No. 649,415. Patented May 8, 1900.

R. M. SHAFFER.

METAL PATCH.

(Application filed Sept. 28, 1899.)

(No Model.)

Fig. 1.

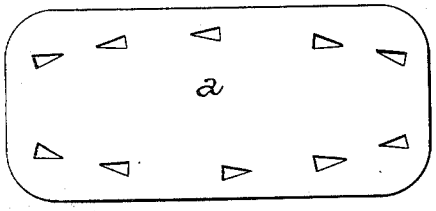


Fig. 3.

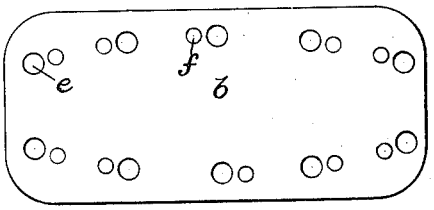


Fig. 4.

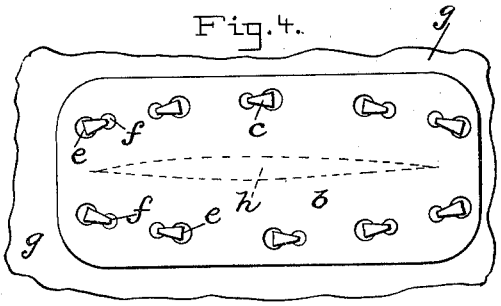


Fig. 2.

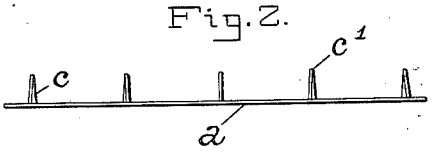


Fig. 5.

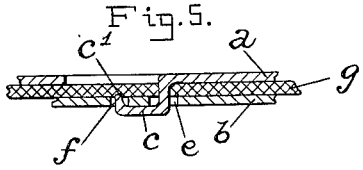
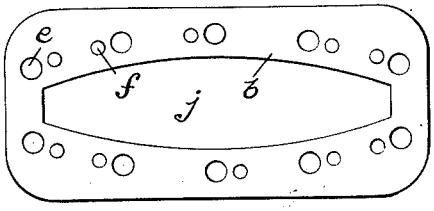


Fig. 6.



Witnesses:—
Charles B. Mann Jr.
Charles Vietsch.

Inventor:—
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UNITED STATES PATENT OFFICE.

RICHARD M. SHAFFER, OF BALTIMORE, MARYLAND, ASSIGNOR TO WILLIAM A. PLEASANTS, OF SAME PLACE.

METAL PATCH.

SPECIFICATION forming part of Letters Patent No. 649,415, dated May 8, 1900.

Application filed September 28, 1899. Serial No. 731,960. (No model.)

To all whom it may concern:

Be it known that I, RICHARD M. SHAFFER, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Metal Patches, of which the following is a specification.

This invention relates to improvements in metal patches for bags, awnings, tents, sails, and other fabrics.

The object of the invention is to provide a strong patch which may be easily and quickly applied to fabrics which have been ripped or torn.

A patch made according to my invention may also be applied to fabrics for other purposes than as a repair device.

The accompanying drawings illustrate the invention, wherein—

Figure 1 is a plan or back view of the tang-disk of my patch and illustrates the holes formed by punching out the tangs. Fig. 2 is an inverted edge view of same and shows the punched tangs projecting. Fig. 3 is a plan view of the clenching-disk and illustrates the holes which receive the tangs of the tang-disk. Fig. 4 is a view illustrating the complete patch as applied to a fabric. Fig. 5 is a sectional view and illustrates, on a large scale, the method of clenching the tangs when the patch is applied; and Fig. 6 illustrates a modification of my invention and shows its adaptability to other purposes than as a mere repair-patch.

Referring now to the drawings by letter, *a* designates the tang-disk, and *b* the perforated clenching-disk. In the present instance both of these disks are oblong in shape; but it is obvious that they may be made in many different shapes.

The tang-disk *a* is preferably constructed of thin sheet metal, with the tangs *c* projecting at one side and extending around and substantially parallel with but inside of the edge of the disk and formed integral therewith by punching same out of said disk and forming a hole, from which the tang is cut, but leaving the tang attached at a right angle. The edge of the disk is continuous or uninterrupted all around. The perforated clenching-disk *b* may also be formed from sheet metal or other suitable material, and said perforated disk is provided with two sets of holes *e* and *f*, arranged in pairs, which are also located around and substantially parallel with the edge of the disk, whereby when the two disks *a* and *b* are placed together the tangs *c* on one disk will register with one set of holes *e* in the other disk. Each of the second set of holes *f* in the disk *b* may be placed at any convenient side of the holes *e*. When used as a patch, the entire central area of both disks is solid or imperforate, so as to cover the torn hole in the fabric.

Referring now to Figs. 4 and 5, the application of the invention to fabric will be described. The tang-disk *a* is first placed against the fabric *g* over the hole, tear, or rip *h*, (see dotted lines, Fig. 4,) with the row of tangs *c* surrounding the torn or ripped place. All the tangs are then forced through the fabric and project on the opposite side thereof, and then the perforated plate *b* is placed over the ends of the tangs, with the latter projecting through the several holes *e*. At this point it will be seen that each disk is on an opposite side of the fabric and the tang of one of the disks projects through the fabric and also through holes in the other disk on the opposite side of the fabric. The projecting tangs are then bent down close against the disk *b* and the point end *c'* of each tang is inserted in one of the holes *f* and clenched through said hole, so that the point end *c'* will penetrate the fabric on the opposite side from that where the tang-plate contacts. This prevents the tangs from unclenching.

The modification shown in Fig. 6 is constructed and applied the same as the devices shown in Figs. 1 to 4, inclusive, except that here the disk is shown as having a central opening *j*. By this central opening the disk is adapted to receive a card-plate and may be used for mail or other bags. The card would be inserted between the disk *b* and the fabric, with the tangs also penetrating the card. It is also obvious that two disks of this modified form may be applied to a mail-bag to receive the staple through which the padlock is passed.

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

In a metal patch the combination with a fabric, of a metal disk provided on one side with projecting tangs, each tang being cut from the body of the disk—a hole being formed in the disk from which each tang is bent—the tangs being inside of but parallel with the edge of the disk—the said edge being continuous or uninterrupted all around—and each tang projecting through said fabric; a disk on the side of the fabric opposite the tang-disk and provided with a series of holes, *e*, which register with and receive said tangs and a second series of holes, *f*, each of which together with one of the holes of the first series forms a pair, whereby the tangs may be bent and the point ends of the tangs inserted and clenched in the holes, *f*, in said disk, for the purpose set forth.

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

RICHARD M. SHAFFER.

Witnesses:
EDWARD B. AMBLER,
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