A. T. McALLISTER & H. DIPPEL.

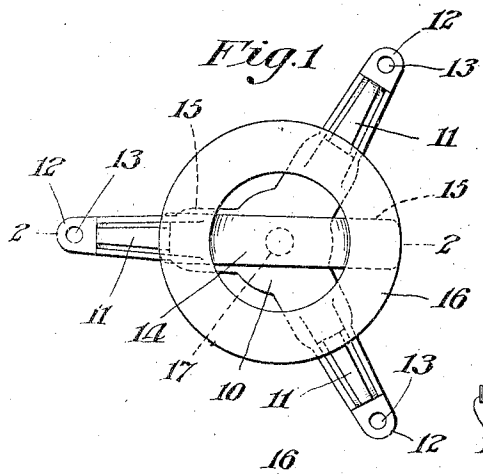
HANGER FOR CONCRETE WORK.

APPLICATION FILED APR. 9, 1913.

1,088,290.

Patented Feb. 24, 1914.

Fig. 1



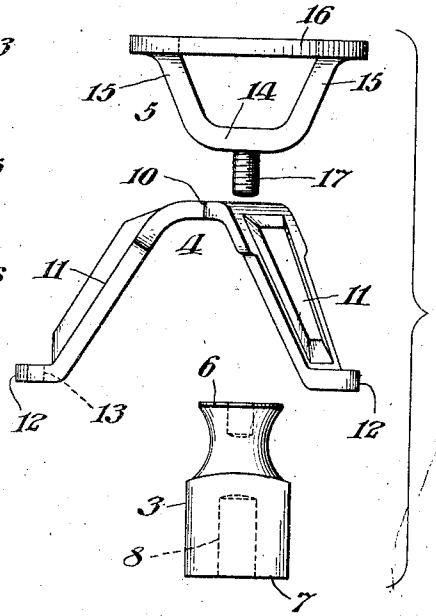


Fig. 3.

Fig. 2.

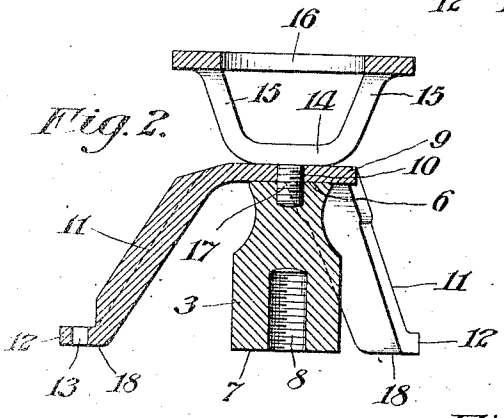
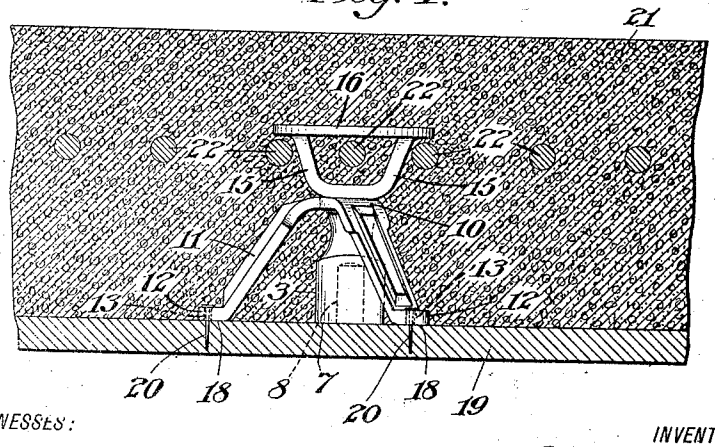


Fig. 4.



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HANGER FOR CONCRETE WORK.

1,088,290. Specification of Letters Patent. Patented Feb. 24, 1914.

Application filed April 9, 1913. Serial No. 759,834.

To all whom it may concern:

Be it known that we, ARCHIE T. McALLISTER and HARRY DIPPEL, citizens of the United States, residing in the city and county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Hangers for Concrete Work, of which the following is a specification.

Our invention relates to hangers adapted to be embedded or molded in concrete work and to thereafter have supporting devices attached thereto to support shafting, pipes, etc.

The object of our invention is to provide a hanger of novel, simple and efficient construction which may be readily secured in the mold which receives the concrete in which the hanger is to be embedded, which will be held in proper position relative to the mold at all times and under all conditions during the introduction of the concrete to the mold the spreading or working of the concrete within the mold, which may be anchored on the usual metal rods employed to reinforce the concrete and which will be provided with spaced or open parts between which the concrete may extend so that the hanger will be properly anchored, all as will be hereinafter fully described and particularly claimed.

In the accompanying drawings, illustrating our invention: Figure 1, is a plan of our improved hanger. Fig. 2, is a vertical section thereof, on line 2—2 of Fig. 1. Fig. 3, is a side view of the parts of the hanger, slightly separated from each other. Fig. 4, is a vertical section through a portion of a mold filled with concrete, showing the hanger secured to the floor of the mold and embedded in the concrete therein.

Referring to the drawings, our hanger, in the preferred form of embodiment of our invention is made in three parts, a central body portion 3, a member or spider 4 above and laterally of the body portion 3 and a head 5 above the member 4.

The body portion 3 is made in the form of a vertically-arranged block having upper and lower end faces 6 and 7, respectively, in parallel, horizontal planes and having an interiorly screw-threaded opening 8 extending vertically into the lower end thereof and adapted to receive the screw-threaded shank of the part to be supported by the hanger.

The member 4 comprises a central plate-like upper portion 9, having a hole 10 in the center thereof, and inclined arms 11 extending outwardly and downwardly from the portion 9 in spaced relation to each other and in spaced relation to the central body portion 3. The lower ends of the arms are provided with outwardly extending flanges 12 having holes 13 therein for the reception of nails or other devices to secure the arms to the concrete mold, as will be hereinafter explained.

The head 5 comprises a lower, horizontal portion 14, arms 15 extending upwardly and outwardly from the sides of the horizontal portion 14, a horizontally-arranged ring 16 connecting the upper ends of the arms 15 and a central, screw-threaded shank 17 extending downwardly from the portion 14.

In assembling the three parts 3, 4 and 5, the upper portion 9 of the member 4 is placed upon the upper face 6 of the body portion 3 and the shank 17 on the head 5 is passed through the opening 10 and screwed into an interiorly threaded hole in the upper end of the body portion 3, thus clamping the member 4 firmly between the body portion 3 and the head 5. When the parts are thus assembled, the bottom faces 18 of the arms 11 are in the same horizontal plane with the bottom face 7 of the block 3, and the axis of the opening 8 extends at right angles to this plane.

Our improved hanger is usually employed in the concrete forming the ceiling of a room, and, in this connection, prior to the formation of the ceiling, the hanger is placed upon the wooden board 19, as shown in Fig. 4, with the bottom faces 7 and 18 of the body portion 3 and arms 11 against the top of the board 19 or floor of the mold. The lower ends of the arms 11 are then secured to the board 19 by driving nails 20 through the openings 13 and into the board 19, thus holding the hanger in place with the axis of the opening 8 in true position at right angles to the floor of the mold. The wet concrete mixture 21 is then placed within the mold and spread and raked in the usual manner until it properly fills the mold and the spaces between the parts of the hanger, as shown. After the concrete mixture has hardened, the mold, including the bottom board 19 is removed and the projecting nails 20 are cut off leaving the bottom face of the block 3 exposed and the axis 8 in true

position at right angles to the bottom face of the concrete or ceiling of the room.

When metal reinforcing rods are used in the concrete, the same may be placed to extend beneath parts of the arms 15 and ring 16, as shown at 22 in Fig. 4, and these rods 22 serve to more firmly anchor the hanger in the concrete.

By the construction of our hanger, the same may not only be firmly anchored in the concrete, but the parts serve to maintain the body portion 3 in true position guarded by the arms 11 so that the raking and spreading of the concrete, the walking of workmen over the hanger and the rolling of wheelbarrows over the wet concrete and the hanger will not disturb the true position of the body portion 3.

We claim:

1. A hanger for concrete work comprising a central body portion, a member engaged with the upper portion of the body portion and having spaced arms extending downwardly therefrom, and means for securing said member to the body portion, said arms having bottom faces in the same plane with a bottom face of the body portion, said faces being adapted to rest upon the floor of a concrete mold, and the lower ends of said arms being adapted to be secured to said floor.

2. A hanger for concrete work comprising a central body portion, a member engaged with the top of the body portion and having spaced arms extending downwardly therefrom, and a head engaged with the top of said member and having a screw-threaded shank extending through said member and screwed into said body portion, said arms having bottom faces in the same plane with a bottom face of the body portion, said faces being adapted to rest upon the floor of a concrete mold, and the lower ends of said arms being adapted to be secured to said floor.

3. A hanger for concrete work comprising a central body portion, a member engaged with the top of the body portion and having spaced arms extending downwardly therefrom, and a head engaged with the top of said member and having a screw-threaded shank extending through said member and screwed into said body portion, said head being provided with upwardly and outwardly extending arms, the arms of said member having bottom faces in the same plane with a bottom face of the body portion, said faces being adapted to rest upon the floor of a concrete mold, and the lower ends of said arms being adapted to be secured to said floor.

4. A hanger for concrete work comprising a central body portion, a member engaged with the top of the body portion and having spaced arms extending downwardly therefrom, and a head engaged with the top of said member and having a screw-threaded shank extending through said member and screwed into said body portion, said head being provided with upwardly extending arms connected at their upper ends by a horizontally arranged ring, the arms of said member having bottom faces in the same plane with a bottom face of the body portion, said faces being adapted to rest upon the floor of a concrete mold, and the lower ends of said arms being adapted to be secured to said floor.

In testimony whereof we affix our signatures in the presence of two witnesses.

ARCHIE T. McALLISTER.
HARRY DIPPEL.

Witnesses:
A. V. GROUPE,
WM. HARRISON SMITH.