W. AIKIN & W. W. DRUMMOND.

CORE-BOX.

No. 192,556. Patented July 3, 1877.

Fig. 1.

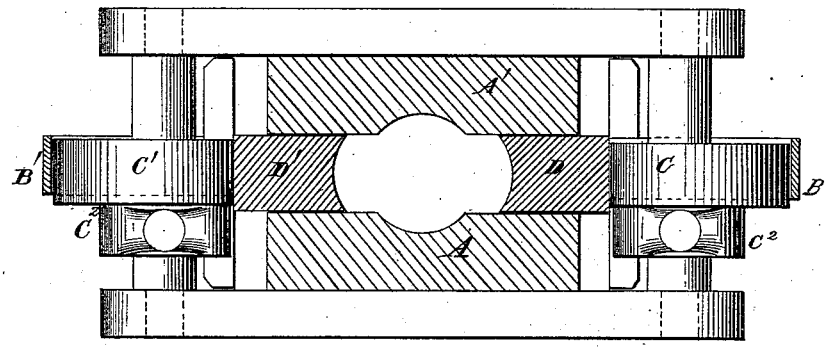
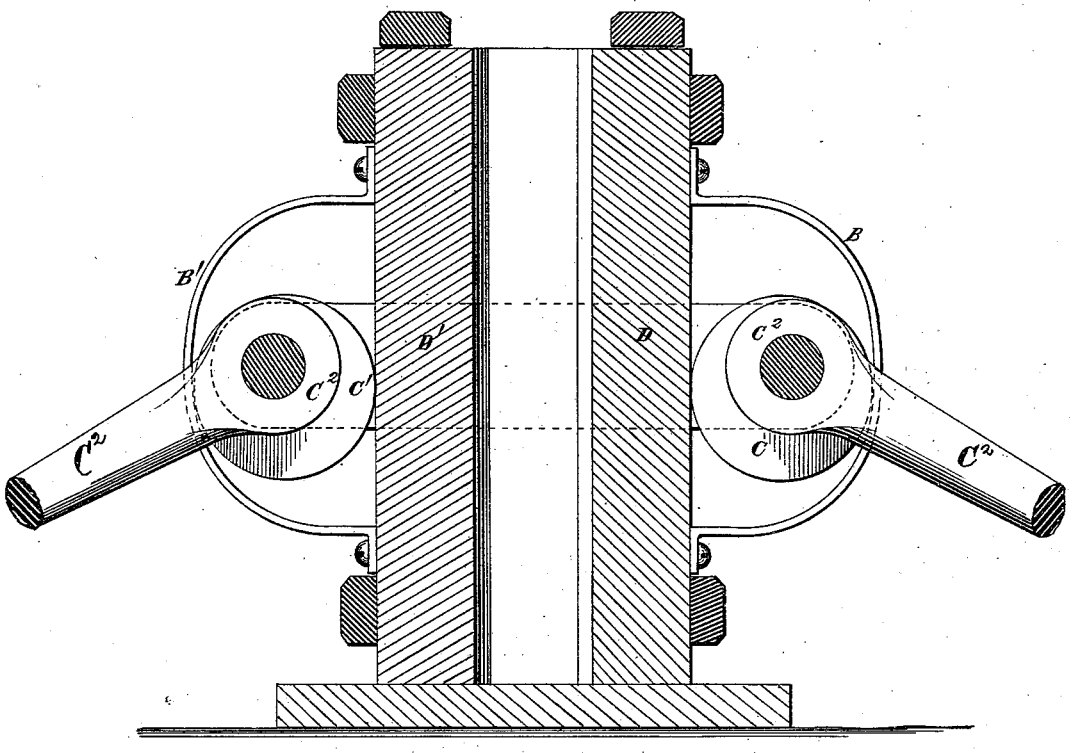


Fig. 2.



Witnesses.
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Attys.

UNITED STATES PATENT OFFICE.

WILLIAM AIKIN AND WILLIAM W. DRUMMOND, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN CORE-BOXES.

Specification forming part of Letters Patent No. **192,556**, dated July 3, 1877; application filed April 28, 1877.

To all whom it may concern:

Be it known that we, WILLIAM AIKIN and WILLIAM W. DRUMMOND, of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful Improvement in Core-Boxes, of which the following is a specification:

The object of this invention is the formation of cores for casting by compression, thereby saving the comparatively costly process of making them by ramming the sand confined in a core-box.

In the annexed drawing, making a part of this specification, Figure 1 is a transverse section. Fig. 2 is a vertical section.

The same letters are employed in both figures in the indication of identical parts.

A A′ are the stationary sides of the core-box, fastened by strong frames to hold them firmly in place. On the sides are the two semicircular braces B B′, which inclose the eccentrics C C^1, actuated by the levers C^2. On one side the eccentrics bear against the braces B B′, and on the other against the sliding rams D D′, which fill the space between the edges of the sides A A′, and are cut into segments on their inner faces, corresponding to those cut in the sides, so that the four faces, when the plungers are forced in, shall form a complete circle.

The operation is as follows: The sand having been prepared in the ordinary manner, and the core barrels or rods, if such are used, being placed in position in the press, the sand is thrown in to fill the space between the parts A A′ D D′, in relative position, as shown in Fig. 1, and then the levers C^2 are depressed, forcing the plungers D D′ toward one another, compressing the sand until it is brought to its proper cylindrical or other form. Instead of eccentrics, levers or any other suitable device may be used in forcing the plungers together.

Instead of having the sides absolutely stationary, as shown, they may be made in sections, joined in the middle on one side by hinges, so that the core-box may be spread by swinging the sections on the hinges.

We illustrated our case as adapted for making plain cylindrical cores, but we do not limit our claims to any particular form.

What we claim as our invention, and desire to secure by Letters Patent, is—

In a core-box, the combination of the recessed side pieces A A′, the intermediate plungers D D′, forming the core between the four parts, and the eccentrics C C^1, for compressing the core, substantially as set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

WILLIAM AIKIN.
WM. W. DRUMMOND.

Witnesses:
E. THOMPSON,
W. T. DRUMMOND.