No. 617,492. Patented Jan. 10, 1899.

W. LOVE.

SCREW ANCHOR.

(Application filed Mar. 31, 1898.)

(No Model.)

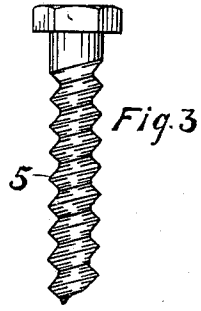

Fig. 3

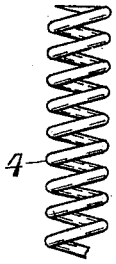

Fig. 2

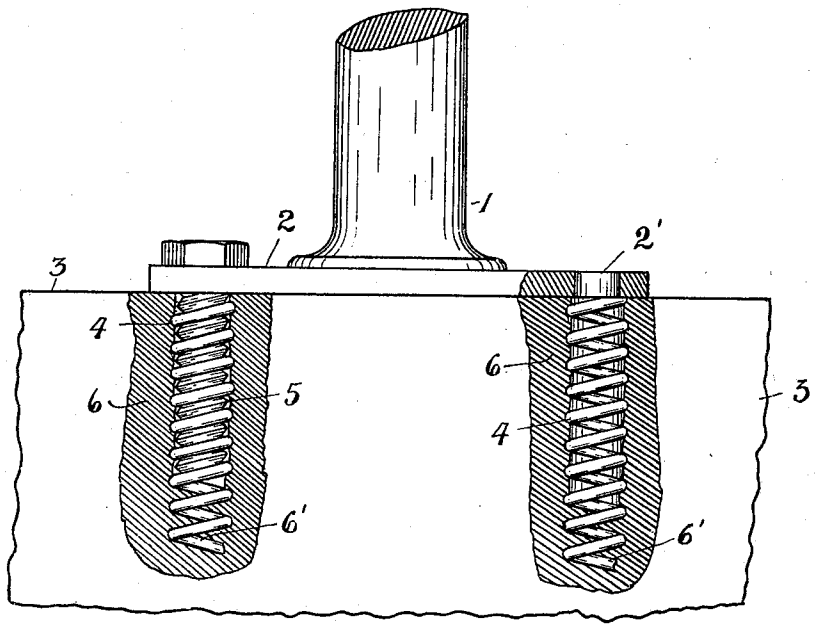

Fig. 1

WITNESSES:

Thomas S. Gates.

William J. Fisher

INVENTOR

Wm. Love

BY

C. N. Butler

ATTORNEY.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM LOVE, OF BRYN MAWR, PENNSYLVANIA.

SCREW-ANCHOR.

SPECIFICATION forming part of Letters Patent No. 617,492, dated January 10, 1899.

Application filed March 31, 1898. Serial No. 675,858. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LOVE, residing at Bryn Mawr, in the county of Montgomery, State of Pennsylvania, have invented a new and useful Screw or Bolt Anchor, of which the following is a specification.

The object of this invention is to provide means for holding screws or bolts in constructions of cement, concrete, asphalt, brick, stone, or other substances which fail to provide a suitable thread for effectually resisting the loosening of such screws or bolts. Particularly in connection with pavements, floors, walls, and foundations of cement, concrete, and asphalt it is frequently necessary to attach thereto such constructions as lamp-posts, fences, machinery, and other appliances, which attachments could not heretofore be simply and effectually effected because of the comparatively brittle character of the material, which will not hold a screw.

In my invention a wire coiled to the pitch required for engagement with the thread of the bolt or screw to be used is secured in the supporting construction and forms an anchor for the said bolt or screw which is used to secure the construction to be supported.

In the accompanying drawings, Figure 1 is an elevation, partially in section, illustrating my invention as practically applied; and Figs. 2 and 3 illustrate, respectively, the characters of the anchor or coiled wire and screw in their separated relation.

In the construction illustrated the pedestal 1 and its base 2 are adopted as a conventional form of support for any structure to be attached to the foundation 3. In this foundation holes of suitable size have been drilled, in which have been placed the coils or helices 4 preferably having the screws 5 therein. The spaces around the coils have then been packed with soft cement 6, and the lower ends of the coils, which are preferably made longer than the screws, become embedded therein, as shown at 6'. When the cement has set, the coils or helices 4 are thereby securely anchored to the foundation 3 and form threaded sockets for receiving and holding the screws 5. The screws can then be removed from these sockets and replaced therein at will and when passed through the apertures 2' in the base-plate 2 anchor and hold the superstructure firmly to the foundation. It will be evident that these threaded sockets may be formed in the foundation as well during the construction and before the hardening thereof as after when this is considered expedient. It is immaterial whether the foundation be made of asphalt, cement, concrete, brick, stone, or like material, the device is applicable and is not intended to be confined to use with the particular materials named.

It will be evident that minor changes may be made in the construction without departing from the spirit of my invention, which contemplates the use of a threaded socket adapted for anchoring a screw or bolt in a material which is not adapted for providing a suitable thread for holding such screw or bolt.

It is to be understood that the word "foundation," as used in the claims, is designed to mean a supporting structure for the coiled wire or helix.

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

1. The combination of an anchored coiled wire and a screw, substantially as specified.

2. A screw-anchor comprising an independent helix formed of coiled wire fixed in a foundation of cement or like material and forming a threaded socket for the reception of a screw or bolt, substantially as specified.

3. A screw-anchor comprising a coiled wire set in a socket formed in a suitable foundation of cement or like material and anchored therein by having one end thereof embedded in said cement or like material, substantially as specified.

In testimony whereof I have hereunto set my hand this 29th day of March, A. D. 1898.

WILLIAM LOVE.

Witnesses:
C. N. BUTLER,
THOMAS S. GATES.