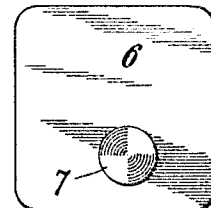
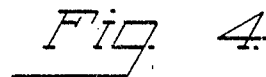
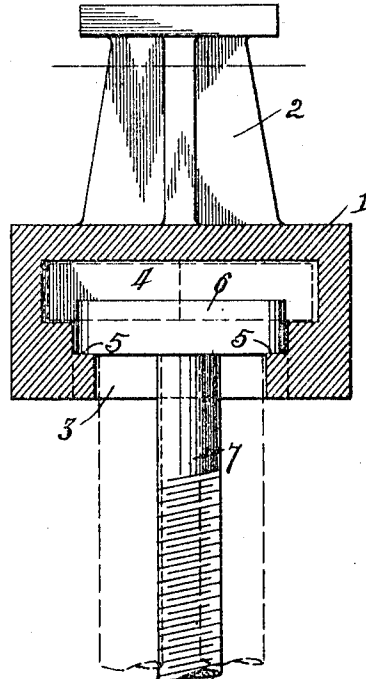
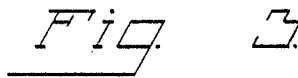
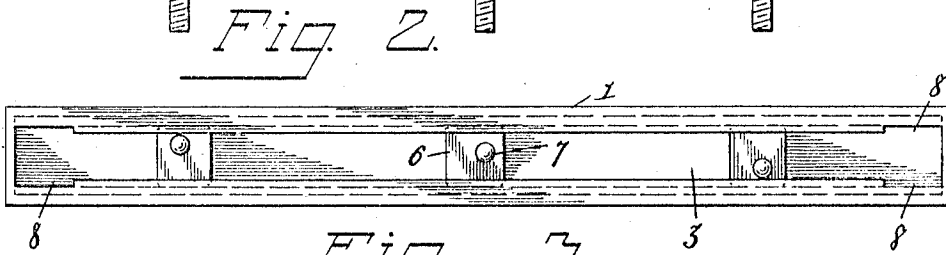
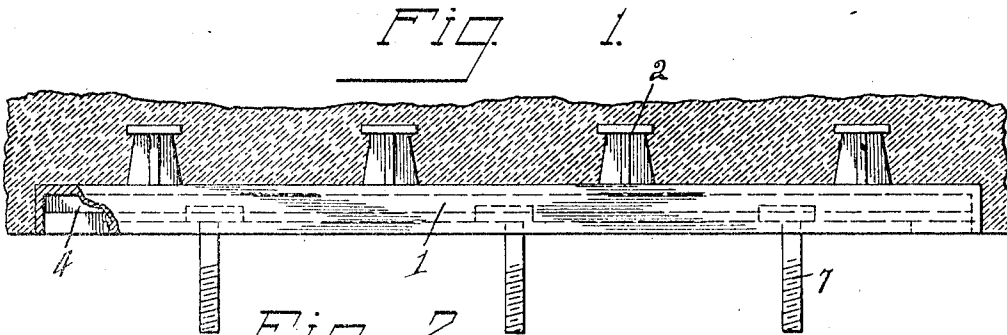


W. W. BRIGHT.
CONCRETE INSERT.
APPLICATION FILED JAN. 25, 1911.

1,035,525.

Patented Aug. 13, 1912.



WITNESSES

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CONCRETE INSERT.

1,035,525.

Specification of Letters Patent.

Patented Aug. 13, 1912.

Application filed January 25, 1911. Serial No. 604,667.

To all whom it may concern:

Be it known that I, WILLIAM W. BRIGHT, a citizen of the United States, and a resident of Toledo, in the county of Lucas and State of Ohio, have invented a certain new and useful Concrete Insert; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of the specification.

My invention relates particularly to devices for holding or supporting shaft hangers, brackets, or other articles from the walls, floors or ceilings of concrete structures, but is not restricted to such use as it may be used in any connection for which it may be adapted or appropriate.

The object of my invention is the provision, in combination with a beam or other form of article adapted to be anchored in concrete, of a bolt or similar article-securing means which is held for lateral adjustment relative thereto to facilitate an alining of a plurality of such bolts with the article or articles to be hung or attached to the concrete should the beam or other holding means be out of true with the desired line of such article.

The invention is fully described in the following specification, and while, in its broader aspect it is capable of embodiment in numerous forms, a preferred embodiment thereof is illustrated in the accompanying drawings, in which,—

Figure 1 is a side elevation of an insert embodying my invention embedded in concrete and with a part broken away. Fig. 2 is a view of the open side of the insert with bolts projecting therefrom. Fig. 3 is an enlarged cross-section of the insert, and Fig. 4 is an enlarged view of the bolt.

Referring to the drawings, 1 designates the insert or anchor of my invention, which is intended to be embodied in a concrete wall, floor or ceiling with its outer side substantially flush with the face thereof, and for the purpose of securely anchoring the insert within the concrete it is preferably provided on its inner side with anchor means 2 of any suitable form.

The inserts 1, which are preferably of beam form and of suitable length to ac-

commodate one or more of the article holding bolts hereinafter referred to, are hollow throughout substantially the entire lengths thereof and provided on their outer sides with a longitudinally extending slot or opening 3 to the interior thereof.

The slot or opening 3 is of less width than the hollow 4 of the insert and has its side walls each stepped to provide shouldered longitudinal flanges 5 for receiving the outward thrust of the head or nut 6 of a bolt, the shank 7 of which is intended to project outwardly through the opening 3. The bolt head or nut 6 is of suitable width to rest on and be supported by the flanges 5 and to engage between the shoulders of said flanges to prevent its turning. The hollow 4 of the insert, however, is of suitable width to permit a free turning of the bolt head or nut 6 therein when moved into register therewith, as shown by dotted lines in Fig. 3. The opening 3 is cut away at either or both ends of the insert, as shown at 8, or at any other desired point therein to permit an insertion or removal of a nut or bolt head 6 therethrough as is apparent. When a bolt is engaged with the insert it may be placed at any desired position therein by moving it longitudinally in the space between the shoulders of flanges 5 or within the hollow 4.

It frequently occurs in the construction of concrete buildings that the inserts to which shaft hangers or other articles are to be anchored become out of alinement with each other or with the line of securing of the articles prior to or during the setting of the concrete. To compensate for such feature the opening 3 of the insert is made of greater width than the shank of a bolt which is intended to be anchored thereto and the shank of the bolt is offset from the center of the head or nut 6 thereof which is disposed within the insert, as indicated. This enables the bolt shank to be placed in at least four different positions transversely of the insert by a turning of the bolt head or nut 6 therein, as indicated in Fig. 2. To be more specific, the point of attachment of the bolt shank to the head or nut 6 is adjacent to one side thereof and preferably slightly nearer to one end of such side than to the other so that the shank of the bolt may be placed adjacent to one side or the other of the insert opening 3, or adjacent to but at one side or the other of the center line of

the opening by giving the bolt a one-quarter turn in one direction or the other from such position. This feature is found to be of very great importance in inserts of the class described, and is not restricted to use in connection with the particular type of insert shown. In practice the lateral play of the bolt head or unit 6 within the opening 3 is sufficient to enable its shank to be placed in the center of the opening 3 if desired.

I wish it understood that my invention is not limited to any specific construction or arrangement of the parts except in so far as such limitations are specified in the claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is,—

1. In combination, with a square head and an eccentric shank projecting outwardly therefrom, a hollow insert the interior of which is of a width greater than the diameter of the head, said insert having an outer longitudinal opening of greater width than the diameter of the shank, the side walls of the opening being stepped to provide a pair of spaced longitudinal shouldered flanges, the head resting on the flanges and the shoulders engaging two of the sides of the head to prevent rotation thereof, the shank of the head extending through the opening, the interior of the insert above the shoulders being of sufficient width to receive the head and allow turning thereof when the head is raised above said shoulders to permit the shank to occupy various positions in a plane transverse to the length of the longitudinal opening, the longitudinal opening being of sufficient width to permit movement of said shank to its different positions.

2. In combination with a hollow insert formed with an outer opening the side walls

of which latter have a pair of shouldered flanges formed thereon, a member having an eccentric article engaging element extending outwardly therefrom, said member seating on the flanges and being engaged with the shoulders to prevent turning thereof, and being turnable in said insert when the head is moved out of engagement with the shoulders to permit said article engaging element to be adjusted to occupy various positions in a plane transverse to the length of the opening, said opening being of sufficient width to permit movement of said eccentric element to its different positions.

3. In combination, with a member having eccentric supporting means projecting outwardly therefrom, an insert, means carried by the insert to support said member against outward movement, and means carried by the insert to engage said member to prevent rotation thereof, said insert having its interior of a width to receive the member to permit turning of the latter when the member is moved out of engagement with the means which prevent rotation thereof, to allow the eccentric supporting means of the member to be adjusted to occupy various positions in a plane transverse to the length of the insert and to be again moved into engagement with the means which hold same against rotation, said insert having an opening of sufficient width to permit movement of said eccentric supporting means to its different positions.

In witness whereof, I have hereunto signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM W. BRIGHT.

Witnesses:

C. W. OWEN,
M. G. GASKELL.