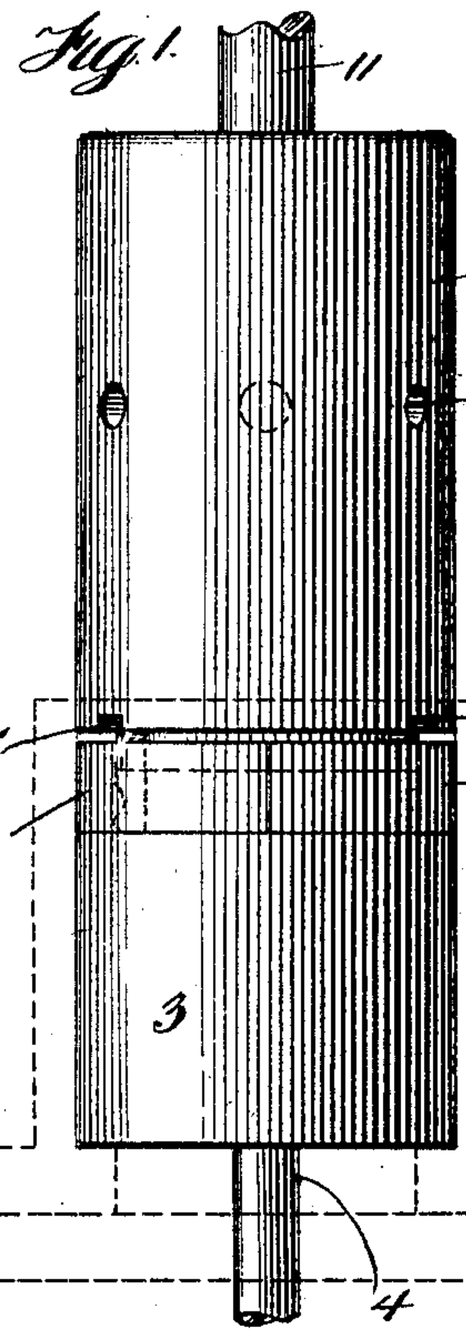
No. 860,368. PATENTED JULY 16, 1907.

B. H. GREENE.

DIES FOR MANTLE HOLDERS.

APPLICATION FILED APR. 5, 1907.

Fig. 1.



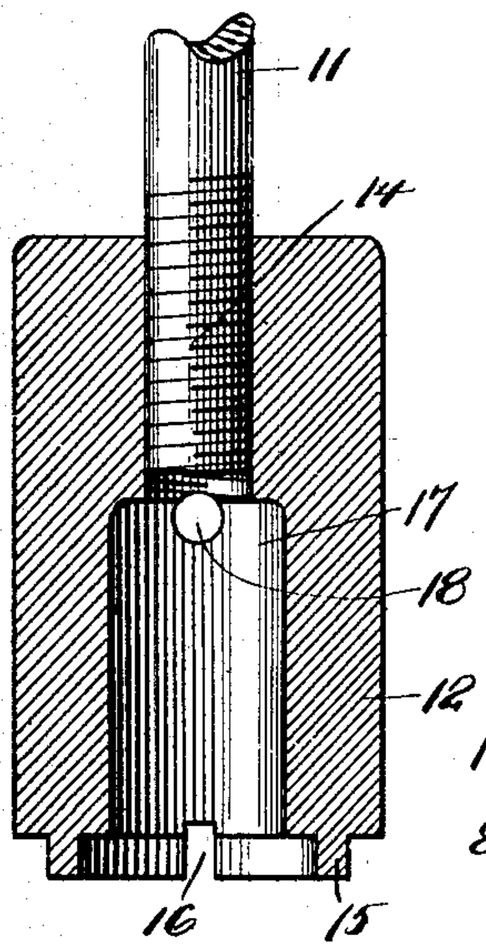


Fig. 2.

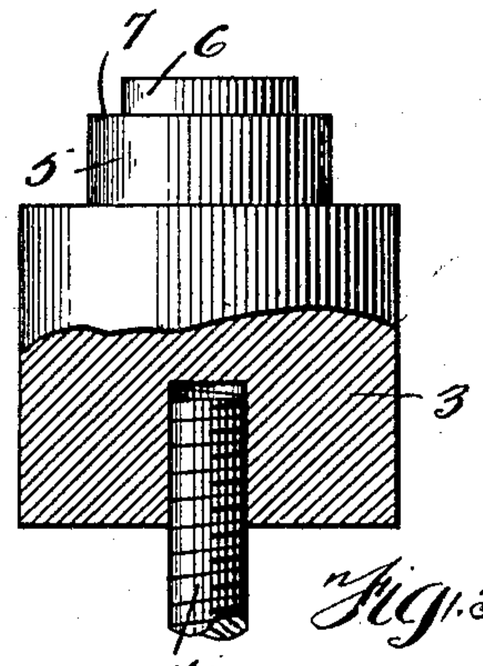


Fig. 3.

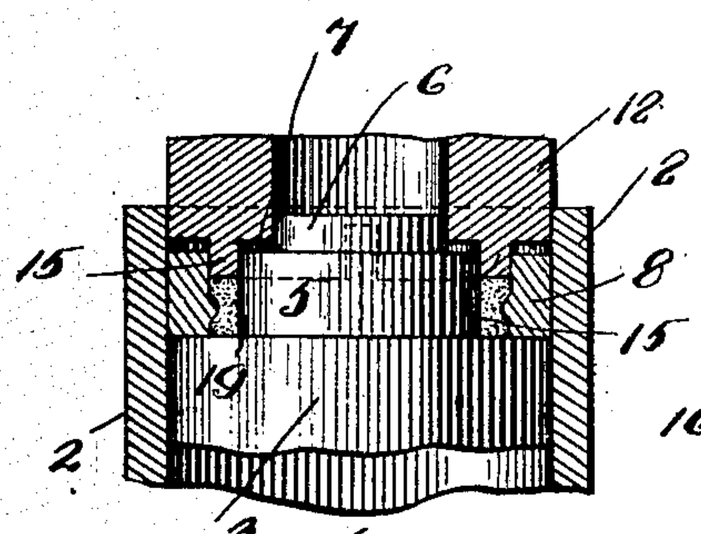


Fig. 4.

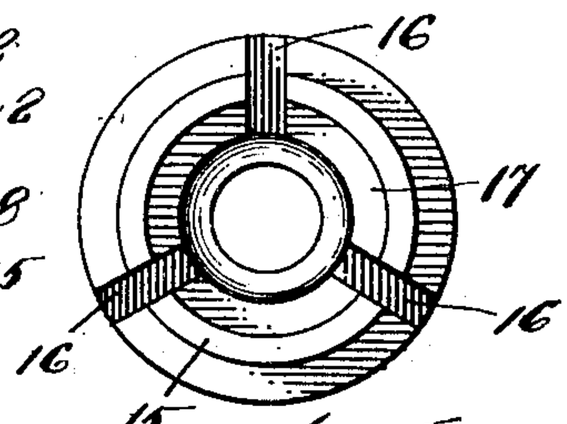


Fig. 5.

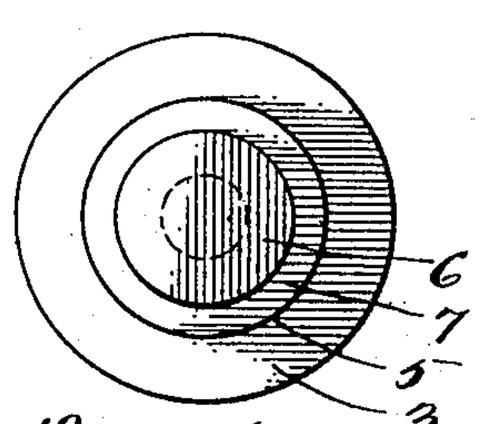


Fig. 6.

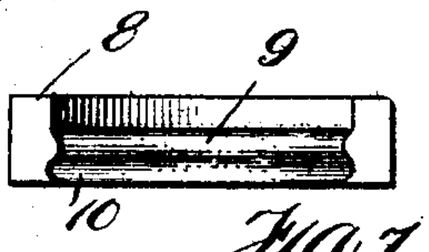


Fig. 7.

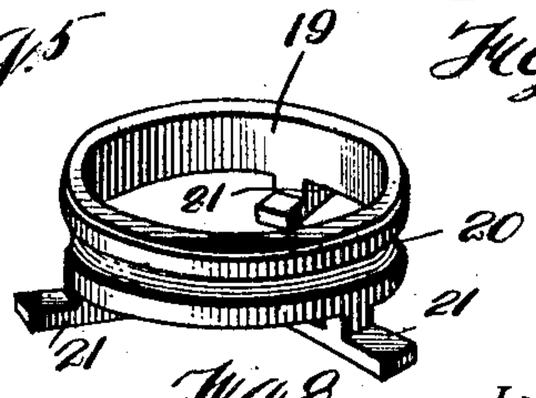


Fig. 8.

WITNESSES:

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UNITED STATES PATENT OFFICE.

BARTHOLOMEW H. GREENE, OF EAST LIVERPOOL, OHIO, ASSIGNOR OF ONE-THIRD TO HARRY D. WEAVER AND ONE-THIRD TO EMETT C. ALBRIGHT, OF EAST LIVERPOOL, OHIO.

DIES FOR MANTLE-HOLDERS.

No. 860,368. Specification of Letters Patent. Patented July 16, 1907.

Application filed April 5, 1907. Serial No. 366,576.

To all whom it may concern:

Be it known that I, BARTHOLOMEW H. GREENE, a citizen of the United States of America, residing at East Liverpool, in the county of Columbiana and State of Ohio, have invented certain new and useful Improvements in Dies for Mantle-Holders, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to dies for mantle holders, and the invention relates more particularly to improvements in dies for forming mantle holders of that type designed for suspending a mantle beneath a gas burner.

My invention aims to provide two movable dies having a detachable two-part ring which when assembled, filled with clay and pressed together will produce an effective, strong and durable mantle holder, the holder comprising supporting arms, and a grooved band, to which is suitably secured a mantle.

The dies are extremely simple in construction and can be readily cleansed at any desired time without necessarily retarding or causing a cessation in the operation of producing mantle holders. In constructing the dies, I have made provision for the escape of air between the dies and have allowed for excess material that is placed between the dies and not used in the completed article.

The detail construction entering into my invention will be hereinafter more fully described and then specifically pointed out in the appended claims.

Referring to the drawing forming part of this specification, like numerals of reference designate corresponding parts throughout the several views, in which:—

Figure 1 is an elevation of my improved dies illustrating in dotted lines the supporting shell of the female die, Fig. 2 is a vertical sectional view of the male die, Fig. 3 is an elevation partly in section of the female die, Fig. 4 is a vertical sectional view of a portion of the dies illustrating the formation of the holder therein. Fig. 5 is a bottom plan of the male die, Fig. 6 is a top plan of the female die, Fig. 7 is an elevation of one of the parts of a ring used in connection with the die, Fig. 8 is a perspective view of the mantle holder or article produced by my improved dies.

In the accompanying drawings, 1 designates a table or support upon which is suitably clamped a supporting shell 2 for the cylindrical female die 3 of my invention. The die 3 is provided with a depending detachable stem 4 connecting with a conventional form of treadle or elevating mechanism (not shown), whereby the die 3 can be elevated or raised within the shell 2 so that the upper end of the die will protrude slightly above the shell 2. The upper end of the die is contracted to provide two collars 5, and 6.

Surrounding the collar 5 is a two-part detachable ring 8, said ring having a circular interiorly arranged rib 9 and a groove 10, the object of which will presently appear.

Movably mounted above the female die 3 by a stem 11 is a male die 12, said die being threaded upon the stem 11, as at 14. The die 12 upon its lower end is provided with an annular depending flange 15, which is provided with three equally spaced recesses 16. The die is formed with a central bore 17 communicating with radially disposed openings 18 formed intermediate the ends of the male die.

The male die 12 is constructed to enter the shell 2 and compress the material, such as clay, placed in the shell upon the top of the female die 3, the material entering the space between the collar 5 and the ring 8 which surrounds said collar and snugly engages the shell 2. As the male die is lowered to enter the shell 2, the air within said shell escapes through the bore 17 and to openings 18, while the excess amount of material in the shell is forced upwardly into the bore 17. As the male die 12 descends into the shell, the flange 15 enters the space between the collar 5 and the ring 8, compressing the material therein, and forcing a part of the material into the recesses 16 of the male die. After the material has been compressed, the dies 3 and 12 are elevated until the top of the die 3 is above the shel 12. The male die 12 is then further elevated, the two-part ring 8 removed from the die 3 and the finished article removed from the die.

In the formation of a mantle holder, the annular rib 9 and groove 10 of the two-part ring 8 provide the band 19 of the mantle holder with an annular groove 20, in which a mantle is suitably secured.. The recesses 16 of the male die 12 provides the band 19 with supporting arms 21, whereby the mantle holder can be suitably held upon a fixture. The mantle holder illustrated in Fig. 8 is in an inverted position to that in which it is commonly used.

It will be apparent from the illustration of my invention that I have devised simple and inexpensive dies for rapidly producing mantle holders, the dies being constructed to insure a perfect formation of the material placed between the dies within the shell 2.

I do not care to confine myself to the size, proportion and minor details of construction entering into my invention as such changes as are permissible by the appended claims, may be resorted to without departing from the spirit and scope of the invention.

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

1. In dies for forming mantle holders, the combination with a shell, of a female die fitting within the shell and provided at its upper end with collars of different diame-

ters, a two-part ring fitting within the shell and surrounding the larger collar on said female die, there being a space between said collar and said two-part ring, and said two-part ring provided on its inner face with an annular rib, and below said rib with an annular groove, and a male die adapted to fit in the upper end of said shell having a hollow lower end and having air vents through the sides communicating with the chamber within said hollow end, said male die having an annular flange on its lower end adapted to enter the space between the larger collar on the female die and said two-part ring, said annular flange provided with spaced recesses, substantially as described.

2. In dies for forming mantle holders, the combination with a shell, of a female die and a male die, the female die fitting within said shell and having superposed collars of different diameters on its upper end, a two-part ring surrounding the larger of said collars and spaced away therefrom, said ring provided on its inner face with an annular rib and with a groove below said rib, said male die having a hollow lower end and having air vents through the side communicating with the chamber formed in said hollow end, a flange carried by the lower end of said male die adapted to enter the space between the larger collar on the female die and said two-part ring, and having equally spaced recesses, the smaller collar on said female die adapted to enter the hollow end of the male die when the flange of the latter enters the space between the larger collar of the female die and said two-part ring.

In testimony whereof I affix my signature in the presence of two witnesses.

BARTHOLOMEW H. GREENE.

Witnesses:

MAX H. SROLOVITZ,

C. V. BROOKS.