To all whom it may concern:

Be it known that I, JOHN R. BARRETT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Cleats for Binders, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to cleats for temporary binders of the Emerson type, and has for its object to provide a new and improved cleat which will be particularly well adapted for the uses for which it is intended. I accomplish this object as illustrated in the drawings and as hereinafter described.

What I regard as new is set forth in the claims.

In the accompanying drawings, Figure 1 is a plan view, Figure 2 is an edge view, partly in section, Figure 3 is a partial edge view, Figure 4 is a partial longitudinal section, and Figure 5 is a perspective view showing part of one of the binder-strips with my improved cleat in position.

As is well understood by those familiar with temporary binders of the Emerson type, the binder consists of covers having strips adapted to fit against the rear edge portions of the magazines or other documents to be bound, the binder-strips being held in contact with the magazines by cords which pass through the magazines and through the strips. One and sometimes both of the strips are provided with cleats, upon which the ends of the cords are bayed. A binder of this type is shown and described in my pending application, Serial No. 655,053, filed October 13, 1897.

My present application has to do with a cleat intended for attachment to the usual binder-strips for the purpose of securing the ends of the cord in the manner described in my said application.

My improved cleat consists of an intermediate portion which is adapted to fit upon the binder-strips and to be secured rigidly thereto, said intermediate portion having a perforation for the passage of the cord and having projecting end portions or arms which extend from said intermediate portion, being elevated above the surface of the binder-strips, so as to provide space for the cord between said arms and the opposite surface of the binder-strip to which the cleat is secured. The intermediate portion is depressed below the upper or outer surfaces of the projecting arms to provide for accommodating the crossed portion of the cord bayed upon the cleat, and to further accommodate the crossed portion of the cord the surface of the intermediate portion of the cleat adjacent to the central perforation is further cut away, so as to permit that portion of the crossed cord which is thickest to lie nearest the surface of the binder-strip. Furthermore, the cleat is secured to the binder-stripe by an eyelet passing through the central perforation, and to prevent the upper head of said eyelet from projecting above the surface of the cleat and interfering with the cord I provide an annular shoulder in said central passage adapted to receive the flange or upset edge of the eyelet.

A further feature of my improved cleat consists in rounding the inner portions of the projecting arms and flattening the outer portions thereof, so that they are nearer the intermediate portion of the cleat, where the greatest strength is required, and are more elastic and flexible near their outer ends, where such elasticity is necessary.

A still further feature consists in making the under surfaces of the inner portions of the arms concave and the outer portions of the under surfaces thereof convex, so that greater space is provided near the inner portions of said arms, while the outer portions lie nearer the surface of the binder-strip and assure the retention of the cord in place.

Further features of my improved cleat consist in making the outer end portions of the arm broader than the inner portions thereof, thereby still further making it difficult for the cleat to become accidentally disengaged, and in providing the ends of the arms with enlarged rounded heads, by which the cord is guided into place in belaying.

Referring to the drawings for a more detailed description of my improved cleat, 6 indicates the depressed intermediate portion of the cleat, 7, the central passage for the cord, and 8 the shoulder in said passage which re...
ceives the flange 9 of the retaining-eyelet 10, as shown in Fig. 4.

11 indicates the cut-away portion of the intermediate part of the cleat, which, as best shown in Figs. 1 and 3, is more extensive at the sides of the cleat than at the center thereof. As shown in said figures, the cut-away portion 11 is bounded by portions 12,13, which are not cut away and through which are bored holes 14 for the reception of rivets or screws, by which the cleat is secured to binder-strip 15. (Shown in Fig. 5.) As best shown in Fig. 1, the inner side edges of the portions 12, 13 are inclined, so as not to interfere with the cord.

16 indicate the projecting arms of the cleat, which, as best shown in Fig. 1, are narrower measured horizontally at their inner ends than at their outer ends, thus making the accidental disengagement of the cord more difficult.

18 indicates the enlarged rounded heads at the outer ends of the arms 16, 17. As best shown in Fig. 2, the under surfaces of the inner portions of the arms 16, 17 are concave, while the outer portions thereof are convex, so that, as shown, the space between the under surface of the cleat and the upper surface of the binder-strip is greater near the inner portions of the arms 16, 17 than near the outer portions thereof, thus providing for retaining the cord securely in position. The greater vertical thickness of the inner portions of the arms 16, 17 and the elevation of the upper surfaces of the inner portions of said arms above the depressed intermediate portions 6 of the cleat are also best shown in Fig. 2. The advantages of these features have already been described.

Having thus described my invention, what I claim is:

1. A cleat for binders, composed of an intermediate portion having a perforation for the passage of the cord, arms extending from said intermediate portion, and a shoulder in said passage, said shoulder lying below the upper surface of the intermediate portion of the cleat, substantially as described.

2. A cleat for binders, composed of an intermediate portion having a perforation for the passage of the cord, said intermediate portion being cut away adjacent to said passage, and holes for retaining devices in said intermediate portion at opposite sides of said perforation, said intermediate portion being thickened around said holes, substantially as described.

3. The combination of a binder-strip, a cleat composed of an intermediate portion adapted to rest upon said strip and having a perforation for the passage of the cord, arms extending from said intermediate portion, a shoulder in said intermediate portion around said perforation, said shoulder lying below the upper surface of the intermediate portion of the cleat, and an eyelet fitted in said perforation and secured to said strip, substantially as described.

4. The combination of a binder-strip, a cleat composed of an intermediate portion having a perforation for the passage of the cord, arms extending from said intermediate portion, said intermediate portion being cut away adjacent to said passage, and an eyelet fitted in said perforation and secured to said strip, substantially as described.

5. The combination of a binder-strip, a cleat composed of an intermediate portion having a perforation for the passage of the cord, arms extending from said intermediate portion, said intermediate portion being cut away adjacent to said passage, an eyelet fitted in said perforation and secured to said strip, and holes for retaining devices in said intermediate portion at opposite sides of said perforation, said intermediate portion being thickened around said holes, substantially as described.

6. A cleat for binders composed of an intermediate portion having a perforation for the passage of the cord, and arms extending from said intermediate portion, said intermediate portion being cut away to form thickened portions, the inner terminals of the thickened portions being adjacent to said perforation, substantially as described.

7. The combination of a binder-strip, a cleat composed of an intermediate portion having a perforation for the passage of the cord, said intermediate portion being cut away to form thickened portions tapering toward said passage, and retaining devices at opposite sides of said perforation for securing the cleat upon the binder-strip, substantially as described.

JOHN R. BARRETT.

Witnesses:  
JOHN L. JACKSON,  
HELEN M. COLLIN.