

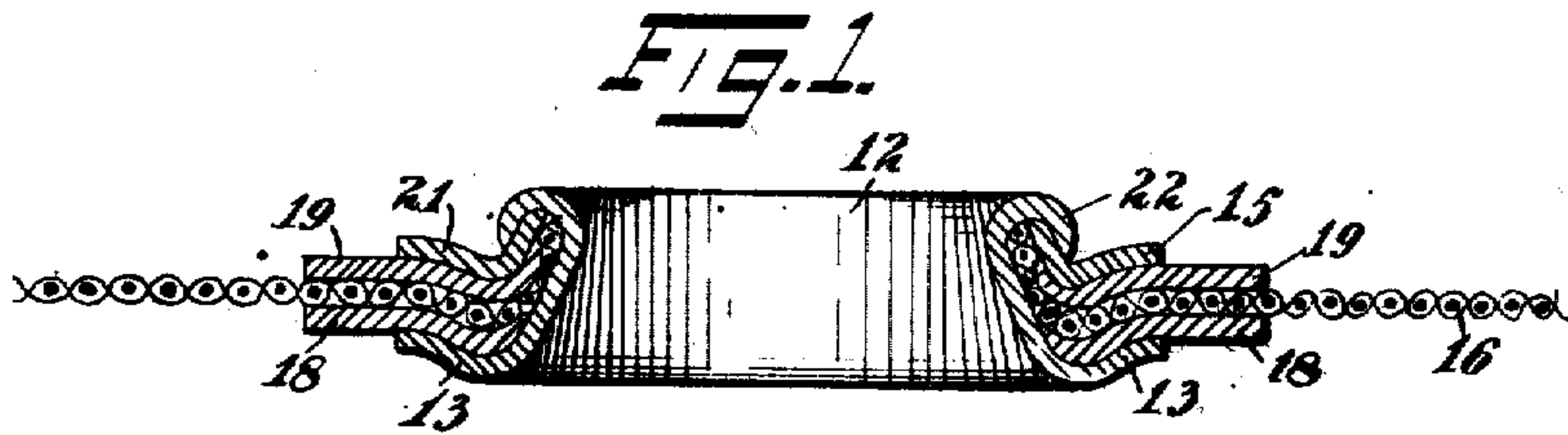
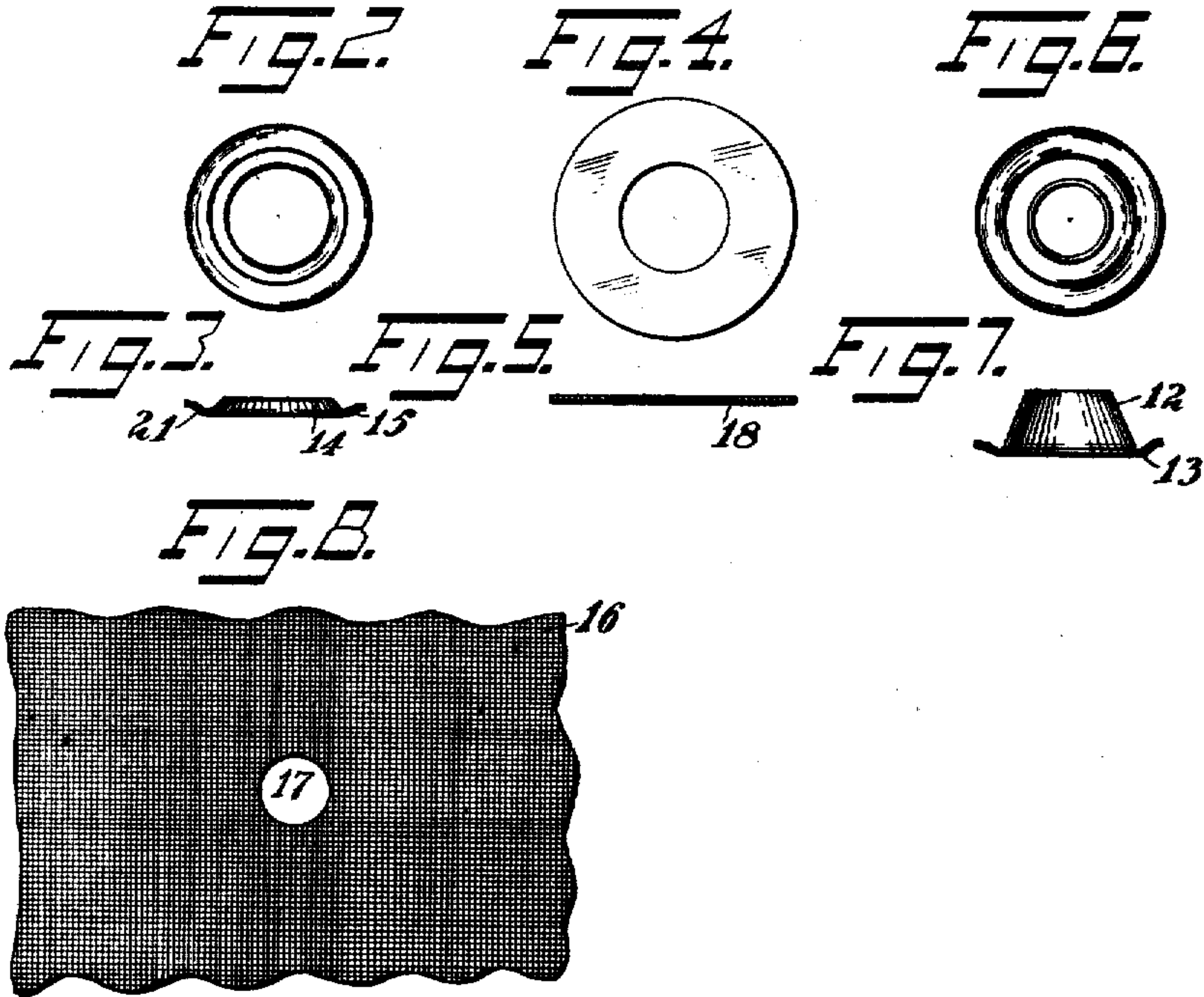
F. A. DONNELLY & J. E. BLANTHORN.

EYELET.

APPLICATION FILED JAN. 28, 1908.

914,705.

Patented Mar. 9, 1909.



Witnesses.

A. Newman.

H. D. Penney

Inventors.

F. A. Donnelly,

J. E. Blanthorn.

By their Attorney,

F. H. Richards.

UNITED STATES PATENT OFFICE.

FRANK A. DONNELLY, OF BAYONNE, NEW JERSEY, AND JOHN E. BLANTHORN,
OF NEW YORK, N. Y.

EYELET.

No. 914,705.

Specification of Letters Patent.

Patented March 9, 1909.

Application filed January 28, 1908. Serial No. 413,080.

To all whom it may concern:

Be it known that we, FRANK A. DONNELLY, a citizen of the United States, residing at Bayonne, in the county of Hudson and State of New Jersey, and JOHN E. BLANTHORN, a citizen of the United States, residing at New York, in the county of Kings and State of New York, have invented certain new and useful Improvements in Eyelets, of which the following is a specification.

This invention relates to the eyelets formed in fabrics or flexible material of various kinds and has for its object to provide a construction of eyelet in which the fabric will be very strongly secured between the gromet and the washer of the eyelet, so that it will be practically impossible for the eyelet to pull out of the fabric without tearing the fabric itself.

In the accompanying drawing representing one embodiment of our invention, Figure 1 shows enlarged a piece of fabric having an eyelet secured therein. Fig. 2 is a plan view and Fig. 3 a section of the form of washer used. Fig. 4 is a plan and Fig. 5 a section through one of the non-metallic washers employed. Fig. 6 is a plan view and Fig. 7 a section of the gromet. Fig. 8 shows a piece of fabric with an aperture therein of the preferred size for having the gromet and washer secured therein.

The gromet shown in Fig. 7 is composed of the usual tapered body portion 12 and flange 13. The usual metallic washer is shown in Fig. 3 as having the tapered portion 14 and the flange portion 15. The fabric 16 is provided with an aperture 17 slightly smaller than the small end of the body portion 12 of the gromet. It is desirable, but not necessary, that a non-metallic washer 18 be used between the fabric and the flange of the gromet, and also a non-metallic washer between the fabric and the metallic washer. Where such washer 18 is used, it is first placed on the gromet body, and then the fabric is forced down over the gromet at its aperture 17. This aperture being smaller than the end of the gromet, will cause the marginal portion of the fabric to flare upward and lie against the outer face of the gromet as shown. Thereupon the non-metallic washer 19 is placed on the fabric, and its aperture is of sufficient size to pass over the projecting portion of the fabric at 20, that remains in contact with the gromet. Thereupon the washer 21 is placed on the

gromet. Its flange portion will engage the non-metallic washer 19, while its flaring shank portion will engage the outer face of the raised portion 20 of the fabric and press it against the gromet. Thereupon the gromet and its metallic washer are secured together, preferably by bending over the small end of the gromet, as indicated in Fig. 1. Suitable pressure is also applied whereby the washers and fabric will be pressed together at the flange portions and all the members will assume the configuration shown in Fig. 1. By this operation it will be seen that the fabric is not merely clamped between the flange portion of the gromet and the metallic washer, but that the flaring portion of the fabric at the edge of its marginal portion is securely locked between the gromet and the flaring portion of the metallic washer, and the latter will have a wedging effect that will very securely lock the fabric in this position.

By this construction the fabric will be so securely locked in the eyelet that it will be practically impossible to pull the fabric out, and it has been found that the fabric will tear at other portions before it can be pulled out from the eyelet. Such a construction is especially advantageous for use in canvas eyelets, as for instance in sails of boats, feed bags, collapsible pails, and in a large variety or articles constructed of this fabric, where it is desired to permanently or temporarily secure the fabric to the member by means of small ropes or cords.

Having described our invention we claim.

1. In an eyelet secured in an apertured piece of material, a gromet comprising a shank and a flange, and a washer member comprising a shank and a flange, the gromet shank being extended through the aperture of the material and through the washer member with the flange portions of the two members lying substantially transverse to the axis of the shank portions and inclosing the material therebetween, the margin of the material at the aperture extending up between the shank portions of the two members for the full length of the washer shank, the upper portion of the gromet shank being bent down around the outer face of the washer shank serving to clamp the material between the shank of the gromet and the entire shank of the washer member.

2. In an eyelet secured in an apertured

piece of material, a gromet comprising a shank and a flange, and a washer member comprising a shank and a flange, the gromet shank being extended through the aperture 5 of the material and through the washer member with the flange portions of the two members lying substantially transverse to the axis of the shank portions and inclosing the material therebetween, the margin of the 10 material at the aperture extending up between the shank portions of the two members for the full length of the washer shank, the upper portion of the gromet shank being bent down around the outer face of the washer shank serving to clamp the material 15 between the shank of the gromet and the entire shank of the washer member, a non-metallic washer located between the flange portion of the gromet and the material on one side thereof, and a non-metallic washer 20 on the other side of the material between the latter and the flange of the washer.

FRANK A. DONNELLY.
JOHN E. BLANTHORN.

Witnesses:

WILLIAM H. HERR,
ROBERT VONDER HEYDEN.