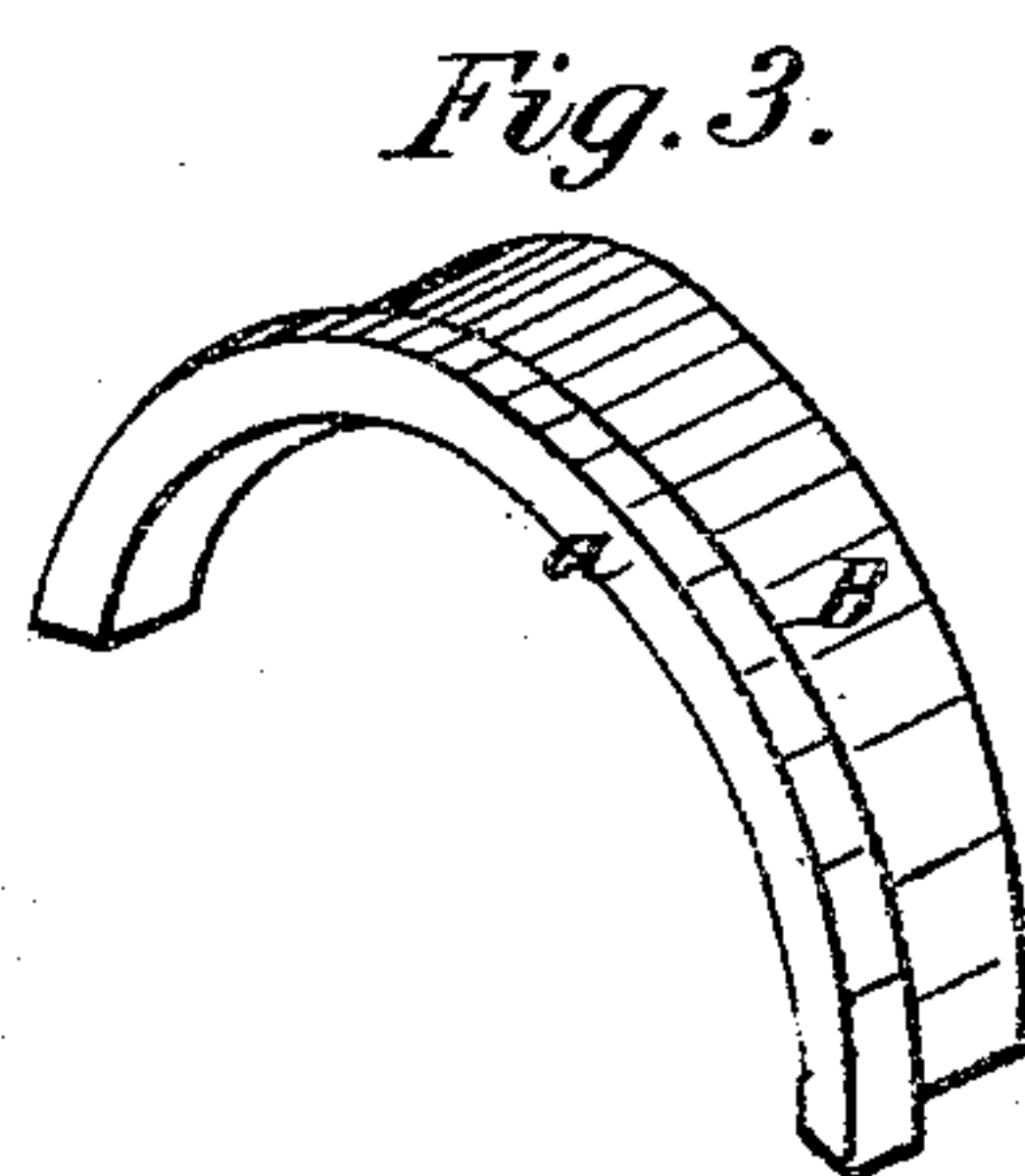
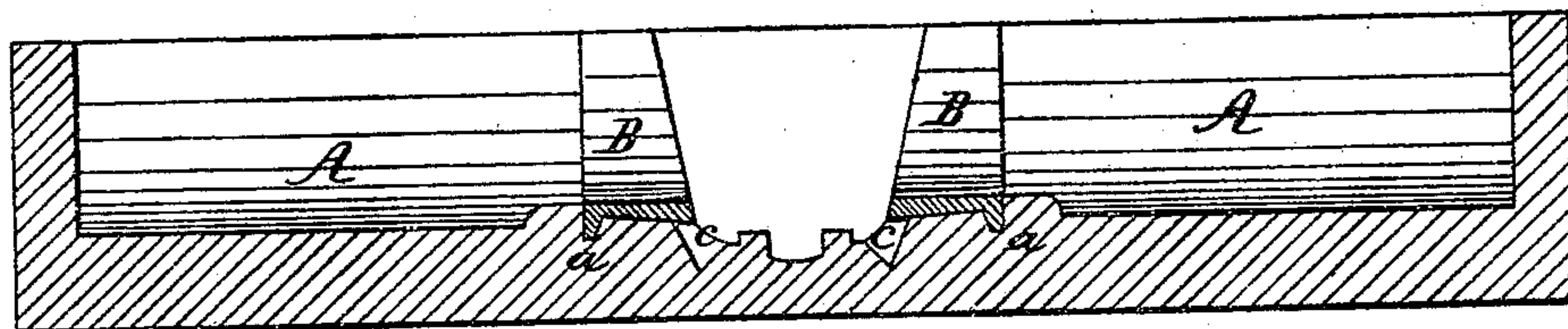
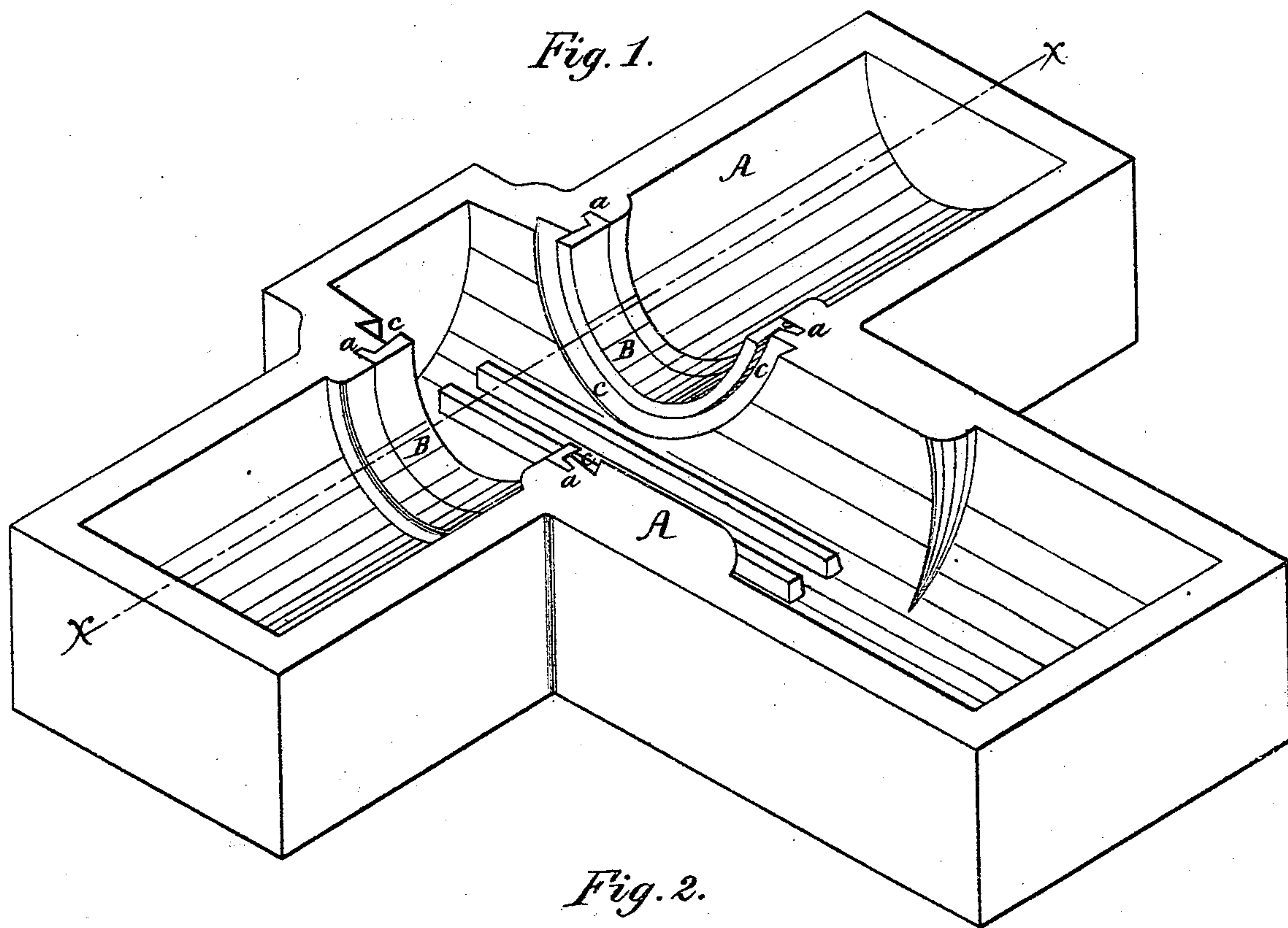


JOHN C. CHAPMAN.

Improvement in Core Boxes.

No. 123,329.

Patented Feb. 6, 1872.



WITNESSES.

R. E. Teschemacher
N. W. Stearns

INVENTOR.

John C. Chapman

UNITED STATES PATENT OFFICE.

JOHN C. CHAPMAN, OF WALTHAM, MASSACHUSETTS, ASSIGNOR TO THE
CHAPMAN VALVE COMPANY.

IMPROVEMENT IN CORE-BOXES.

Specification forming part of Letters Patent No. 123,329, dated February 6, 1872.

To all whom it may concern:

Be it known that I, JOHN C. CHAPMAN, of Waltham, in the county of Middlesex and State of Massachusetts, have invented an Improved Core-Box for Making Cores to be used in Casting Valves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a perspective view of one-half of a core-box having my improvement applied thereto. Fig. 2 is a vertical section through the same on the line *x x* of Fig. 1. Fig. 3 is a perspective view of one of the removable pieces detached.

This invention has for its object to enable me to readily cast dovetailed or other shaped recesses within the shell or body of a valve, for the reception of a Babbitt or other soft-metal seat; and consists in a core-box provided with removable pieces which, when in place, form recesses for the reception of the material out of which the core is formed, these pieces falling out with the core, from which they can be readily removed, leaving the core with projections of a form corresponding to that of the recesses which are to be produced within the shell of the valve.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawing, A represents one-half of a core-box, of a form suitable for making a core to be used in casting a valve. Each side of the box A is provided with a groove for the

reception of a flange, *a*, projecting from a removable piece, B, which is thereby held in place, as seen in Fig. 1, in which position it forms one side of a groove, *c*, into which the molding-sand or other material is packed when the core-box is filled to form the core.

The removable pieces B B may be of elliptical or other form, to correspond to that of the exterior of the core.

When the core-box is inverted the removable pieces B B drop out with the core, from which they may be readily removed, leaving the core with projections of a form corresponding to that of the recesses to be cast within the shell or body of the valve for the reception of the Babbitt or other soft-metal seat.

It will be seen that by the employment of the removable pieces B B I am enabled, with great facility, to draw from its box a core provided with dovetailed projections to be used in casting valves, which has not heretofore been found practicable.

Claim.

What I claim as my invention, and desire to secure by Letters Patent, is—

A core-box, A, provided with removable pieces B B and the dovetail projections *c c* for making cores to be used in casting valves, substantially as set forth.

Witness my hand this 30th day of October, A. D. 1871.

JOHN C. CHAPMAN.

In presence of—

P. E. TESCHEMACHER,
N. W. STEARNS.