S. H. DOLBEAR.

GUARD FOR CEMENT WORK.

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1,101,909. Patented June 30, 1914.

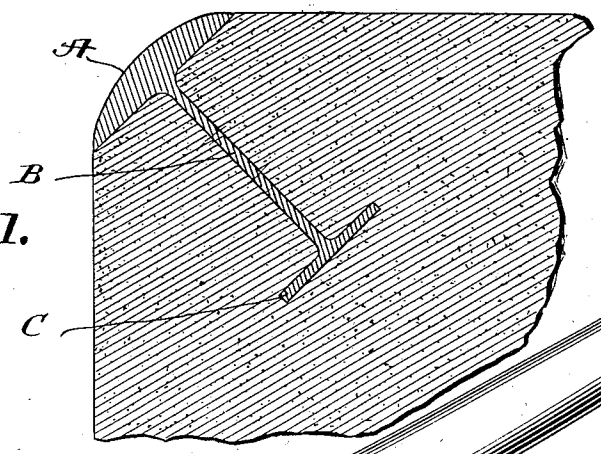


Fig. 1.

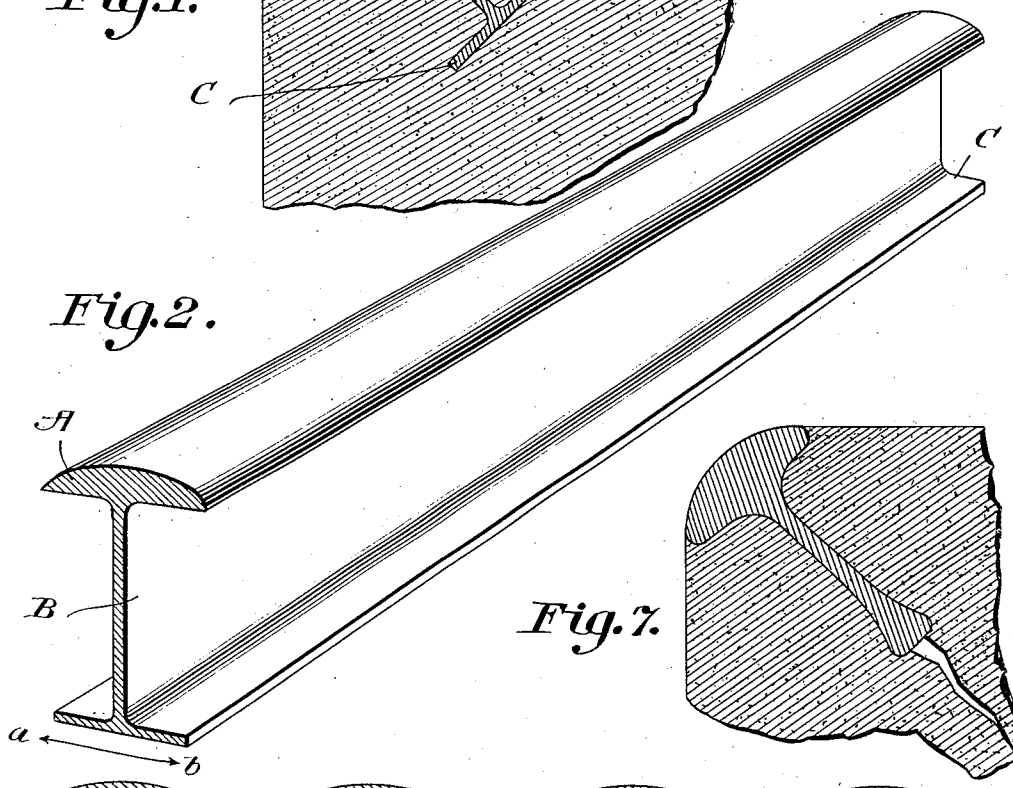


Fig. 2.

Fig. 7.

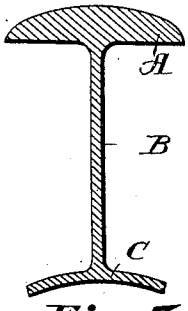


Fig. 3.

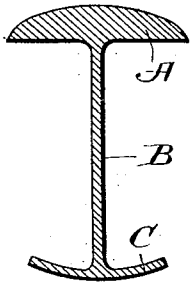


Fig. 4.

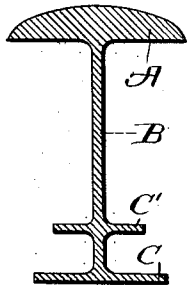


Fig. 5.

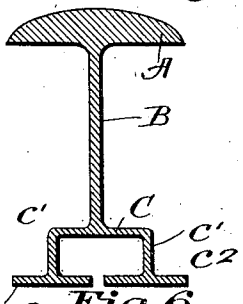


Fig. 6.

Witnesses

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UNITED STATES PATENT OFFICE.

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GUARD FOR CEMENT WORK.

1,101,909. Specification of Letters Patent. Patented June 30, 1914.

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To all whom it may concern:

Be it known that I, SAMUEL H. DOLBEAR, a citizen of the United States, residing in the city and county of San Francisco and State of California, have invented new and useful Improvements in Guards for Cement Work, of which the following is a specification.

This invention relates broadly to protecting structures for corners, edges, etc., of cement-work, and the like.

The object of my invention is to provide a simple, inexpensive and effective protector or guard for use in connection with cement-work and the like, and whereby corners and edges which are exposed to considerable wear, pressure or impact, may be protected from injury.

I am aware that it has heretofore been proposed to incorporate in cement-work—subject to wear, blows or pressure—metallic strips and the like, and these have generally been in the form of a T-shaped bar provided with a slightly enlarged end designed to anchor the strip in the cement. While, in practical use, these have been found more or less effective for the particular purpose designed, yet by reason of their construction, they produce very undesirable results, since the aforementioned enlarged anchoring-end has the effect of a wedge in that it produces a splitting or cracking of the work.

It is, therefore, the prime object of my invention to produce a structure which will not be open to the objections and defects inherent in present-day devices of this character. The invention, consequently, seeks in general to provide a cement-protecting guard which in practical use possesses a high degree of efficiency and durability and which, structurally considered, will be of very great simplicity.

Other objects and advantages will in part be obvious from the annexed drawings and will also be in part pointed out in the following description.

The invention resides broadly in the feature of construction and relative arrangement of the parts thereof, all as will be exemplified in the construction hereinafter set forth, and the scope of application of which will be indicated in the claims hereto appended.

From the accompanying drawings, which are illustrative of some of the many possible utilizations of the invention and which are appended hereto as a part of its disclosure, it will be manifest that other possible utilizations and embodiments employing the underlying principles of the invention may be resorted to and be within the spirit thereof and within the objects contemplated thereby.

In these drawings: Figure 1 is a view in vertical transverse section of a section of cement-work with my improved form of corner-protector embedded therein; Fig. 2 is a view in perspective of a section of the protector; Figs. 3, 4, 5 and 6 are views in vertical transverse section of modified forms of my improved protector; and Fig. 7 is a view similar to Fig. 1 showing the present-day form of protector and illustrating the manner of its effecting a cracking or splitting of the cement.

Referring to the drawings, the reference-character A designates the exposed or head portion of the device; B the shank or web-portion thereof; and C the foot or anchor-portion. Preferably and as shown, the web-portion B is comparatively thin and of considerable width, though the dimensions thereof may be such as to meet requirements in any particular instance. The exposed and anchor-portions, on the other hand, are of relatively different dimensions from those of the web. Preferably the outer surface of the portion A is round, and has a back-surface which is substantially flat. The anchor-portion C must be of considerable width and its surfaces occupy a position at a distinct angle to the surfaces of the web. In the form shown in Figs. 1 and 2, the anchor-portion has its surfaces at approximately right angles to those of the web.

As shown the device is so embedded in the cement that the portion A occupies a position longitudinal of the curb or other edge to protect it, while the portion C firmly anchors the whole structure in the cement, and its wide surface *a*—*b* prevents any tendency of said anchor-portion from acting as a wedge to split the cement-mass.

In some instances the anchor-portion may be outwardly curved, as shown in Fig. 3, or convexed as shown in Fig. 4. Sometimes, it is desirable to increase the anchor-surface of the device, and this may be accomplished in the manner illustrated in Figs. 5 and 6. In Fig. 5, there are two anchor-portions C′ formed on each side of the web and intermediate of the portions A and B. In the form shown in Fig. 6, the portion C is pro-

vided at each end with supplemental anchor-portions c^2 connected by webs c'.

The essence of my invention resides in providing the device with sufficient foot-surface or anchoring surface as firmly to hold the device in position in the cement-work and yet preclude the possibility of said anchor-portion operating as a wedge to split the cement. If a form of foot like that illustrated in Fig. 7—which is that now employed in this sort of work—be utilized, its dimensions are such as to serve as a splitting wedge.

It will now be perceived that I have succeeded in devising a cement-work guard or protector which is well adapted to achieve the objects and ends in view. The structure is simple and compact in form, and can be made by any convenient method.

As many changes can be made in the construction and form and many other widely different embodiments of the invention can be made without departing from the scope and spirit thereof, it is intended that all matter contained in the foregoing description and shown in the accompanying drawings shall be interpreted as illustrative and not in any limiting sense. It is also to be understood that the language used in the following claims is intended to cover all of the generic and specific features of the invention which as a matter of language might be said to fall therebetween.

What I claim is:

1. A protecting guard for cement and similar work, comprising a web-portion, an exposed head-portion formed integral with the web-portion and having its inner surfaces substantially flat and arranged at approximately right-angles to the side surfaces of the web-portion, and a foot-portion also formed integral with the web-portion and continuous throughout its length at both sides of the web-portion and having the surface farthest removed from the head-portion in substantial parallelism with the inner surfaces of the head-portion to constitute an unbroken, uninterrupted and unangular surface, whereby a blow struck at any point of the head-portion will be distributed throughout said unangular surface of the foot-portion at both sides of the web-portion.

2. A protecting guard for cement and similar work comprising a web-portion, an exposed head-portion formed integral with the web-portion and having its inner surfaces substantially flat and arranged at approximately right angles to the side surfaces of the web-portion, and a foot-portion also formed integral with the web-portion and continuous throughout its length at both sides of the web-portion and having the surface farthest removed from the head-portion arranged at substantially right angles to the side surfaces of the web-portion to constitute an unbroken, uninterrupted and unangular surface, whereby a blow struck at any point of the head-portion will be evenly distributed throughout said unangular surface of the foot-portion at both sides of the web-portion.

3. A structure for curbing and the like including in combination, an embedding mass of concrete, and a protecting guard therefor comprising a web-portion embedded in said mass and having an exposed head-portion positioned at the corner of said mass and formed integral with the web-portion and having its inner surfaces substantially flat and arranged at approximately right angles to the side surfaces of the web-portion and having its longitudinal edges approximately flush with the faces of the embedding concrete, and a foot-portion also formed integral with the web-portion and consisting of sections extending from both sides of the web-portion and continuous throughout their length to present an unbroken, uninterrupted and unangular surface in substantial parallelism with the flat surfaces of the head-portion, whereby a blow struck at any point of the head-portion will be distributed throughout said foot-portion at both sides of the web-portion and be effective upon the cement mass at a point approximately opposite to that at which the blow strikes on the head-portion.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

SAMUEL H. DOLBEAR.

Witnesses:

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CHAS. F. DUISENBERG.