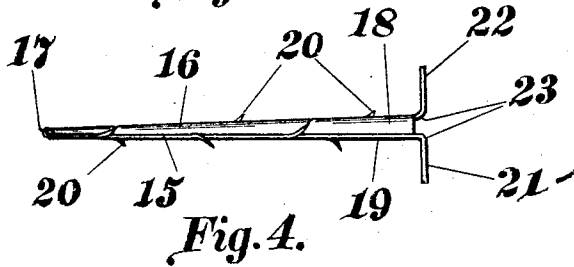
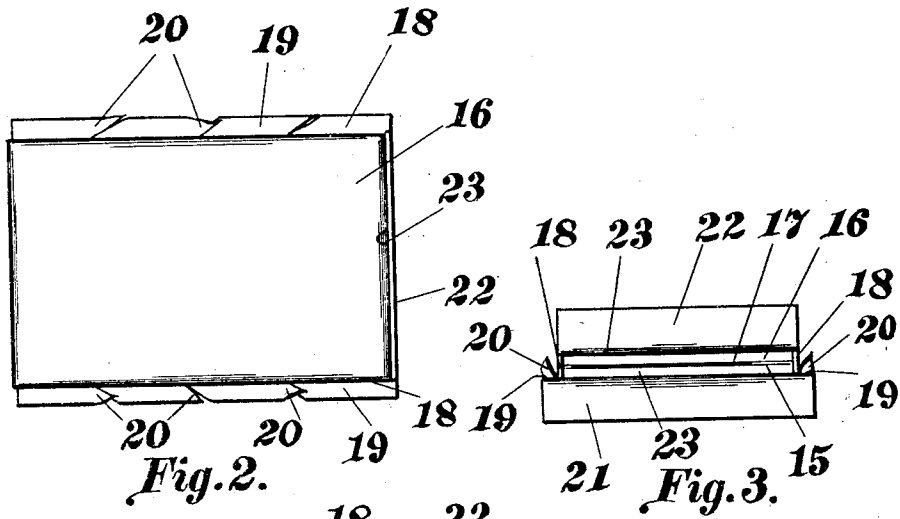
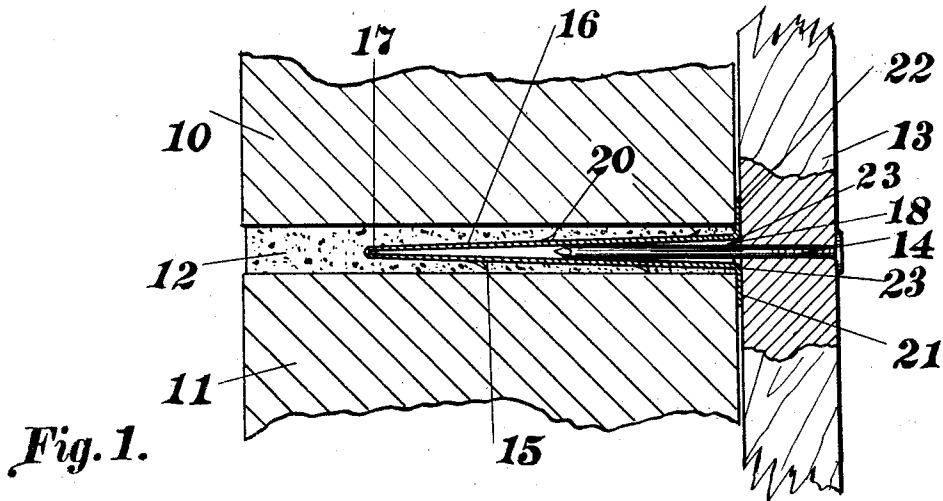


S. SIEVERS.
WALL PLUG.
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SERAPHIM SIEVERS, OF OMAHA, NEBRASKA.

WALL-PLUG.

1,399,407.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, SERAPHIM SIEVERS, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Wall-Plugs, of which the following is a specification.

The present invention relates to wall and floor plugs, adapted particularly for receiving and binding nails and the like by means of which furring and other wall and floor strips may be firmly secured to the body of the wall.

An object of this invention is to provide a plug of this character adapted particularly for use in mortar, concrete and other cementitious bodies wherein heretofore it has been difficult to anchor nails and other securing devices. Various expedients have been resorted to for securing nails in mortar, cement and the like, and chief among these has been the provision of wooden blocks or plugs which are first embedded or driven into the cementitious body and into which are later driven the nails.

The disadvantage of such an arrangement is that the wood is subject to splitting. The wood also swells and contracts under atmospheric and moisture conditions, and becomes ineffectual in that it becomes loose in the cementitious body and either itself becomes detached therefrom or releases its hold upon the nail or other fastening device.

It is therefore another object of this invention to provide a plug of this type which yieldingly grips the nail and which binds thereon in wedgelike fashion to securely maintain the nail in place under all conditions, and to provide a plug which is of a construction such that it is firmly anchored and embedded in the cementitious body.

A further object of the invention is to provide a plug of such construction that it may be embedded in the wall or floor structure while the cementitious material is in a plastic state and which may be approximately located so that when the nail is substantially driven into the plug it is absolutely essential to have the nail register accurately with the opening in the plug, the plug being relatively wide to admit considerable latitude in the positioning of the nail and also having guiding surfaces at its open end for deflecting and guiding the point of the nail to the interior of the plug.

With the foregoing and other objects in view, the invention will be more fully described hereinafter and will be more particularly pointed out in the claim appended hereto.

In the drawing, wherein like symbols refer to like or corresponding parts throughout the several views,

Figure 1 is a fragmentary sectional view through a portion of a brick wall having a furring strip applied thereto, and showing in section a plug constructed according to this invention in position on in the wall;

Fig. 2 is a top plan view of a plug constructed according to this invention;

Fig. 3 is an outer elevational end of the same; and

Fig. 4 is a side edge view of the plug.

Referring to the drawing, and first to Fig. 1 which illustrates one application or use of this plug, 10 and 11 designate adjacent portions of superposed bricks in a wall structure which are cemented or otherwise suitably secured together by a layer of mortar 12.

The inner face of the wall is provided in the usual manner with a furring strip 13 of wood or the like and to which the laths are usually attached. The furring strip 13 is attached to the wall by nails 14 which are usually driven into the mortar 12 between adjacent bricks.

The plug, according to this invention, and which will be described with reference to the upstanding wall shown in Fig. 1, comprises a flat bottom 15 and a flat top 16, the top and bottom being preferably made from a single sheet of metal which is overturned upon itself intermediate its ends as at 17 at an acute angle, and the top and bottom 15 and 16 diverge from the overturned portion 17 to the open end or mouth of the plug.

The top wall 17 is provided at its lateral edges with downturned flanges 18 which gradually increase in depth from the rear edge 17 to the open end of the plug and which seat upon the upper face of the bottom 15 for completely inclosing the interior of the plug, and to prevent the flowing in of mortar, cement or the like in which the plug may be embedded.

The bottom 15 is of greater width than the top 16 and the projecting ledges 19 thereof, are cut obliquely, and the metal adjacent the cuts are bent or stamped up to provide anchoring prongs 20.

The bottom 15 and top 16 are extended slightly beyond the forward edges of the flanges 18 and are rolled or bent outwardly away from each other to provide flanges 21 and 22 adapted to lie against the inner face of the wall structure and not only determine the position of the plug but also to correctly space the furring strip 13 from the face of the wall.

10 The top and bottom walls 15 and 16 of the plug may be of desired width to insure the driving of the nail 14 into the plug at any point throughout the width of the plug so that great accuracy is not necessary in the
15 positioning of the nail 14 opposite the plug. The rolled or rounded edges 23 at the inner ends of the flanges 21 and 22 serve as guides to receive thereagainst and deflect the point of the nail 14 should the latter be out of
20 vertical alinement with the plug.

When the device is used in a wall structure, a number of the plugs are embedded in the cementitious material 12 in vertical rows and with the rows suitably spaced
25 apart, such as with the distance of sixteen inches therebetween, and after the cement or mortar sets, the plugs are firmly embedded therein and held by the prongs 20 from withdrawal from the wall.

30 The furring strips 13 are now applied to the wall and are secured by the nails 14 against the flanges 21 and 22. The nails 14 are driven through the furring strips in approximate alinement with the plugs and,
35 owing to the rounded edges or guides 23 and the width of the plugs, the nails are directed in between the top and bottom walls 15 and 16 of the plugs and are wedged therebetween and held firmly from displacement.
40 ment.

Of course the plug may be used in floor construction where the plug is embedded in a cement body with the plug vertically arranged therein and the prongs 20 firmly
45 anchor the plug in place after the cementitious body has set. In this case, the furring

is in the form of stringers or girders upon which the floor boards are secured.

The plug constructed according to this invention is particularly adapted for use 50 where it is desired to securely hold nails or the like in mortar, cement, concrete or like material.

I do not wish to be restricted to the size, form, and proportions of the various parts, 55 and obviously changes could be made in the construction herein described without departing from the spirit of the invention, it being only necessary that such changes fall within the scope of the appended claim. 60

What is claimed is:

A wall or floor plug comprising a single sheet of metal overturned intermediate its ends at a relatively sharp angle and with its sides diverging toward its ends to provide a 65 wedge-shaped throat and at said ends bent outwardly and oppositely to provide wall abutting flanges, said plug being adapted to be embedded in a body of plastic material in a wall or floor and with said flanges abutting 70 against the outer face thereof, one of said overturned portions of said strip having its edges bent inwardly toward and engaging the other end portion to provide lateral flanges to space and support said sides 75 apart and prevent entrance of the plastic body therebetween, and said other end portion of the strip having spurs struck up therefrom at the outer sides of said flanges to hold the latter from collapsing and 80 adapted to anchor the plug in the plastic body, said plug being adapted to receive the end of a nail in said wedge-shaped throat, whereby to wedge said nail therein and bind the plug in the plastic body. 85

In testimony whereof, I have affixed my signature in presence of two witnesses.

SERAPHIM SIEVERS.

Witnesses:

ARTHUR H. STURGES,
HIRAM A. STURGES.