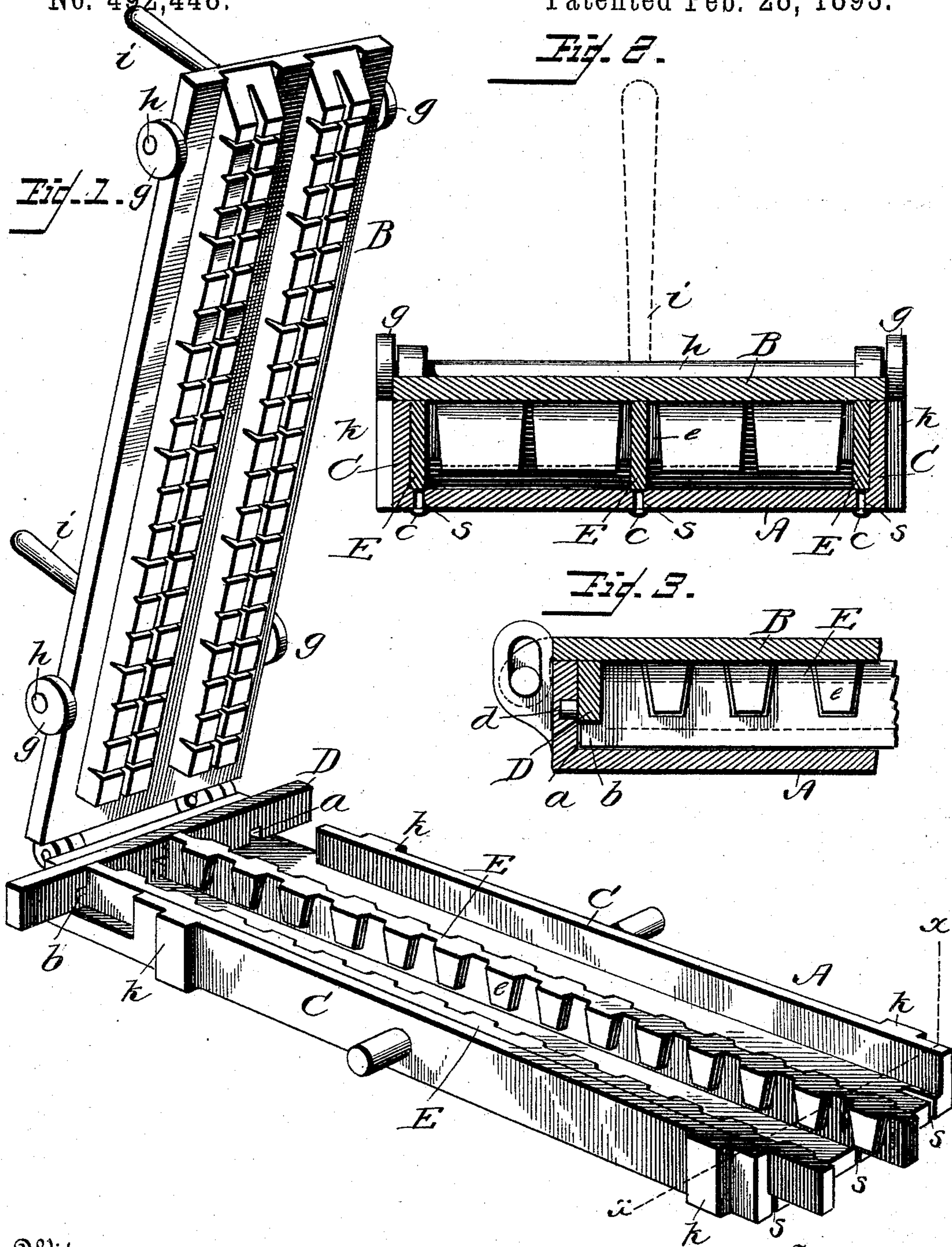


(No Model.)

F. J. WENDELL.  
STEREOTYPE CASTING APPARATUS.

No. 492,448.

Patented Feb. 28, 1893.



Witnesses  
*Paul Finckel*  
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# UNITED STATES PATENT OFFICE.

FERDINAND J. WENDELL, OF FORT WAYNE, INDIANA.

## STEREOTYPE-CASTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 492,448, dated February 28, 1893.

Application filed December 7, 1891. Serial No. 414,215. (No model.)

*To all whom it may concern:*

Be it known that I, FERDINAND J. WENDELL, a citizen of the United States, residing at Fort Wayne, in the county of Allen and State of Indiana, have invented certain new and useful Improvements in Stereotype-Casting Apparatus; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

In the casting of type-high columns of newspaper and other matter much inconvenience, delay, and expense have heretofore been occasioned by the adhering of the casting to the cores on the cover of the casting box.

The object of my invention is to overcome these troubles; and to this end it consists primarily in improved means for holding the cast plate down upon the matrix while the cores are being removed, thus avoiding the danger of straining, bending, or otherwise damaging the plates.

In the annexed drawings which illustrate an embodiment of my improvements, Figure 1 represents a perspective view of the casting box provided with one form of my improved gage bar. Fig. 2 is a transverse sectional view taken on line  $x-x$  of Fig. 1 with the lid closed down in place; and Fig. 3 is a longitudinal sectional view taken at the rear end of the casting box to show the means for securing the rear end of the gage bar in the box.

The letter A upon the drawings designates the box, B the cover to which are secured suitable cores to form the back of the plate.

CC represent the longitudinal side walls or flanges of the box. These side walls or flanges do not extend entirely to the rear end of the box, a small space being left for the introduction and lateral movement of a transversely disposed gage bar D. This bar D is provided on its rear side with pins or dowels  $d$  which enter holes in the rear wall of the box for the purpose of locking the same from movement except toward the front of the box. The under side of the bar D is made with notches or holes  $a$  to receive pins  $b$  on the rear end of the longitudinal gage bars E to lock said end in place. The front end of the bars E are provided with headed pins  $c$  which fit in slots

s in the front end of the bottom of the box, the heads of the pins engaging the underside of the bottom of the box when the bar is in place. It will thus be seen that by this construction the bars E when in position for use will be securely held from movement in any direction except toward the front of the box so that while casting and removing the cores there will be no liability of their being displaced.

The vertical sides of the gage bars E are provided with a series of projections  $e$  for holding the casting down upon the matrix while the cores are being lifted out. In the accompanying drawings, these projections are shown to be of a truncated V-shape with their apexes downward and extending from the top of the bar to nearly the bottom of the cores when the latter are in position for casting (see Fig. 2.) This form of projection permits the removal of the bar vertically out of the casting. The projections also extend across the space between the bars E and the cores. By the use of this form of projection on the gage bars the plates will be cast with their sides formed into a series of truncated V-shaped legs, and I am thereby enabled to effect a considerable saving not only in the amount of metal used in casting but in the cost of transporting these plates. Upon the lid I provide a shaft  $h$  having cams  $g$  at its hub which when the handle  $i$  is properly turned separates, by their action on projections  $k$  on the box, the lid with its cores from the casting. In order that the lid may be moved at both ends in this operation the ears of the hinge on the lid are slotted as shown.

In operation the matrix is placed upon the bottom of the box, the gage bars E secured in their places, and the lid with its cores turned down. The box is then turned to a vertical position and the metal poured in. When the casting has sufficiently cooled the cores are lifted out and the casting together with the matrix and gage bars E is slid forward in the box until the pins  $c$  are out of their slots when the bars may be lifted or turned out of the casting.

I do not wish to be understood as confining myself to the particular form of parts shown as it is possible to vary that without departing from the scope of my invention.

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

1. In a casting apparatus, the box A having holes in its rear wall and slots *s* at its front end, the transverse gage bar D provided with pins *d* adapted to fit said holes,—the bar D also having holes or slots *a*, the longitudinal gage bar E having pin *b* to engage slots *a*,  
5 projections on bar E constructed to hold the casting against the bottom of the box, headed pin *c* on the front end of the bar E to fit in slots *s*, the head of said pin adapted to engage the under side of the bottom of the box,  
10 and the cored cover, substantially as shown and described.

2. In combination with a casting box constructed to receive and hold a gage bar and

having a lid provided with a core substantially as described, a gage bar having on its vertical side V-shaped projections protruding into the space between the bar and the core with their apexes downward for the purpose of holding the casting down upon the matrix while the core is being removed, the  
25 said bar being capable, when released from its fastenings in the box, of removal directly out of its place in the casting vertically or in a plane at right angles to the bottom of the box as set forth.

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

FERDINAND J. WENDELL.

Witnesses:

GEO. M. FINCKEL,  
EUGENE LANE.