No. 880,699. PATENTED MAR. 3, 1908.

M. SWINTEK.

WALL PLUG.

APPLICATION FILED APR. 19, 1907.

Fig. 1.

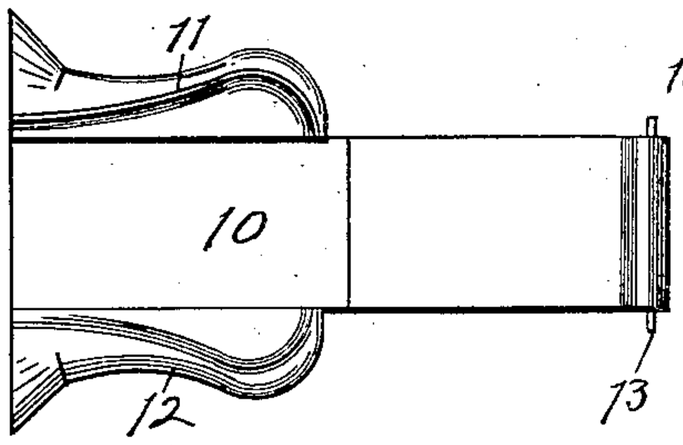
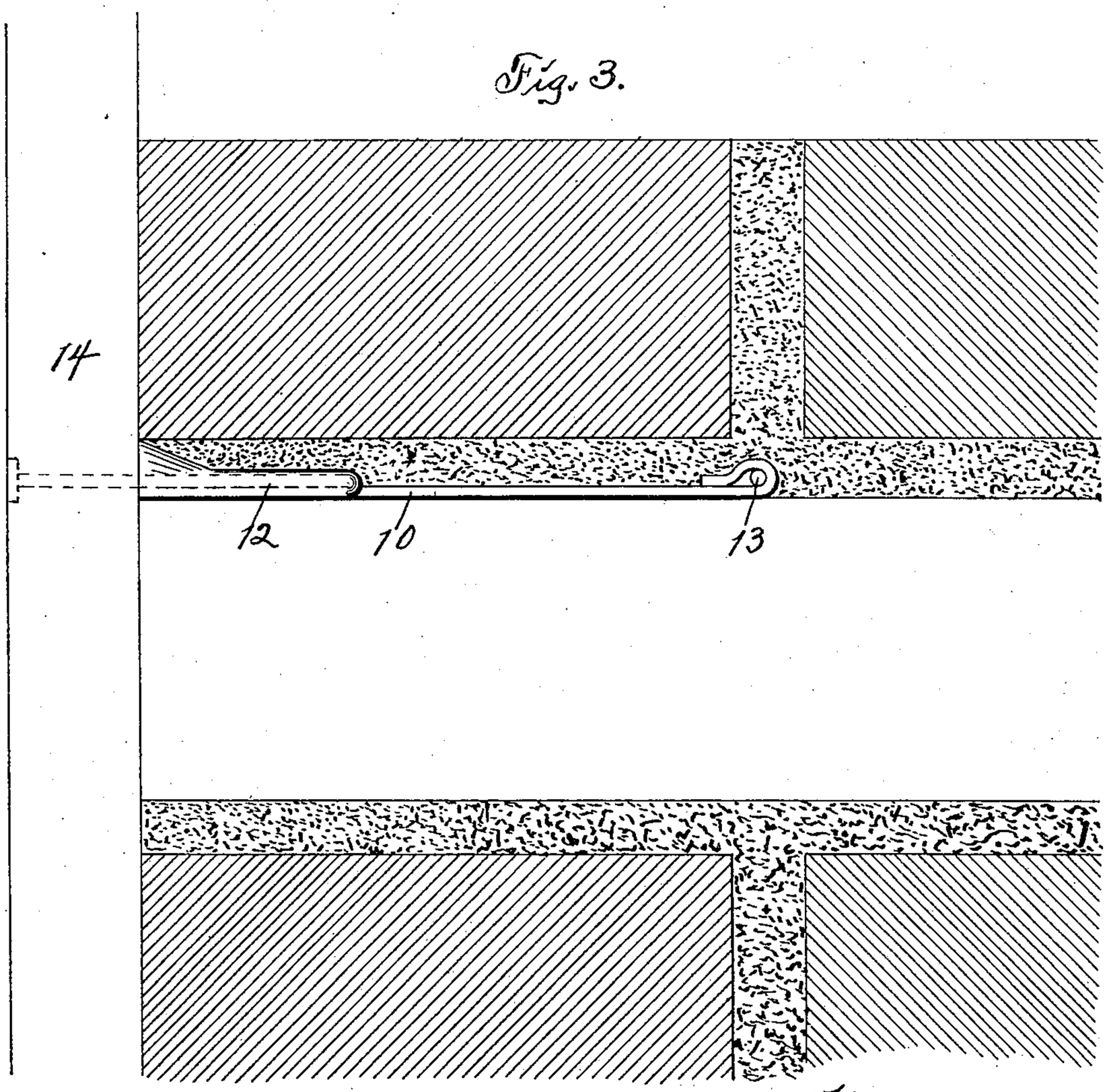


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

MARTIN SWINTEK, OF DES MOINES, IOWA.

WALL-PLUG.

No. 880,699. Specification of Letters Patent. Patented March 3, 1908.

Application filed April 19, 1907. Serial No. 369,694.

To all whom it may concern:

Be it known that I, MARTIN SWINTEK, a citizen of the United States of America, and resident of Des Moines, Polk county, Iowa, have invented a new and useful Wall-Plug, of which the following is a specification.

The object of this invention is to provide improved means for receiving nails, in a wall built of brick, concrete, stone or similar material.

A further object of this invention is to provide an improved construction for wall plugs.

My invention consists in the article of manufacture hereinafter set forth, pointed out in my claims and illustrated by the accompanying drawing, in which—

Figure 1 is a plan of a complete wall plug ready for use. Fig. 2 is an end view of the same. Fig. 3 is an elevation, partly in section, showing the manner of mounting one of my improved wall plugs in a wall, and securing a furring strip thereto.

The article of manufacture as shown is formed of a single piece of metal having a rectangular body portion 10 and wings extending laterally from one end portion of said body portion. The wings are bent upward and inward and the inner margins thereof are pressed close to the side margins of the body portion, thus forming nail seats, 11, 12. In bending the wings to form the nail seats 11, 12, the outer end portions thereof are flared to produce bell-shaped mouths approximately semi-circular in cross-section and the remainder of the nail seats are curved sinuously or with undulating trend so that the rear end portions of said seats extend inwardly toward the body portion 10. The body portion 10 is made of sufficient length that the rear end portions thereof can be bent, doubled, or flexed over a pin 13 as illustrated in Figs. 1 and 3.

In practical use the wall plugs are mounted in the wall during the process of building and are laid in the horizontal mortar joints between layers of brick, stone, building blocks or similar material. The rear end portion of each wall plug is bent or folded over a pin 13 at such point that said pin is located in the line of vertical mortar joints or in hollows or air spaces in building blocks or at such distance from the face of the wall as will give sufficient resistance to maintain the wall plug in the mortar joint against ordinary outward-pulling strain.

The wall plugs are so located that the bell-shaped mouths to the nail seats 11, 12 are flush with the inner face of the wall. The wall plugs are arranged in vertical rows in the wall at such distances of separation as may be desired. Furring strips 14 may be mounted vertically on the face of the wall and two nails may be driven through said furring strips into the nail seats 11, 12 of the wall plugs, as shown by dotted lines in Fig. 3. The nail seats and the folded rear end portion of the wall plug and the pin 13 afford such resistance to movement in the mortar as renders the position of the wall plug stable during the operation of driving the nails into seats 11, 12; and the folded rear end portion and pin 13 prevent withdrawal of the wall plug from the mortar after it is set. When the nails are driven into the seats 11, 12 it traverses the sinuous paths thereof and the inner ends of the nails turn laterally, thus effectually clenching the nails and restraining them against accidental removal. Nails of various sizes may be used in the seats, the smaller nails frictionally engaging the inner surfaces of the seats and the larger nails expanding the seats to receive them and being frictionally engaged thereby. The use of two nails in each wall plug and extending through a furring strip in the same horizontal plane greatly increases the connection between the furring strip and the wall and holds it effectually against oscillation on a vertical axis.

I claim as my invention—

1. A wall plug having a body portion bent intermediate of its ends and wings on opposite sides of one end portion of said wall plug, each wing bent annular in cross-section to form a seat, each seat tapering from end to end, the inner end portions of the seats directed toward each other, and a pin transversely of the bend of the body portion.

2. A wall plug having a body portion adapted to be bent intermediate of its ends and formed with wings on opposite sides of one end portion, each wing bent laterally upon itself to form a bore or seat annular in cross section, each wing so shaped that the bore or seat therein tapers from end to end and the inner end portions of adjacent seats directed toward each other.

3. A wall plug having a body portion adapted to be bent intermediate of its ends and formed with wings on opposite sides of

one end portion, each wing bent transversely upon itself to form a bore annular in cross-section, each bore tapering from end to end and having sinuous longitudinal trend, each wing shaped to form a flaring mouth to the bore therein, the inner end portions adjacent the bores directed toward each other.

Signed by me at Red Oak, Iowa, this 23d day of March 1907.

MARTIN SWINTEK.

Witnesses:
PAUL P. CLARK,
B. B. CUM.