

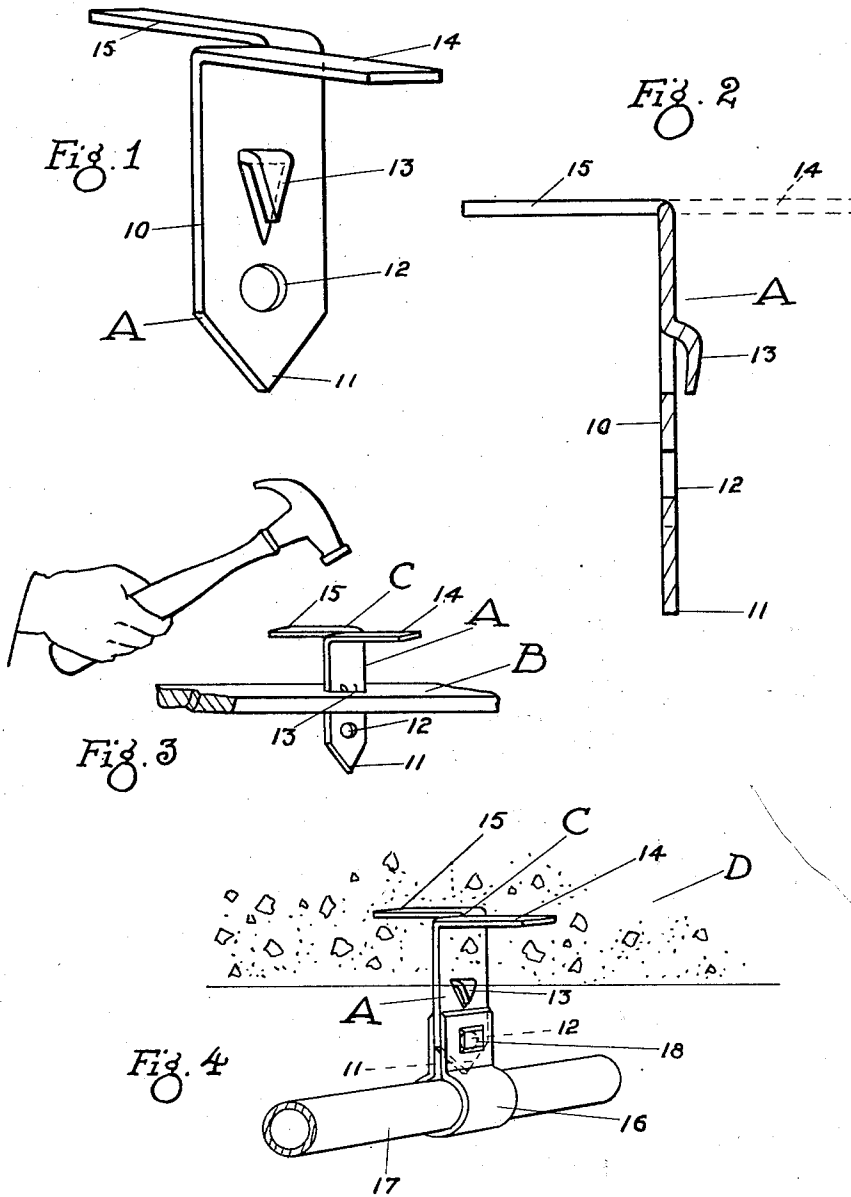
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INSERT

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UNITED STATES PATENT OFFICE

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INSERT

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Our invention relates to insert connectors which are particularly adapted to be used in building construction where it is desired to place an insert in the concrete which may project sufficiently from the surface of the concrete so that a connector can be secured thereto for a pipe or conduit or other connection made to the insert.

A feature of our invention resides in an insert which may be driven into the wooden form set up for the concrete and adapted to project therethrough sufficiently so that when the wooden form is taken down after the concrete is set, the attaching end of the insert is adapted to project through the concrete.

Our insert also includes means for anchoring the insert in the concrete with web members projecting laterally in a manner so as to securely anchor the insert in the concrete. This provides an insert which will hold a considerable load in use.

It is a feature of our invention to provide an insert of a very simple inexpensive construction which can be quickly inserted in the form by pounding the insert in a manner to project through the form and we accomplish this by making an insert of a single piece of material which is of a thin, flat nature, having a pointed or piercing end, an opening for attaching a connector, a shoulder providing a stop, and the oppositely disposed and bent ends formed by splitting one end of the insert. This split end forms a flat head which can be struck with the hammer to pound the insert into the position in form desired.

These features, together with other details and objects of our invention will be more fully and clearly set forth in the specification and claims.

In the drawings forming part of this specification:

Figure 1 is a perspective view of our insert connector.

Figure 2 is a central sectional view of the same.

Figure 3 illustrates the insert connector being inserted into the form by striking the head of the same.

Figure 4 illustrates the insert connector as it would appear in use anchored in a body of concrete.

In the drawings our insert A is formed from a single piece of sheet material 10 of a flat, thin nature.

The insert A is formed with a sharp pointed end 11 and an opening 12 to provide a means of attaching a connector to the same which will be hereinafter described.

The connector A is formed with a barbed shoulder member 13 which is cut from the body of the connector and is adapted to project from the same in a manner so as to form a stop or shoulder which engages against the wooden form B when the insert A is driven into the form, as illustrated in Figure 3.

One end of the insert A is bifurcated or split to provide horizontally disposed flange members 14 and 15 which provide a head C of a flat nature so as to receive hammer blows centrally of the head C so that the force of the blow will be directed to the point 11 driving the insert through the board B of the frame or form for the concrete. The flat, thin nature of the body 10 of the insert A causes the same to strike quickly through the form board B and positions the insert in the form with the flanges 14 and 15 projecting in a manner to provide an anchoring head to hold the insert in the concrete after it has set.

In Figure 4 we have illustrated our insert A embedded or anchored in the concrete D with the flanges 14 and 15 of the head firmly held in place and the form boards B removed, showing the pointed end projecting downward from the ceiling of the concrete D of the side of the same. In this illustration we have shown a connector 16 which is adapted to fit about a pipe or conduit 17 to support the same, while a bolt 18 extends through the connector 16 and through the hole 12 in the insert A.

Our insert may be used in various places for holding or anchoring members in concrete buildings and the simple inexpensive construction is of primary importance in the invention. The insert is of a flat, thin nature formed from a single piece having

an anchoring head to be embedded in concrete, a shoulder which is adapted to gauge the position of the insert when driving it through the form B so that the inserts may project uniformly from the concrete wall after the forms have been taken away and we therefore provide a simple inexpensive insert which has a very extensive use.

In accordance with the patent statutes we have described the principles of operation and illustrated our insert connector in a manner to show the best embodiment thereof, but we desire to have it understood that these illustrations are only suggestive of a means of carrying out our invention and that the same may be applied to uses other than those above set forth within the scope of the following claims.

We claim:

1. An insert including, a one-pieced member formed of thin, flat material, a pointed piercing end formed thereon having an opening extending therethrough adapted to receive a connector bolt, a bifurcated end having laterally disposed flange anchor members, and a shoulder projecting from said member below said bifurcated end.

2. An insert formed of a single piece of sheet metal including, a striking head adapted to form an anchor to hold said insert in concrete, a pointed end opposite said driving end, and a barbed shoulder projecting from the side of said insert.

3. An insert for concrete construction including, a body portion formed of flat material, a piercing end formed across one end thereof, and an enlarged driving and anchoring head formed on the other end thereof whereby said insert connector may be driven through wooden forms to project in a manner to permit anchoring of a connector to the same after the concrete has set about said anchoring head.

4. An insert including, a body portion formed of strap metal, a piercing end formed thereon and said insert having an opening extending through said body portion adjacent said piercing end, a barbed shoulder struck out of said body portion and projecting therefrom, and a bifurcated head end formed by splitting the end opposite said pointed end and bending the bifurcated end in a manner to extend in opposite disposed directions to form a driving end anchor for said insert.

5. An insert connector adapted to be driven through the wooden forms before the concrete is poured in a building, including, a body portion having a pointed end, an opening adjacent said pointed end through said body portion, a driving end adapted to form anchoring means embedded in concrete, a pointed end on one side of the form and the anchoring driving end on the other side of the form and shoulder means projecting

from the side of said body portion adapted to limit the driving through of said insert in the form.

6. An insert adapted to be driven through wooden forms in the construction of concrete buildings, a flat body portion, a piercing end on one end of said body portion, a driving end formed across the other end of said body portion, an opening through said pointed end and a shoulder projecting from the side of said body portion adapted to limit the driving through the wooden forms of said insert.

7. An insert adapted to be used in concrete construction including, a body portion, a piercing end formed on one end thereof, a shoulder remote from said end adapted to limit the driving of the piercing end through a form, and a driving head adapted to form anchoring means embedded in the concrete when the form is removed.

8. An insert hanger for use with concrete construction comprising, a flat thin body portion having a piercing end across one side, a shoulder intermediate the ends adapted to limit the driving movement of said hanger when positioning the same in a form, and a driving head forming anchoring means adapted to be embedded in the concrete to support said anchor.

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