Feb. 2, 1932. J. E. McCRACKEN 1,843,398

HIGHWAY GUARD

Filed Oct. 4, 1930 2 Sheets-Sheet 1

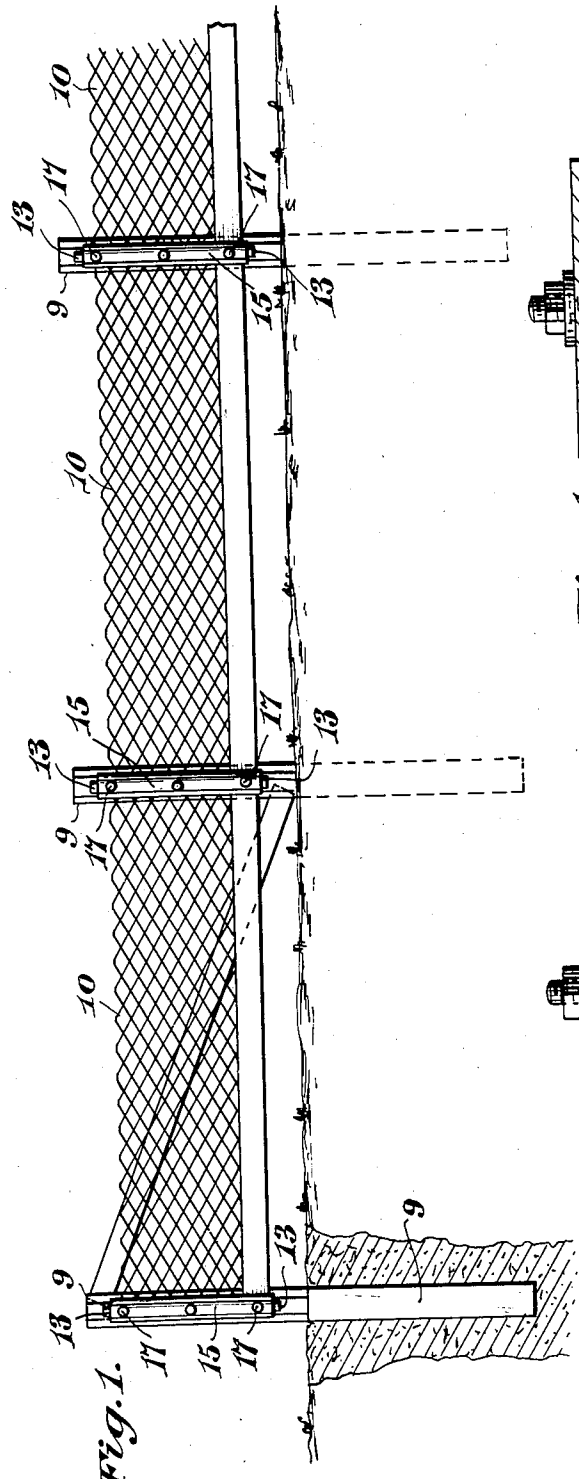


Fig. 1.

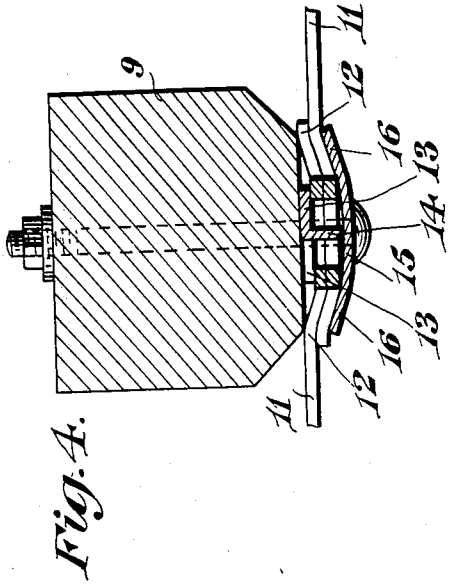


Fig. 4.

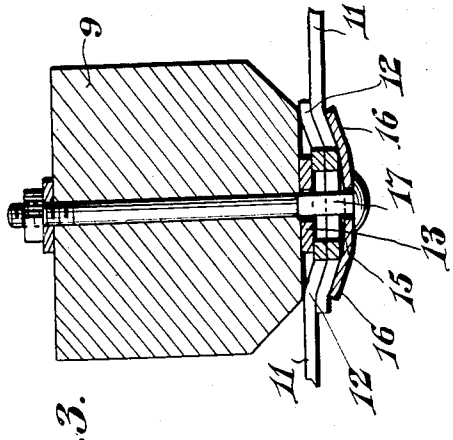


Fig. 3.

INVENTOR
Joseph E. McCracken,
BY
ATTORNEY

Feb. 2, 1932. J. E. McCRACKEN 1,843,398

HIGHWAY GUARD

Filed Oct. 4, 1930 2 Sheets-Sheet 2

Fig. 6.

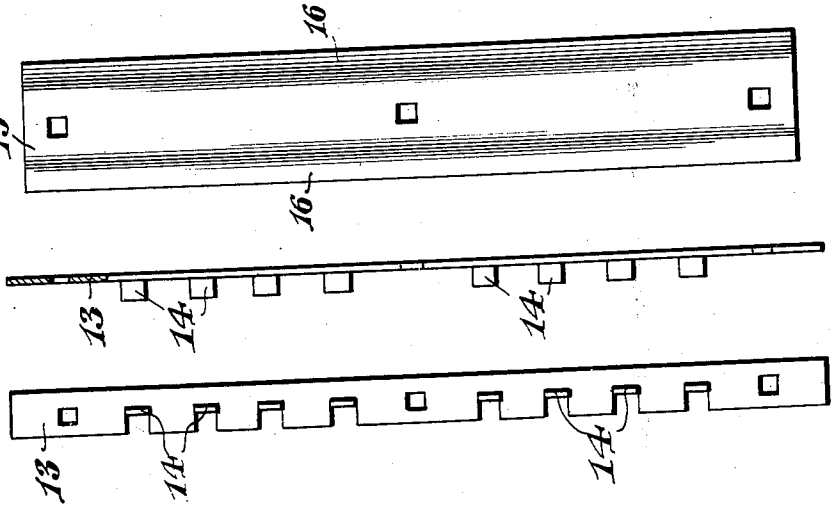


Fig. 5.

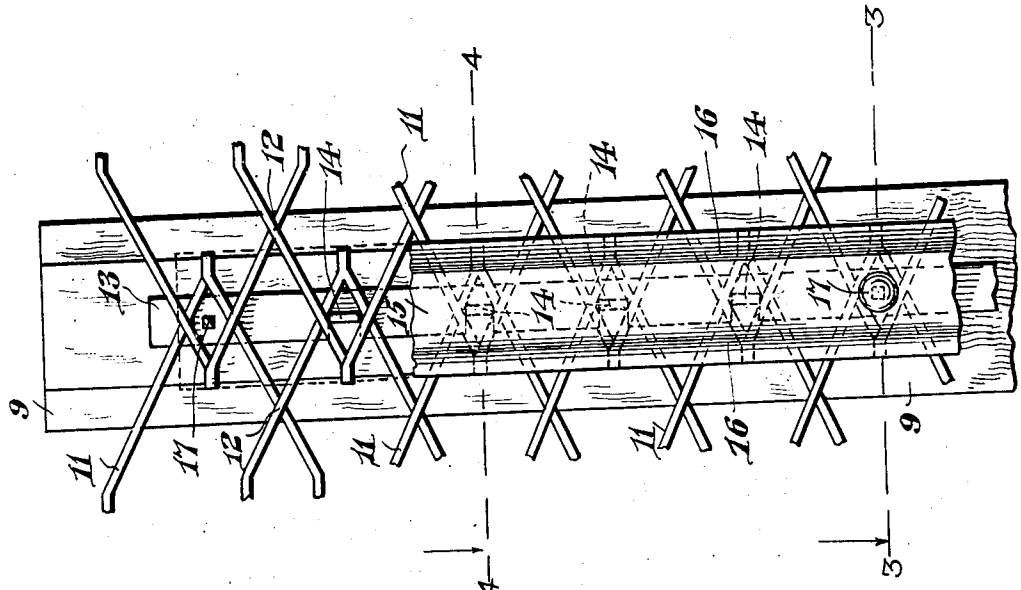


Fig. 2.

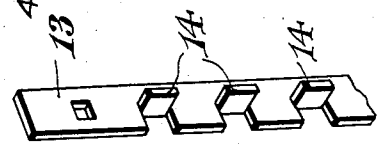


Fig. 7.

INVENTOR
Joseph E. McCracken,
BY
ATTORNEY

Patented Feb. 2, 1932 1,843,398

UNITED STATES PATENT OFFICE

JOSEPH E. McCRACKEN, OF YOUNGSTOWN, OHIO, ASSIGNOR TO TRUSCON STEEL COMPANY, OF YOUNGSTOWN, OHIO, A CORPORATION OF MICHIGAN

HIGHWAY GUARD

Application filed October 4, 1930. Serial No. 486,478.

The object of the present invention is to provide a novel and effective means for securing a fence fabric, such as expanded metal, to a supporting post in a manner that will resist the shocks and strains brought against it by the impact of an automobile or other body, this means furthermore performing the functions of an extended clamp which will act upon and hold the fabric throughout its width.

In the accompanying drawings:

Figure 1 is a side elevation of a portion of a fence or guard structure embodying the present invention.

Figure 2 is a detail view in elevation on an enlarged scale of a portion of the fastening means.

Figures 3 and 4 are respectively sectional views on the lines 3—3 and 4—4 of Figure 2.

Figure 5 is a front elevation of the locking or holding plate.

Figure 6 is a view at right angles to Figure 5.

Figure 7 is a detail perspective view of a portion of the holding plate.

Figure 8 is a front elevation of the retaining or clamping plate.

In the embodiment disclosed, the guard or fence is, as usual, supported on a set of spaced posts 9, which may be of any desired form or material. The fabric 10 of the fence or guard is preferably of expanded metal formed into lengths, each of which may extend across a plurality of posts, the ends, however, being arranged in overlapping relation on one of the posts, as will be clear by reference to Figures 2, 3 and 4. This expanded metal is, as is well known, in reticulated form, consisting of strands 11 integrally connected at spaced points, as shown at 12, and generally forming diamond meshes.

In order to effectively secure the fabric 10 to the posts 9, and particularly where the overlapping ends of the lengths of fabric are located, the following fastening means is employed. A holding strip or plate 13 is placed longitudinally on the face of the post. This strip has outstanding holding lugs 14 preferably formed by upsetting portions of the metal, as will be clear by reference to Figure 7. The end meshes of the fabric 10 are overlapped against the strip 13 with the outstanding holding lugs 14 engaged in the terminal angles formed by the strands. Thus one end of one length of fabric overlies the other and the strain is in opposite directions against the lugs.

Placed over the thus secured fabric is a retaining and clamping plate 15 consisting of an elongated bar or plate of metal with its margins 16 bent rearwardly. The plate 15 is wider than the strip 13 so that it completely encloses the same and projects beyond its side edges. Through these strips or plates 13 and 15 are passed holding bolts 17 that also pass through the posts and serve to bind the structure tightly with the parts in closely associated relation. The bolts preferably have portions of their shanks which pass through the metal strips square, so that they will not turn.

It will be understood that the above described fastening means may be employed on all the posts, but is especially desirable at the meeting ends of the lengths of fabric. When in place the fabric is thus secured against pulling strains throughout its width, not only being positively fastened by the lugs 14, but being effectively clamped by the rearwardly turned margins 16 of the retaining plate 15.

From the foregoing, it is thought that the construction, operation and many advantages of the herein described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

What I claim, is:

1. A guard fence or the like including a post, holding elements outstanding from the post, a fence fabric comprising sections having strands provided with end loops that detachably pass over the free ends of the holding elements and are engaged about the holding elements, and a retainer mounted on the post and overlying the fabric and retaining

elements to hold the loops against detachment.

2. A guard fence or the like including a post, a plate therein having spaced outstanding holding elements, a fence fabric having connected strands forming terminal loops that detachably pass over the free ends of the holding elements and are engaged about the holding elements, and a retainer mounted on the post and overlying the fabric and retaining elements to hold the loops against detachment.

3. A guard fence or the like including a post, holding elements outstanding from the post fence fabric sections extending on opposite sides of the post and having reticulated portions provided with terminal loops that are overlapped and engaged over the holding elements, and a retainer mounted on the post and overlying the fabric and retaining elements.

4. A guard fence or the like including a post, holding elements outstanding from the post, fence fabric sections extending on opposite sides of the post and having reticulated end portions overlapped and engaged over the holding elements and disposed in overlapping relation, and a retainer mounted on the post and overlying the fabric and retaining elements.

5. A guard fence or the like including a post, an elongated plate mounted longitudinally on the post and having outstanding holding lugs, reticulated fence fabric having overlapping end portions located over the plate and engaged by the lugs, and a cover retaining plate secured over the holding plate and covering the lugs and the portions of the fabric engaged with said lugs.

6. A guard fence or the like including a post, a plate located longitudinally thereon and having outstanding holding lugs, reticulated fence fabric, with the meshes of which said lugs are engaged, a retainer plate located over the holding plate and covering the outer ends of the lugs and the portions of the fabric engaged therewith, said plate having inset clamping margins, and means securing the holding and retaining plates to the post.

7. A fence or guard structure of the character set forth including a post, a reticulated metal fabric extending across the post, a holding plate extending longitudinally of the post behind the fabric, a clamping plate extending longitudinally of the post over the fabric and the holding plate and covering the lugs of the latter, and means for drawing the plates tightly together to clamp the fabric between them.

8. A fence or guard structure of the character set forth, including a post, a reticulated metal fabric extending across the post, a holding plate extending longitudinally of the post behind the fabric, a clamping plate extending longitudinally of the post over the fabric and the holding plate, and wider than the latter, said clamping plate having rearwardly turned side margins, and means for drawing the plates tightly together to clamp the fabric between them.

9. A fence or guard structure of the character set forth, including a post, a holding plate extending longitudinally of the post and having outstanding lugs, a fabric having strands engaged by the lugs, a clamping plate extending longitudinally of the post over the holding plate and covering the lugs, and fasteners for the clamping plate passing therethrough and through the holding plate and entering the post.

In testimony whereof, I affix my signature.

JOSEPH E. McCRACKEN.