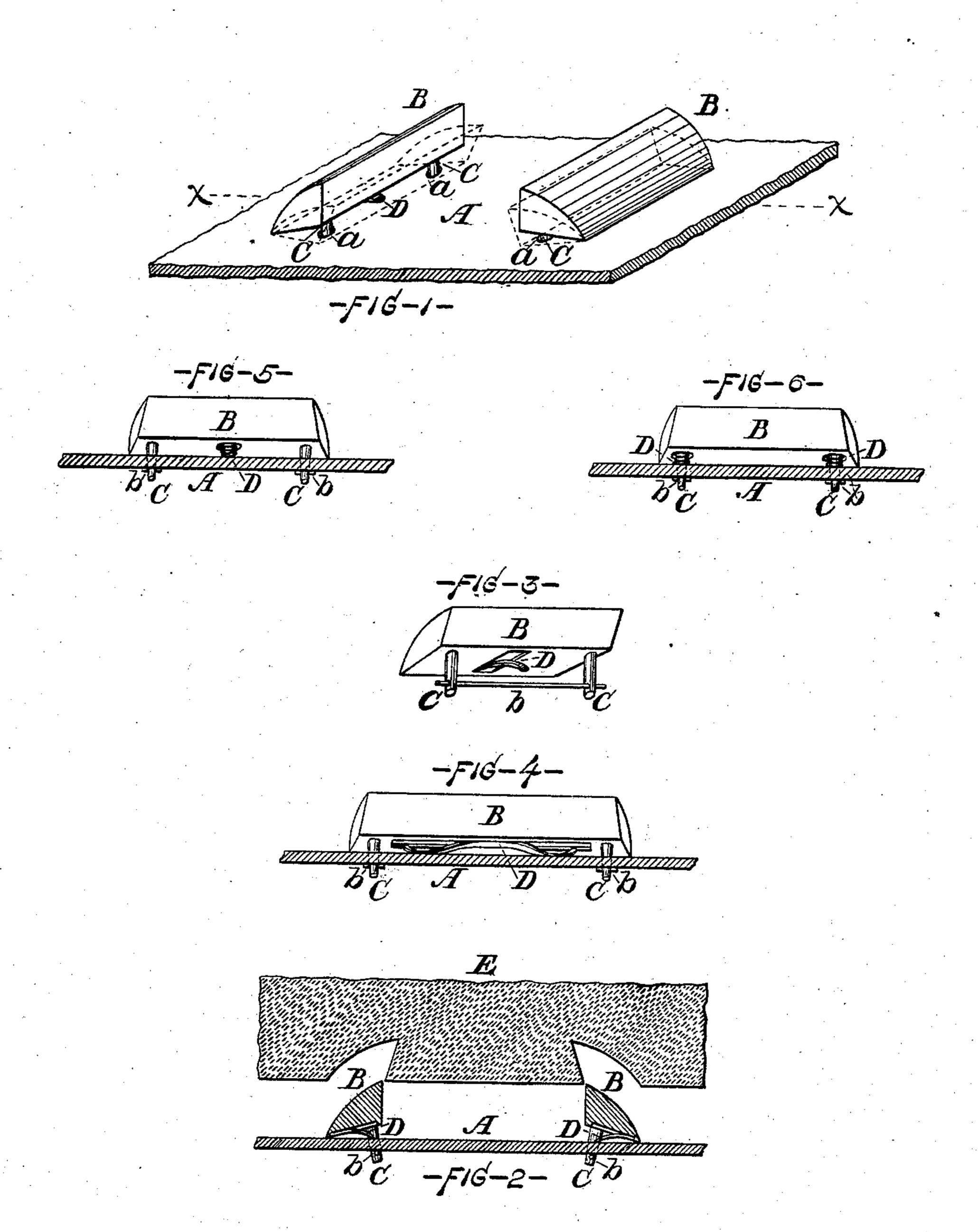
## J. B. VALLEE. Dovetail Pattern.

No. 231,943.

Patented Sept. 7, 1880.



-WITNESSES-H. Lisle Fleming. Machine

John B. Valle

## United States Patent Office.

JOHN B. VALLEE, OF TROY, NEW YORK.

## DOVETAIL-PATTERN.

SPECIFICATION forming part of Letters Patent No. 231,943, dated September 7, 1880.

Application filed December 8, 1879.

To all whom it may concern:

Be it known that I, John B. Vallee, of the city of Troy, in the county of Rensselaer and State of New York, have invented a new and useful Improvement in Dovetail-Patterns, of which the following is a specification.

This invention relates to dovetail mortise-patterns for metal castings; and it consists in the application of springs, so that the same may be made to operate automatically, as hereinafter more fully described, my object being to perfect the method and simplify the operation of molding dovetails.

In the accompanying drawings, Figure 1 is a perspective view. Fig. 2 is a sectional view through dotted line x x on Fig. 1; and Figs. 3, 4, 5, and 6 are detail views, showing modifications.

Similar letters of reference in each indicate corresponding parts.

A represents portion of main pattern, to which the side pieces or cheeks, B B, are connected by pegs C C projecting downward from their inside lower corners, which are loosely inserted through corresponding holes a a in said pattern, and secured beneath by stoppins b b at their extremities, as shown, the bottoms of said side pieces being recessed to admit the springs D D, which may be applied as shown in Figs. 3 and 4, or as shown in Figs. 5 and 6, and by means of which the inner inclined faces of said side pieces are sustained vertically above main pattern, as shown more

clearly in Fig. 1. The position of same when cope or upper part of mold is prepared is also 35 shown in Fig. 1 by dotted lines.

In Fig. 2, E represents a portion of cope, showing form of mold for dovetail mortise.

The operation of this improved device is as follows: When the cope is lifted off the in-40 clined side pieces are raised by action of the springs, as aforesaid, so that the beveled faces of the mold for dovetail mortise may readily pass upward between them without injury by contact therewith, and may likewise 45 in the same manner pass downward if the cope should be replaced as often as is found necessary.

I do not claim, broadly, side pieces that by lifting the cope may be raised or thrown back 50 to release the mold for dovetail mortise, as I am aware similar devices have been used before; but

What I do claim, and desire to secure by Letters Patent, is—

In patterns for molding dovetails, the combination of the recessed side pieces or cheeks, B B, pegs C C, springs D D, and pins b b with the main pattern A, and with each other, constructed and arranged substantially as shown 60 and described, for the objects herein set forth.

JOHN B. VALLEE.

Witnesses:

B. MACGREGOR, H. LISLE FLEMING.