W. D. JAMES.

CONCRETE ANCHOR.

APPLICATION FILED JULY 8, 1912.

1,104,805. Patented July 28, 1914.

Fig. 1.

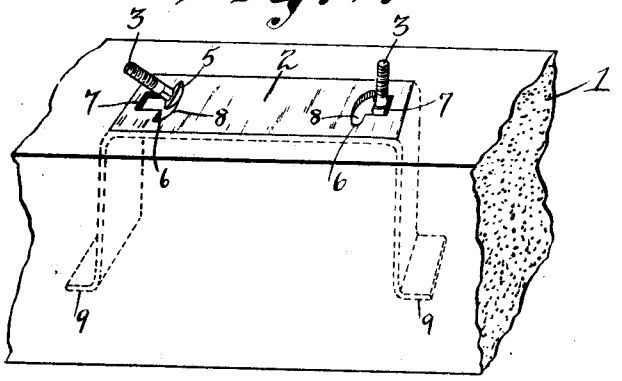


Fig. 2.

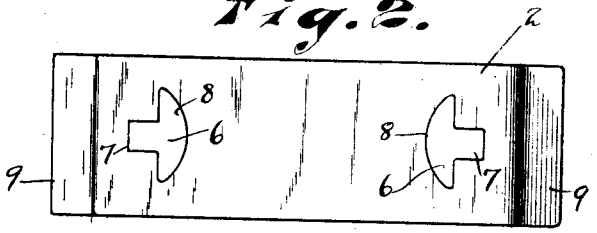
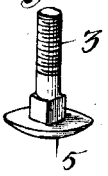


Fig. 3.



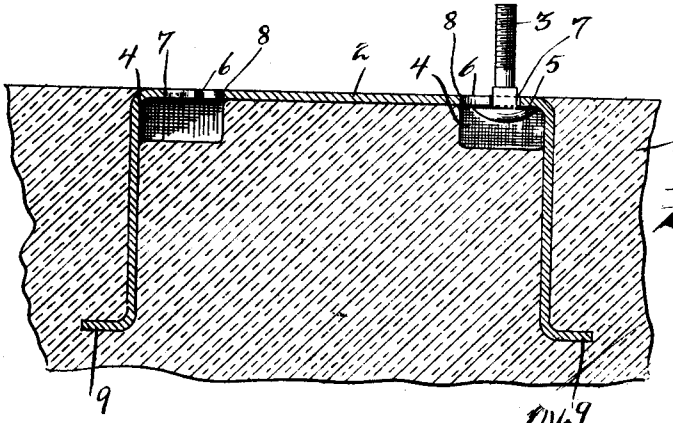


Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

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CONCRETE-ANCHOR.

1,104,805. Specification of Letters Patent. Patented July 28, 1914.

Application filed July 8, 1912. Serial No. 708,093.

To all whom it may concern:

Be it known that I, WILLIAM D. JAMES, a citizen of the United States, residing at Fort Atkinson, county of Jefferson, and State of Wisconsin, have invented new and useful Improvements in Concrete-Anchors, of which the following is a specification.

The object of my invention is to provide a convenient means for rapidly affixing stanchions, stalls, mangers, feed troughs and similar structures to concrete floors or other concrete bodies, and it pertains more especially, among other things, to the construction of the concrete body and the metallic anchor bracket by which such stanchion or other devices may be rigidly secured to concrete bodies.

My invention is further explained by reference to the accompanying drawings, in which—

Figure 1 represents a perspective view of a concrete body provided with a metallic bracket, showing bolts for securing stanchions or other devices to such concrete body. Fig. 2 is a top view of the metallic bracket shown in Fig. 1 with the bolts and concrete body removed. Fig. 3 represents one of the bolts removed from the bracket, and Fig. 4 represents a vertical section of a concrete body and the metallic bracket anchored therein, showing one of the fastening bolts secured in place.

Like parts are identified by the same reference numerals throughout the several views.

1 represents the concrete body.

2 is the metallic anchor bracket.

3, 3 are bolts by which stanchions, mangers and the like are adapted to be rigidly secured to the metallic bracket and the concrete body.

The concrete body 1 is provided with a plurality of recesses 4 for the reception of the heads 5 of the bolts, and the metallic anchor bracket 2 is provided with apertures 6 for the reception of the headed ends of the bolts. The apertures 6 each comprise a rectangular recess 7 formed for the reception of the body of the bolts, and the transversely arranged portion 8 for the reception of the head of the bolt as it is passed through said apertures preparatory to use. The metallic anchor bracket comprises a flat central portion, the upper surface of which is flush with the surface of the floor. This central portion is elbowed at its respective ends to form legs extending substantially at right angles to the central portion and adapted to be embedded in the concrete. The lower extremities of the legs are provided with angular bends forming anchor feet 9, whereby when the legs and feet are embedded in a body of concrete, the bracket will be securely anchored thereto and cannot be withdrawn without breaking away the concrete. The bolt receiving apertures, which are substantially in the form of key hole slots, are located in close proximity to the elbows formed at the junctions of the central portion and the downwardly extending legs, so that pulling or weaving strains exerted upon the bolts will be transmitted almost directly to the anchor legs without lifting, twisting, or warping the central portion of the bracket. The upper surface of the metallic bracket 2 is preferably formed flush with the upper surface of the concrete body, as shown in Fig. 4.

It will be understood that the bolts 3 are adapted to be temporarily inserted in or withdrawn from the metallic bracket without removing such bracket or changing the construction of the concrete body, whereby when the concrete body is provided with the required number of brackets of predetermined construction, stanchions, mangers and a great variety of other devices may, by the use of said bolts, be readily and quickly secured to such concrete body. Also that by removing the nuts from the threaded ends of said bolts, said stanchions or other devices may be disengaged from the bolts and the bolts in turn disengaged from said metallic bracket.

While I have described the body 1 as being formed of concrete, it will, of course, be understood that cement or other equivalent substance may be substituted therefor.

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

1. As an article of manufacture, an anchorage member comprising a strip of metal having a flat central portion elbowed at its respective ends to form anchor legs and the extremities of said legs being also elbowed to form feet, adapted, with the legs, to be embedded in a body of concrete with the central portion flush with the surface of a floor, said central portion being provided

with bolt receiving key slot apertures adjacent to said first mentioned elbows, substantially as described.

2. A concrete stable floor provided with a pair of shallow pockets in its upper surface having side and bottom walls of concrete, and both pockets covered by a strip of metal forming metallic top and outer end walls of said pockets, said end walls being extended downwardly and anchored in the concrete below the outer ends of said pockets and said metal top wall being flush with adjacent portions of the floor and provided with bolt receiving apertures laterally enlarged in one portion to permit manipulation of a bolt head therethrough, and adapted to facilitate the attachment of stanchions, mangers, or posts to said floor, substantially as described.

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

WILLIAM D. JAMES.

Witnesses:

MARTHA URBAN,

TROTWOOD ECKHART.