H. J. LAMET.

BOLT SECURING MEANS FOR CONCRETE CONSTRUCTION.

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1,286,658. Patented Dec. 3, 1918.

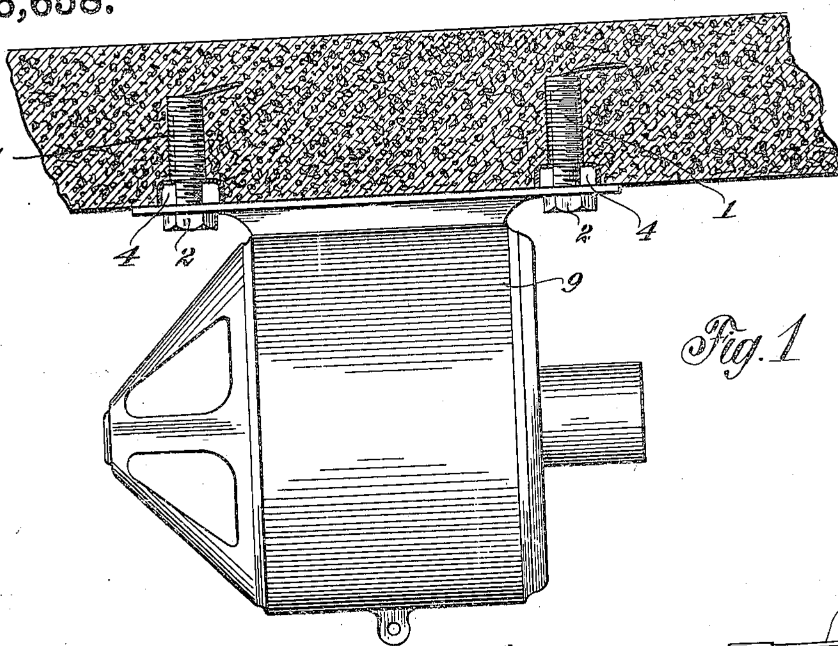

Fig. 1

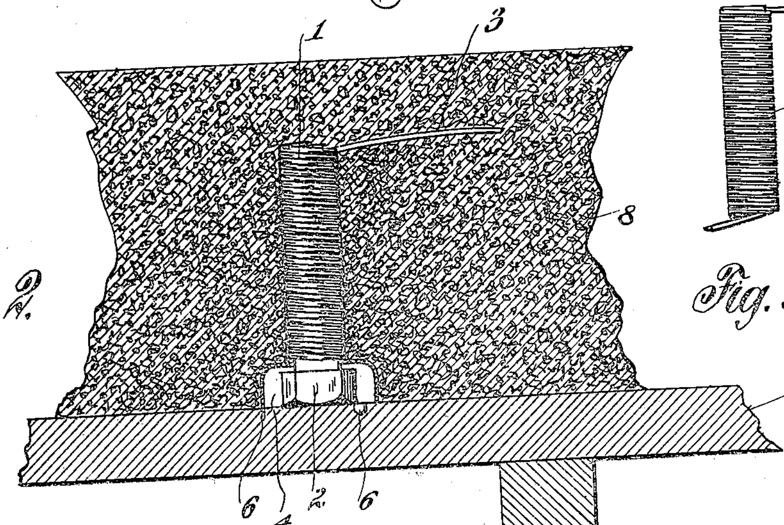

Fig. 2

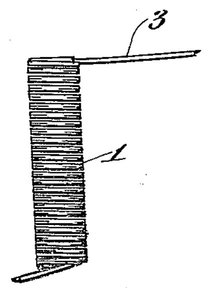

Fig. 3

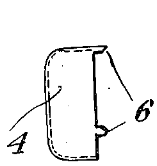

Fig. 4

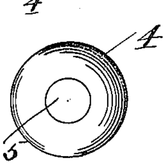

Fig. 5

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By [signature] Attorneys

UNITED STATES PATENT OFFICE.

HILLE J. LAMET, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-FOURTH TO STEWART A. OSTRANDER, OF DETROIT, MICHIGAN.

BOLT-SECURING MEANS FOR CONCRETE CONSTRUCTION.

1,286,658. Specification of Letters Patent. Patented Dec. 3, 1918.

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To all whom it may concern:

Be it known that I, HILLE J. LAMET, a subject of the Queen of Holland, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Bolt-Securing Means for Concrete Construction, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to fastening means for bolts in concrete structures, and has special reference to novel means for anchoring bolts in concrete so that the bolts may be utilized as supporting means for motors, shaft hangers and the structures to be suspended from ceilings or attached to walls. In the construction of concrete buildings, particularly those used for power purposes, it is often desirable to attach motors and various kinds of hangers to a ceiling, and bolts and similar devices have been anchored in the concrete for such purposes. It is necessary that the bolts or fastening devices to be anchored in the concrete be held in a manner that permits of concrete being poured about the bolts and so the holding means of the bolts cannot interfere with the planks, studding or forms that support the concrete while the same is drying out or becoming seasoned.

The object of my invention is to provide simple and effective means for anchoring a bolt or fastening device, in a vertical position, relative to a plank or form, so that an ordinary plank or form may be used and concrete poured therein to form a ceiling or wall.

Another object of my invention is to use a helically wound rod or member as a socket or anchoring means for bolts and attached to said rod or member is an inverted cup shaped member which will protect the head of the bolt from concrete and provide sufficient clearance so after the rod or member has become set in concrete, the bolt may be adjusted to hold the motor or other structure relative to a ceiling or wall.

A further object of my invention is to accomplish the above results by a durable and inexpensive construction that will be hereinafter specifically described and then claimed.

Reference will now be had to the drawings, wherein—

Figure 1 is a side elevation of a motor attached to a concrete ceiling by fastening means in accordance with my invention;

Fig. 2 is an enlarged detail sectional view of the fastening means in position during the formation of the concrete ceiling;

Fig. 3 is a side elevation of a helically wound rod or member forming a socket or anchor for a bolt;

Fig. 4 is a side elevation of a cup shaped member; and

Fig. 5 is a plan of the same.

In the drawing, the reference numeral 1 denotes a helically wound rod or member which may be made by winding a wire or rod on the threads of a bolt 2 and when so constructed, the bolt may be adjusted in the member. The upper convolution of the member 1 is extended in a lateral plane, as at 3, and the lower convolution thereof is adapted to be electrically welded or otherwise connected to an inverted cup shaped member 4 having a concentric opening 5 providing clearance for the bolt 2. The cup shaped member 4 is made of light and durable metal and the side walls of said cup shaped member are provided with a plurality of depending prongs, which may be driven into a plank 7 to retain the cup shaped member in engagement with the plank, and the bolt 2 in a vertical position, while concrete 8 or other plastic material is placed around the inverted cup shaped member 4 and the member 1 to form a ceiling or wall.

After the concrete has set and become seasoned, the plank 7 may be easily removed and then access may be had to the bolt 2, so that the bolt may be partially unscrewed or completely removed, to permit of a motor 9 or other structure being installed in a ceiling or wall.

I attach considerable importance to the fact that the bolt heads are housed within the inverted cup shaped members and consequently ordinary planking or other forms can be used, without any provision for holding bolts or other fastening means in position to be anchored in the concrete.

One embodiment of my invention has been illustrated, but it is to be understood that

the structural elements are susceptible to such variations and modifications as fall within the scope of the appended claim.

What I claim is:—

Means for anchoring a fastening member in concrete during the formation of the wall or ceiling, consisting of a pressed inverted cup shaped metallic member having depending prongs in alinement with the walls of said cup shaped member adapted to enter a plank or form by pressure on said member, said member having a central opening, and a spiral member having its axis in alinement with the axis of the opening in said member and having one convolution thereof fixed to said inverted cup shaped member and adapted to be surrounded by concrete and hold the fastening member, the outer convolution of said spiral member extending into a lateral plane and into the concrete at the upper end of said spiral member.

In testimony whereof I affix my signature in the presence of two witnesses.

HILLE J. LAMET.

Witnesses:
OTTO F. BARTHEL,
STEWART A. OSTRANDER.