Nov. 8, 1932. E. W. HELBERG 1,887,455

ANCHOR FOR HANGERS

Filed May 22, 1929

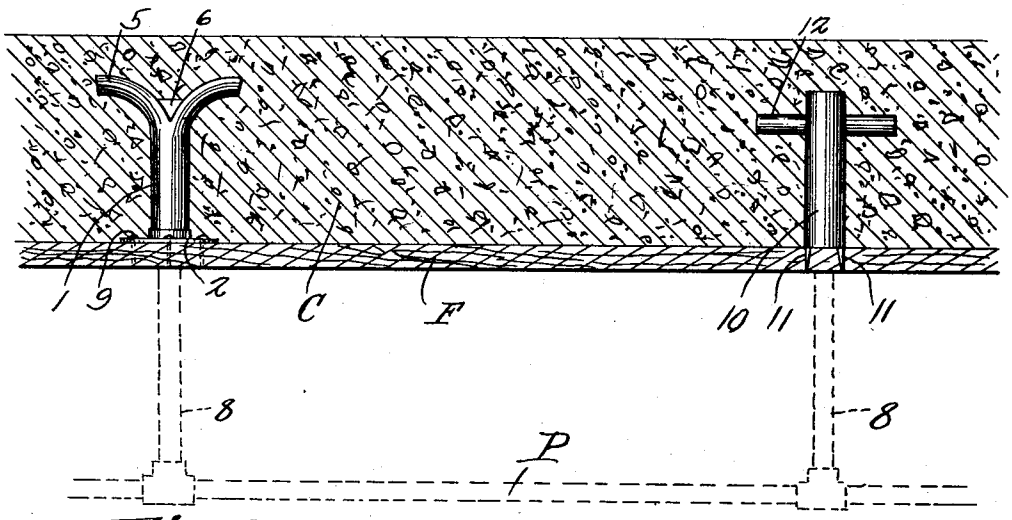

Fig. 1.

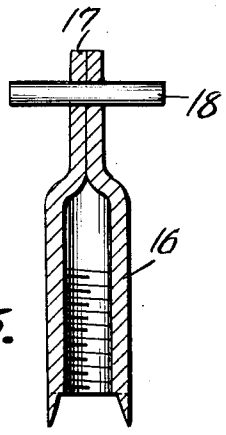

Fig. 3.

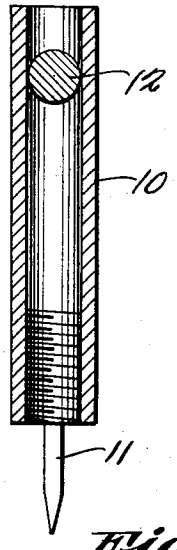

Fig. 2.

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UNITED STATES PATENT OFFICE

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ANCHOR FOR HANGERS

Application filed May 22, 1929. Serial No. 365,172.

This invention relates to an anchor designed primarily for use in suspending pipes and similar hangers from concrete structures.

It is an object of the present invention to provide an anchoring device which can be placed in a concrete form before the concrete is poured and, after the form has been removed, will present an open threaded recess or socket into which a hanger can be directed.

Another object is to provide simple and efficient means whereby the anchoring devices can be held properly positioned during the pouring operation.

A further object is to provide means for preventing the anchoring devices from becoming partly or entirely filled with concrete while being embedded therein or covered thereby.

A still further object is to provide an anchoring device which is simple in construction, cheap to manufacture, and does not require any special skill in positioning the same for use.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawing the preferred forms of the invention have been shown.

In said drawing,

Figure 1 is a section through a portion of a form having concrete therein, two different kinds of anchoring devices being shown positioned therein, the hangers to be used with the anchoring devices being indicated by broken lines.

Figure 2 is a section through another form of anchoring device.

Figure 3 is a section through an additional form of the invention.

Referring to the figures by characters of reference, 1 designates a tubular member one end of which is fitted in a ring-like disk 2.

The other end of the tubular member is split longitudinally so as to provide opposed arms 5 that diverge along curved lines. A plug 6 of wood or other suitable material is insertable into the tubular member at the forked end thereof for the purpose of sealing said end of the member. The other end of the tubular member is engaged by the end of a hanger 8. This hanger can be in the form of a pipe, rod, or the like for supporting any suitable structure such as a sprinkler pipe, steam pipe, etc., indicated at P.

In practice, after a concrete form F has been set up, the anchoring device 1 is placed at the point where a hanger is to be located. It is held in position by driving nails 9 or other suitable fastening devices 4 into the bottom of the form F. Thus the anchoring device will be held fixedly in an upstanding position. Plug 6 of course closes the upper end of the anchoring device. Thereafter the concrete C is poured into the form and will cover the anchoring device which thereby becomes firmly connected to the concrete after it has set.

Subsquently to the foregoing operation the form is taken down in the usual way, the bottom thereof being pulled away from the nails 9. Thus the lower end of the anchoring device with the ring 2 thereon will be exposed at the lower surface of the molded concrete and the hanger 8 can thus be screwed into the anchoring device.

Instead of making the anchoring device as described, it can be constructed as illustrated at the right of Figure 1 and in Figure 2. In this structure the anchoring device comprises a tube 10 having one or more prongs 11 extending from one end thereof. Extending diametrically through the tubular member adjacent its other end is an anchoring pin 12 the diameter of which is substantially equal to the internal diameter of the tubular anchoring member 10 so that this pin 12 thus serves not only to hold the tubular member 10 against withdrawal from the concrete but it also acts as a closure for the upper portion of the anchoring member 10.

In practice the prongs 11 are driven into

the bottom of the form F at the point where the hanger is to be suspended and these prongs will thus hold the anchoring device properly positioned. Thereafter the concrete is poured into the form and will cover it. After the concrete has set the form can be taken down as before explained and the projecting prongs 11 can be broken off or bent back against the concrete. A hanger can then be screwed into the anchoring device.

Obviously other forms of the device differing from those shown in Figures 1, and 2 can be used. For example, and as shown in Figure 3, the tubular member 13 can be closed adjacent to the arms 14 by pinching together the opposed portions of the member, as at 15. Thus it becomes unnecessary to use a plug.

What is claimed is:

1. A device of the class described including a single length of pipe for engaging and supporting a hanger inserted into one end, and anchoring means separate from the pipe for closing the other end thereof against the admission of poured concrete.

2. A device of the class described including a single length of pipe having a hanger receiving end, means for attaching said end to the inner surface of a form, and an anchoring pin extending through the other end of the pipe, and closing said end against the admission of poured plastic material.

3. A device of the class described including a single length of pipe of uniform diameter having one end interiorly screw-threaded for engagement with a hanger, means on said end for attachment to a form, and means seated in the other end portion of the pipe for closing said end against the admission of poured plastic material, said means projecting beyond the pipe to constitute an anchor.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

EDWIN WALTER HELBERG.