

W. J. REAGAN.
MACHINE FOR MAKING CORES.

No. 176,052.

Patented April 11, 1876.

Fig: 1.

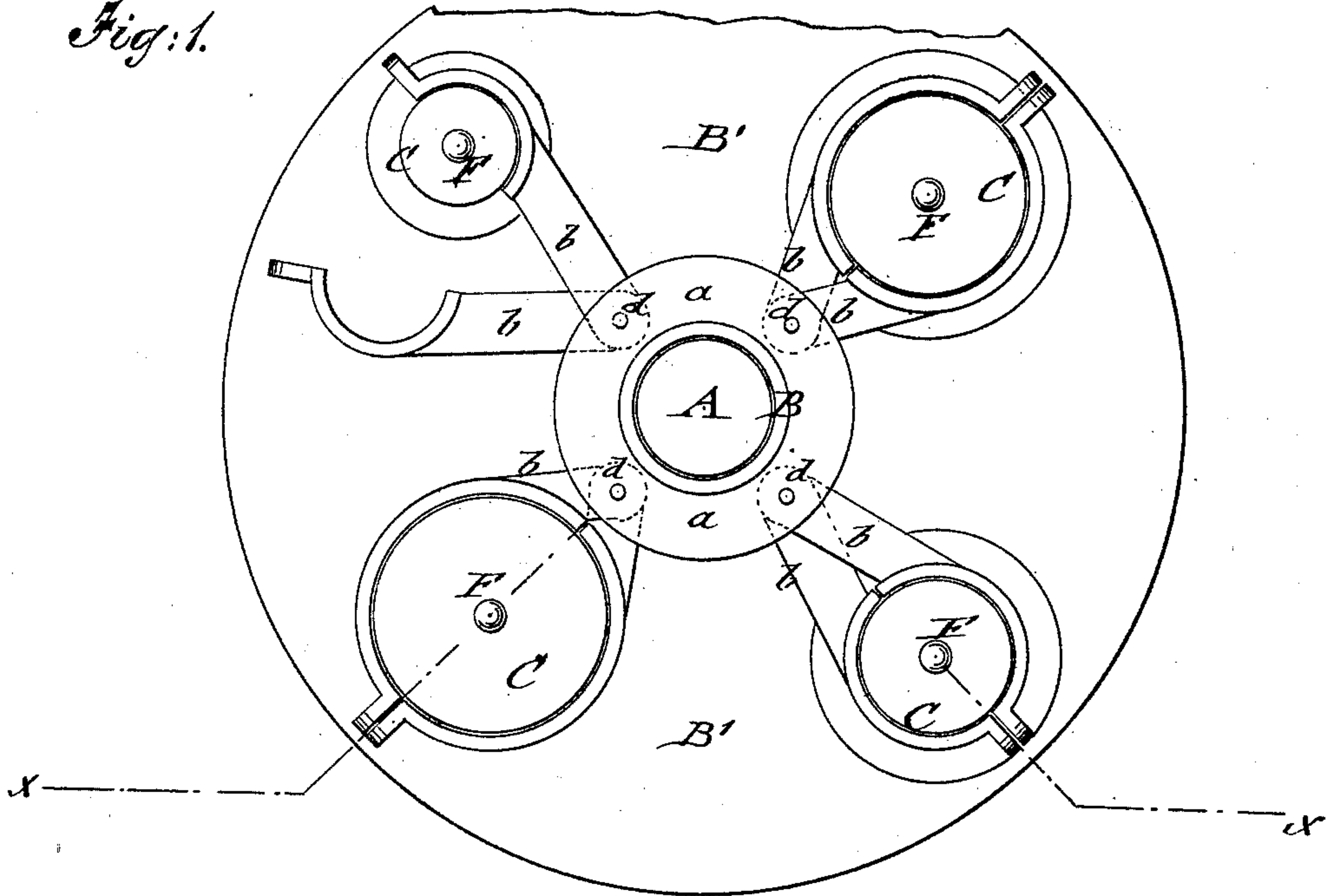
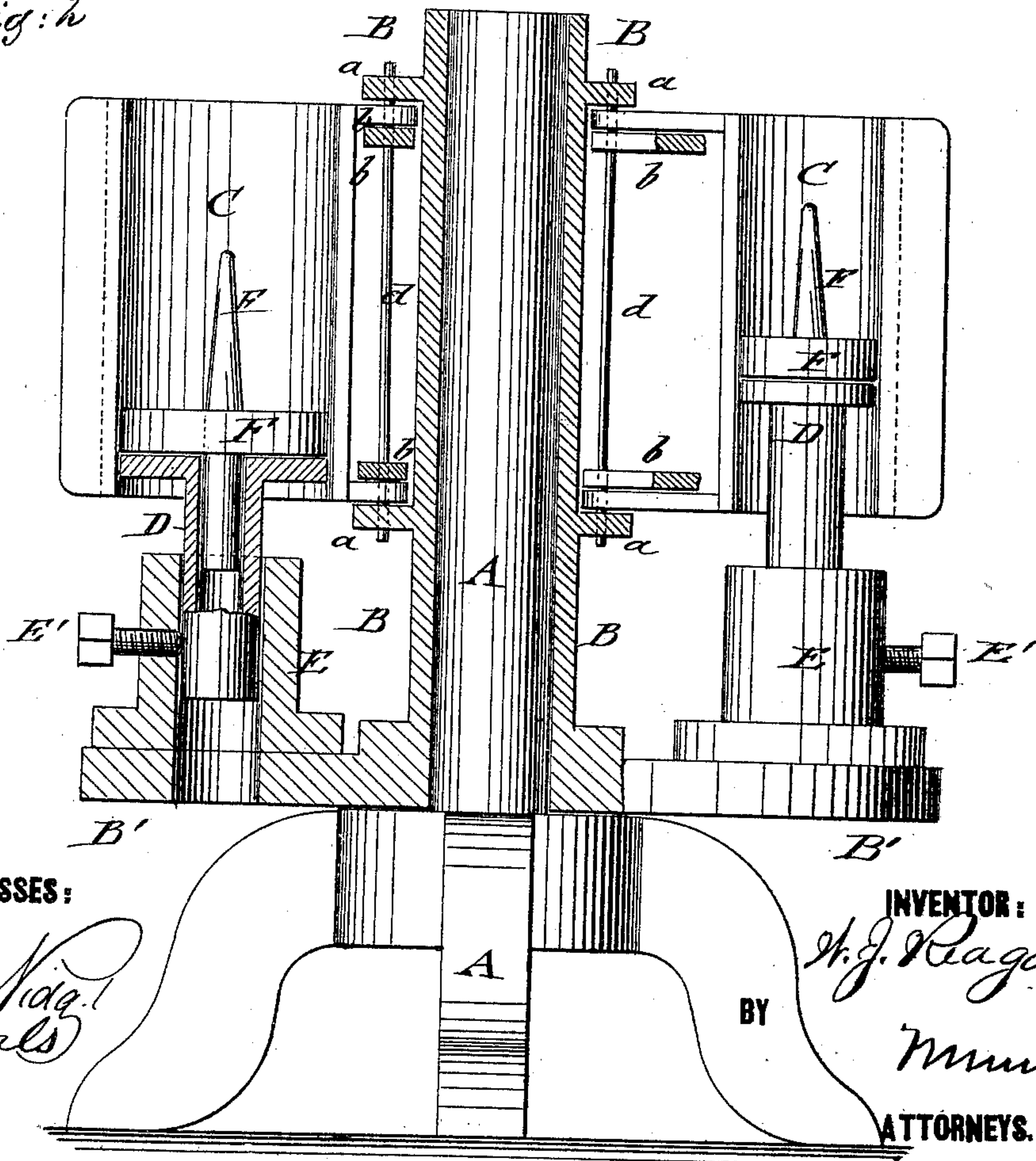


Fig: 2.



WITNESSES:

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WILLIAM J. REAGAN, OF POTTSTOWN, PENNSYLVANIA.

IMPROVEMENT IN MACHINES FOR MAKING CORES.

Specification forming part of Letters Patent No. **176,052**, dated April 11, 1876; application filed January 22, 1876.

To all whom it may concern :

Be it known that I, WILLIAM J. REAGAN, of Pottstown, in the county of Montgomery and State of Pennsylvania, have invented a new and Improved Machine for Making Dry Sand Cores, of which the following is a specification :

In the accompanying drawing, Figure 1 represents a top view ; and Fig. 2 a vertical axial section on the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention relates to an improved machine for making sand cores of any desired thickness and length, so that the production of the same is greatly facilitated and expedited, and the cores transferred to the drying-kiln in quick and convenient manner.

The invention consists of a revolving stand, to which a number of core-boxes of different diameters are hinged, the length of the cores being determined by adjustable pistons carrying the core-supporting vent-pins.

In the drawing, A represents a vertical standard or post, on which the revolving stand B, with central tubular part and base platform B¹, is supported. The tubular part of stand B has annular flanges *a*, to which a greater or less number of core-boxes or flasks, C, of varying diameter, are hinged. The number of core-boxes depends on the different sizes of cores required, the machine being made larger or smaller to correspond therewith. Each core-box C is made in two semi-sections, that are separately hinged, by their top and bottom lugs *b*, to pivot-rods *d* of center tube B. The core-boxes have to be arranged at such distance from each other that a sufficient space is formed between them to allow the opening of the semi-sections for taking out the molded cores. The semi-sections of each core-box C are locked in closed position by hook and pin or other suitable fastening device. A sliding piston, D, is arranged below each core-box, and of the same diameter therewith. Its stem is adjusted by a set-screw, E', in a guide-sleeve, E,

of the platform B², which is perforated, to allow the lowering of the piston-stem below the same. The piston D may be set to any height in the core box, according to the length of the core required. The piston-stem is hollow, for carrying the stem of a cast-iron vent-pin, F, that has a base-disk of the same diameter as the core-box and piston, and a tapering upward-extending center-pin, over which the core is formed for being transferred with the vent-pin into the drying kiln. The different sizes of core-boxes, in connection with the adjustable pistons, allow the molding of a great number of cores of different thicknesses and length, while the vent-pins admit the easy taking off and transferring of the cores to the kilns, where they are inserted into suitable stands, without removing the cores from the pins until they are perfectly dried out and ready for use.

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

1. In a machine for making dry sand cores the combination of a revolving stand, B, a series of sectional hinged core-boxes, C, of various sizes, and a corresponding number of adjustable pistons, D, substantially as and for the purpose described.

2. The combination, with the hinged core-box, of a sliding piston and vent-pin of equal diameter therewith, being adjustable to different height by a guide-sleeve and set-screw of the platform, to obtain cores of any required length, substantially as and for the purpose set forth.

3. The combination, with the perforated piston, of a detachable vent-pin of equal diameter therewith, and central tapering pin, for transferring the molded cores with the vent-pins to the kiln, substantially as specified.

WM. J. REAGAN.

Witnesses :

GEO. W. REAGAN,
JAMES THOMSON.