges set in position to embrace a type-block and adapted to be brought into  
20 rigid, unyielding engagement with the type-block, when pressed together, of a type-block set between the flanges and secured to the handle by pressing the flanges together upon the type-block.

WM. A. FORCE.

Witnesses:

ROBERT VALENTINE MATHEWS,  
M. A. HELMKE.