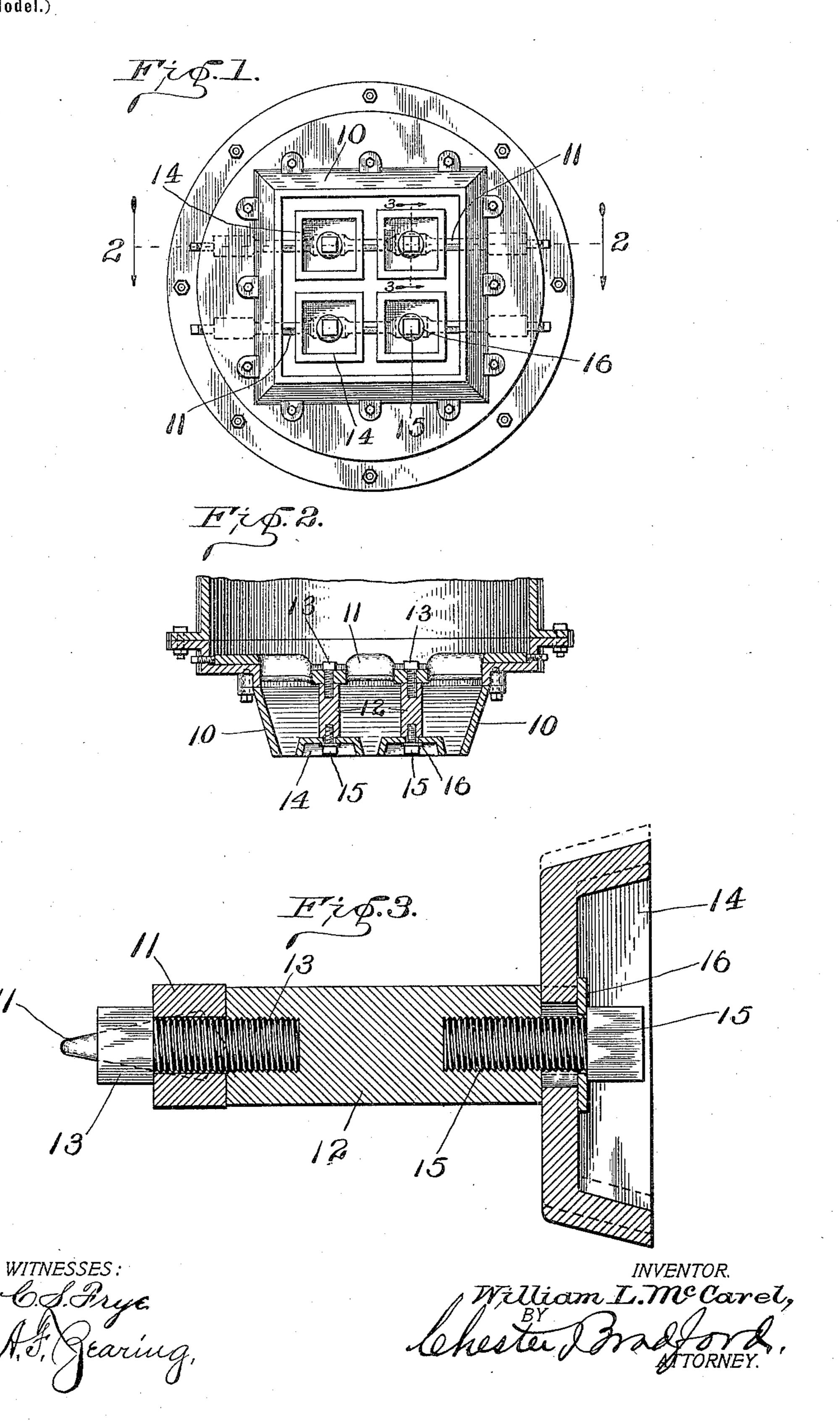
## W. L. MCCAREL.

## DIE FOR MAKING MULTIPLE ORIFICED CLAY CONDUITS.

(Application filed Nov. 22, 1901.)

(No Model.)



## United States Patent Office.

WILLIAM LEE MCCAREL, OF BRAZIL, INDIANA.

## DIE FOR MAKING MULTIPLE-ORIFICED CLAY CONDUITS.

SPECIFICATION forming part of Letters Patent No. 696,377, dated March 25, 1902.

Application filed November 22, 1901. Serial No. 83,283. (No model.)

To all whom it may concern:

Beit known that I, WILLIAM LEE MCCAREL, a citizen of the United States, residing at Brazil, in the county of Clay and State of Indiana, have invented certain new and useful Improvements in Dies for Making Multiple-Orificed Clay Conduits, of which the following is a specification.

ing is a specification.

My present invention relates to that class 10 of clay-working machinery by means of which tile and other varieties of clay conduits having a multiplicity of conduit-openings are produced. It is necessary in these multiple machines that the inner dies or cores which 15 form the orifices shall be adjusted with great nicety, as slight variations from the exact position required are apt to produce a curvature or crookedness in the product, which is highly objectionable. The cores must be capable of 20 adjustment both axially and laterally; and it is the object of my invention to produce dies so constructed that this can be speedily and accurately accomplished, as will be hereinafter more fully described and claimed.

Referring to the accompanying drawings, which are made a part hereof, and on which similar reference characters indicate similar parts, Figure 1 is a front elevation of a machine of the character in question provided with dies embodying my said invention; Fig. 2, a horizontal sectional view thereof as seen when looking downwardly from the dotted line 22 in Fig. 1; and Fig. 3, a detail sectional view of one of the inner or core dies separately, on a greatly-enlarged scale, on the

dotted line 3 3 in Fig. 1.

The outer die 10, the inner supporting-bars 11 for the inner or core dies, and the shanks 12 to said inner dies, which are connected to said bars by the machine-screws 13, are or may be of an ordinary form and arrangement and will not, therefore, be further described herein, except incidentally in describing the invention.

Heretofore the inner or core dies 14 have been non-adjustable in respect to the shanks

12. As most plainly shown in Fig. 3, I connect said dies to said shanks by means of machine-screws 15 and washers 16, the holes through the dies being considerably larger 50 than the diameter of said screws, which pass through said holes and into suitable threaded perforations in the shanks 12. I am thus enabled by merely loosening the screws 15 to adjust these inner or core dies laterally in 55 any direction or revolubly about these screws as axes to the exact point desired and secure them to the adjusted position by merely retightening said screws.

Having thus fully described my said invention, what I claim as new, and desire to secure

by Letters Patent, is—

1. The combination, in a die for making multiple-orificed clay conduits, of a suitable outer die, suitable supporting-bars extending 65 across said outer die for carrying the inner or core dies, a plurality of shanks or standards of suitable length thereon, and a plurality of inner or core dies mounted adjustably upon the outer ends of said shanks or 70 standards, said inner dies being thus adjustable in respect to the outer die, revolubly, and toward and from each other, substantially as and for the purposes set forth.

2. The combination, in a machine for making multiple-orificed clay conduits, of the fixed outer die 10, transversely-arranged bars 11 extending across behind said die for carrying the inner or core dies, said bars being provided with suitable standards or shanks, the 80 inner or core dies 14, connecting-screws 15, and washers 16, the hole in said die 14 through which the screws pass being larger in diameter than said screws, substantially as shown and described.

In witness whereof I have hereunto set my hand and seal at Brazil, Indiana, this 15th day of November, A. D. 1901.

WILLIAM LEE MCCAREL. [L. s.]

Witnesses:

JOHN NORTHWAY, JOSEPH V. AYER.