

April 24, 1928.

1,667,532

H. G. CARLSON
CONCRETE HANGER BLOCK

Filed Oct. 1, 1925

2 Sheets-Sheet 1

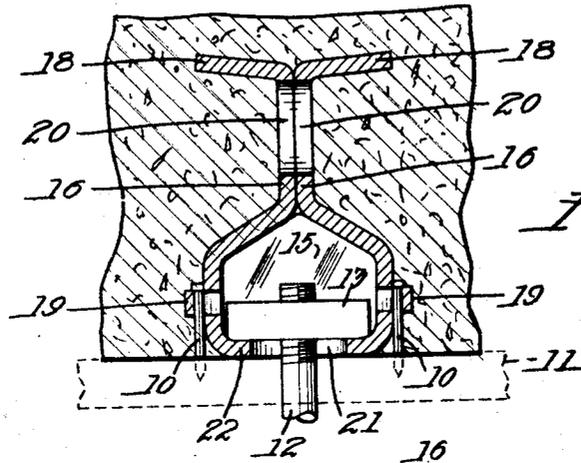


Fig. 1.

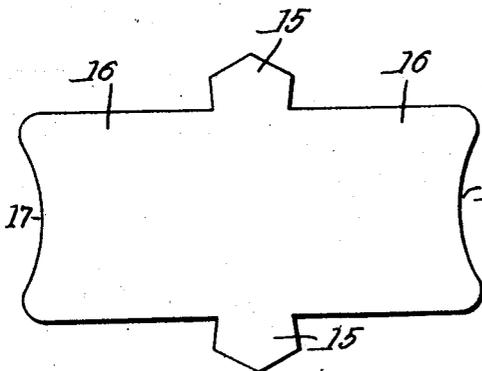


Fig. 2.

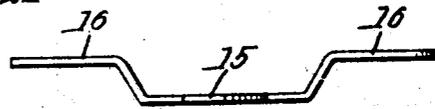


Fig. 3.

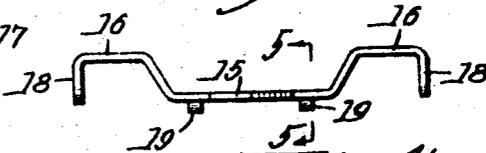


Fig. 4.



Fig. 5.

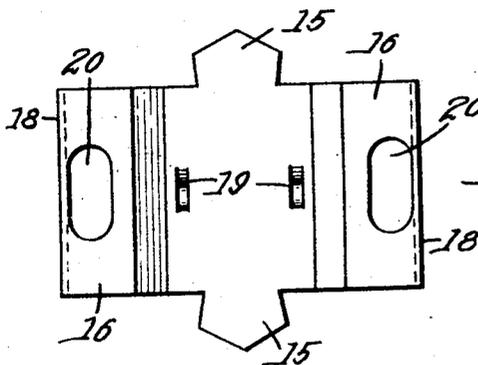


Fig. 6.

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2 Sheets-Sheet 2

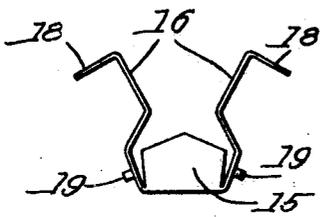


Fig. 7.

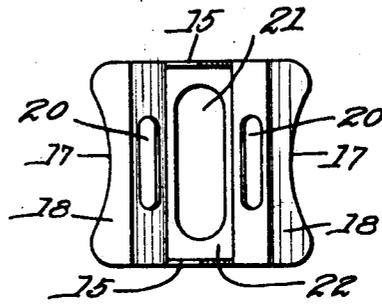


Fig. 8.

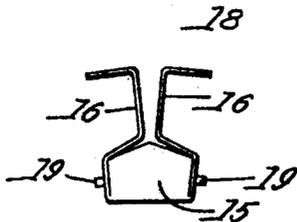


Fig. 9.

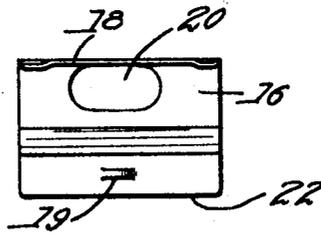


Fig. 10.

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UNITED STATES PATENT OFFICE.

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CONCRETE HANGER BLOCK.

Application filed October 1, 1926. Serial No. 139,000.

This invention relates to a block adapted to be imbedded in a concrete structure and having an opening in the bottom for use in hanging pipes and other articles therefrom by means of a headed support projecting up into the interior of the hanger block.

The principal objects of the invention are to provide a hanger block which can be made of pressed metal instead of the usual casting; to provide a hollow block of pressed metal having end pieces integral with the bottom and filling the ends of the sides so as to prevent the entrance of concrete; to provide perforated ears on the sides of the block for receiving the nails which temporarily hold it in place while the concrete is being poured around it; and to provide extensions on the sides projecting upwardly in contact with each other and having flanges extending outwardly in opposite directions to firmly anchor the block in the concrete.

The invention also involves the method of producing the hanger block and other features as will appear below.

Reference is to be had to the accompanying drawings, in which—

Fig. 1 is a sectional view of a concrete structure with a hanger block constructed in accordance with this invention imbedded therein;

Fig. 2 is a plan of the original blank as cut out for the production of this article;

Fig. 3 is an edge view showing the form of this blank after the first operation;

Fig. 4 is a similar view showing the result of the next operation which produces two flanges in the blank;

Fig. 5 is a transverse sectional view on the line 5—5 of Fig. 4;

Fig. 6 is a plan of the blank shown in Figs. 4 and 5;

Fig. 7 is an end view showing the blank of Fig. 6 with its sides bent upwardly toward each other;

Fig. 8 is a plan of the same;

Fig. 9 is a view similar to Fig. 7 showing the next operation; and

Fig. 10 is a side view thereof.

In Fig. 1, I have shown the complete article imbedded in the concrete. It will be

understood that when the concrete is being molded around it the hanger block is held in position by two nails 10 or the like which are driven into a board 11 which constitutes the bottom of the mold for the concrete and is afterwards removed, leaving the nails projecting out. These nails hold the hanger block temporarily while the concrete is poured and they have no further function. Their ends may be bent back out of the way by means of a hammer. It will be seen that a rod 12 is shown depending from the hanger block held in position by a nut or the like 13 located within it. I will not described the details of the hanger block with reference to Fig. 1, but will describe the process of manufacture, using the other figures for that purpose.

Fig. 2 shows the original flat blank. It is provided with two end pieces 15 and with two side pieces 16, the sides having opposite edges concave at 17. The first operation is to bend this blank into the form shown in Fig. 3 in which the sides 16 are in a plane parallel with the body of the blank, but the ends 15 are in the same plane as the latter.

In the next bending operation two functions are performed. The ends of the sides 16 are bent downwardly at right angles to the sides to form flanges 18 and punches are forced through the body of the blank to cut two slits and punch down the metal between them. This forms perforated ears 19. These ears are cut from the blank at opposite sides, but are continuous between the slits so as to provide means for holding the nails 10 as shown in Fig. 1. At the same time perforations 20 are formed in the sides 16 of the blank near the bent over flanges 18. All this is shown in plan in Fig. 6.

Now the blank is put in other dies and the sides 16 bent up toward each other as shown in Figs. 7 and 8, and an opening 21 is punched in the bottom 22. At the same time the ends 15 are turned upwardly at right angles to their original position. It takes another similar operation to bend over the sides 16 into contact with the edges of the ends 15 as shown in Fig. 9, and in

Fig. 10. Then with still another operation the two perforated walls 16 are forced into contact with each other as shown in Fig. 1, thus sealing the top against the entrance of
5 concrete.

The side walls 16 contact with the vertical side and the slanting top edges of the ends throughout their area to seal the ends against the entrance of concrete. The perforations 20 register with each other to permit a solid body of concrete, integral with the concrete structure, to extend through the hanger block and thus anchor it. The flanges 18 project out oppositely into the
10 concrete to prevent any tendency of the block to fall out.

Although I have illustrated and described only one form of the invention I am aware of the fact that modifications can
20 be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claim.

Therefore, I do not wish to be limited in these respects, but

What I do claim is:

As an article of manufacture, a sheet metal hanger block adapted to be embedded in concrete having a flat bottom having an opening therethrough for a fastening means and provided with a flat surface for a supporting means inside, the bottom having
25 two integral ends each in one piece projecting therefrom in opposite directions and bent upwardly in vertical planes and having vertical edges and tops converging inwardly, the sides of the hanger block being
30 also integral with the bottom and bent upwardly and overlapping the ends throughout their width and contacting with them along the vertical and slanting edges to the
35 center and projecting upwardly therefrom.

In testimony whereof I have hereunto affixed my signature.

HJALMAR G. CARLSON.