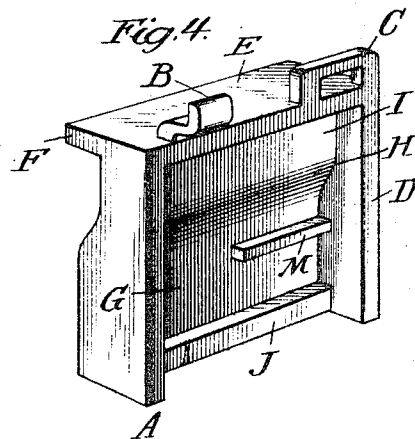
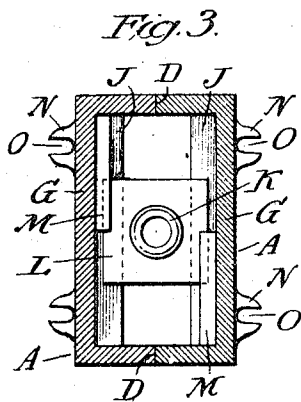
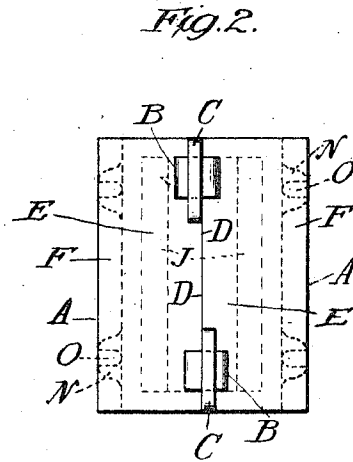
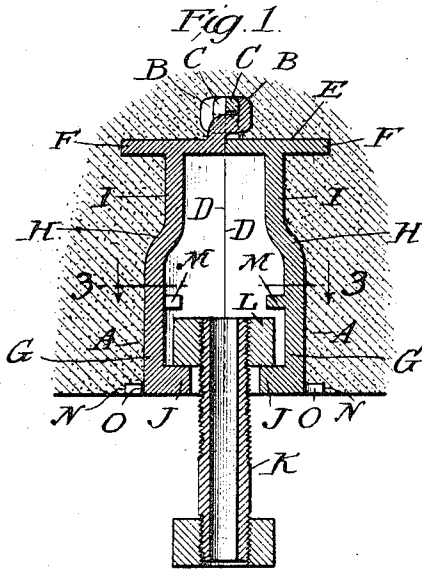


960,625.

Patented June 7, 1910.



Witnesses
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UNITED STATES PATENT OFFICE.

IRVING COWLES, OF CHICAGO, ILLINOIS.

ANCHOR-SOCKET.

960,625.

Specification of Letters Patent.

Patented June 7, 1910.

Application filed June 7, 1909. Serial No. 500,727.

To all whom it may concern:

Be it known that I, IRVING COWLES, citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Anchor-Sockets; 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.

This invention relates to a novel construction in a device adapted to be embedded in concrete or similar material, which is molded in plastic form and subsequently sets, for the purpose of providing sockets therein for the anchorage of fixtures of all kinds, the object being to provide a simple and efficient device of this character and consists in the features of construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings illustrating this invention: Figure —1— is a vertical transverse section of a device constructed in accordance with my invention showing the same embedded in a concrete ceiling and having a bolt secured therein. Fig. —2— is a top plan view of the device. Fig. —3— is a plan section of the same on the line 3—3 of Fig. —1—. Fig. —4— is a detail perspective view of one of the two members constituting my device.

My invention has for its object to provide a device for anchoring fixtures to concrete walls, ceilings, floors and the like, which is cheap, easily applied and which furthermore will permit of the easy insertion of a nut adapted to receive the shank of a bolt and permit lateral play in one direction of said bolt in order to line up pipes, line shafting and the like, and which furthermore permits of the admission of a considerable length of shank of a bolt so as to enable the elevation of fixtures to be varied and adjusted to a considerable extent.

My said device comprises two identical members A preferably of cast iron or other suitable metal, said members A being each provided on their upper ends adjacent their opposed faces with male and female interlocking devices B and C respectively, which when said members are opposed, oppose each other. The member B consists of a hook which is adapted to enter a slot in the member C when said members A are disposed at an angle of about ninety degrees to each

other, and which when said members are turned parallel with each other so that their opposing faces contact with each other, to engage at its free end the rear face of the member C thus holding said members A against relative movement in all directions except pivotally. Each of said members A is substantially rectangular in vertical longitudinal section and is provided with parallel side walls D and a top wall E disposed perpendicularly to said side walls D and on which said male and female interlocking members B and C are disposed. Said top wall E terminates at one end in a free flange F.

The rear wall G of each member A is perpendicular to the side walls D and top wall E and between its ends is deflected inwardly on an incline as at H and terminates at its upper end in an off-set portion I which is parallel with the portion G thereof, said portion I serving to contract the space between said rear wall and the meeting edges of the side and top walls of the device. At its lower end said rear wall G is provided with a flange J extending the entire length thereof and at its ends joining the side walls D, the space between opposing flanges when said members A are assembled as shown in Figs. —1—, —2— and —3— constituting a longitudinal slot through which the shank K of the bolt or other threaded member is adapted to pass, the upper walls of said flanges J constituting shoulders upon which the nut L engaging the shank K of the bolt is adapted to rest. The rear wall G of each member A is further provided between its lower end and the deflected portion H thereof with a rib M which extends from one end of the wall D to a point midway between the ends of said wall G, parallel with said flange J. On the outer face of said wall G and on the bottom edge thereof I provide a plurality of projections N each of which is provided in its free end with a recess O through which the shank of a nail or the like is adapted to pass, said nail or other fastening device serving to secure the members A upon the bottom of the mold in which the concrete embedding said device is received and the permanent position of the device in the wall, ceiling or the like determined.

In inserting the nut L the latter must be removed from the threaded member K and inserted edgewise through the said slot

formed between said flanges J until it is completely contained in the hollow space within the device and is then turned until it has assumed a horizontal position and rests upon said flanges J. The said ribs M are disposed on opposite sides and at opposite ends of the hollow space within the member and in inserting the nut L the latter must be moved to one end portion of the slot so that the inserted edge will avoid contact with one of said ribs M and any hindrance to its insertion and positioning thus provided. After its insertion and positioning the said nut L may be moved longitudinally of the device to a point substantially midway between the ends thereof and the threaded member K then inserted and engaged therewith. The said ribs M, when the nut is so positioned, limit the upward movement of the same thus rendering easy the operation of engaging the said threaded shank K therewith. After such engagement the said nut may obviously be moved longitudinally in either direction and positioned as desired to bring pipe or other fixtures suspended or anchored thereby into alinement.

I am aware that inserts having some features of construction in common with my device are in use and that the records of the Patent Office disclose other patented devices which have some features in common with my invention, the latter being distinguished from the prior art so far as I am acquainted therewith in the following features of construction, namely:

First: My said insert being made in two parts cast from a common pattern and interlocked avoids the necessity of the employment of cores in casting the same without minimizing the strength thereof thus greatly reducing the cost of the casting.

Second: My device permits of longitudinal adjustment of the bolt or other device without reducing the seating surface of the nut on the flanges J thereof.

Third: The depth of the hollow space within the device enables the shank to be inserted for a distance sufficient for all purposes of adjustment and is of such a width in comparison with the diameter of the bolt so as to allow lateral play for said shank, this being essential especially when the device is employed to anchor heating pipes, or the like, of great length and which therefore, will expand and contract to a very considerable extent under the relatively great variation in temperature to which they are subjected.

Fourth: By means of the ribs M all difficulty in engaging the nut with the bolt after insertion of the former is obviated thus rendering the device more efficient than would be the case were the nut allowed free vertical movement.

It is, of course, necessary that the device be made of different sizes to receive and engage nuts of various standard sizes, and that the construction thereof may be changed and varied in some particulars without departing from the invention as defined in the appended claims.

I claim as my invention:

1. An anchor socket of the kind specified, comprising two equal opposed members each provided on one edge with a slot, a hook on said edge of each member opposing and entering the slot of the other whereby said members are engaged and interlocked with each other, said opposed members when assembled constituting a hollow body, parallel flanges on opposed walls of said members between which a slot is formed when said members are assembled, said flanges constituting supports for a nut, the slotted wall of said socket being exposed when the same is embedded.

2. An anchor socket for concrete walls comprising two equal opposed members each provided on one edge with a male and a female interlocking device respectively, each of said respective devices opposing and engaging the other of the opposed member, said members when assembled constituting a hollow body adapted to be embedded in the concrete, one wall thereof being exposed and provided with a longitudinal slot, shoulders bordering said slot and adapted to support a nut, and ribs parallel with said shoulders limiting the movement of said nut inwardly of said member, said ribs being of less length than said member and spaced from said shoulders a distance substantially equal to the thickness of the supported nut.

3. An anchor socket for concrete walls comprising two equal opposed members each provided on one edge with a male and a female interlocking device respectively, each of said respective devices opposing and engaging the other of the opposed member, said members when assembled constituting a hollow body adapted to be embedded in the concrete, one wall thereof being exposed and provided with a longitudinal slot, shoulders bordering said slot and adapted to support a nut, the depth of said hollow body being sufficient to accommodate one end portion of a threaded member engaging said nut, the upper end portion of said body being contracted parallel with the side walls of the slot and opposing the latter, and ribs disposed on opposite sides and ends of the opposing side walls of said body parallel with said shoulders supporting said nut, and adapted to overlap the latter on opposite sides, thereby limiting the movement of said nut inwardly of said member.

4. An anchor socket of the kind specified, comprising a hollow member adapted to be embedded in a concrete wall and provided

in its exposed face with a longitudinal slot
extending the entire length thereof, shoulders
bordering said slot and adapted to support
a nut, there being two chambers in said
5 member of different widths, the lower end
of said chambers being of greater width and
being of greater depth than the diameter of
the nut received therein, said upper chamber
adapted to receive the free end of the
10 shank of a bolt and allowing free movement
of the same therein, and ribs on opposite
sides and ends of the side walls of the lower

chamber adapted to overlap the nut on opposite
sides when the same is disposed substantially
midway between the ends of said
socket and limiting the upward movement of
15 the nut therein.

In testimony whereof I have signed my
name in presence of two subscribing witnesses.

IRVING COWLES.

Witnesses:

E. H. MACDOWELL,

M. M. BOYLE.