(No Model.)

R. BRASS.

GROMMET.

No. 370,924. Patented Oct. 4, 1887.

Fig. 1.

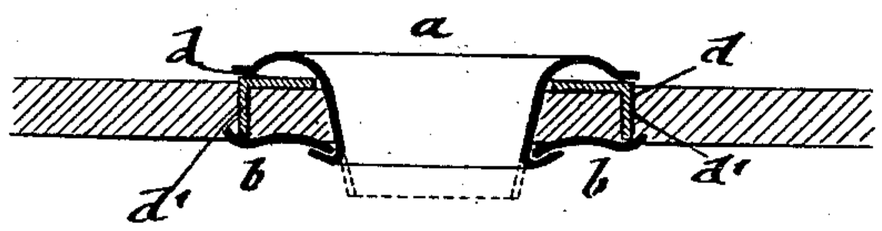


Fig. 2.

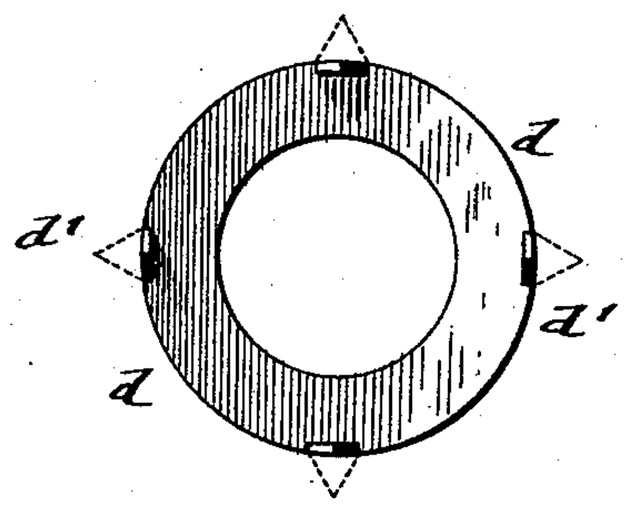


Fig. 3.

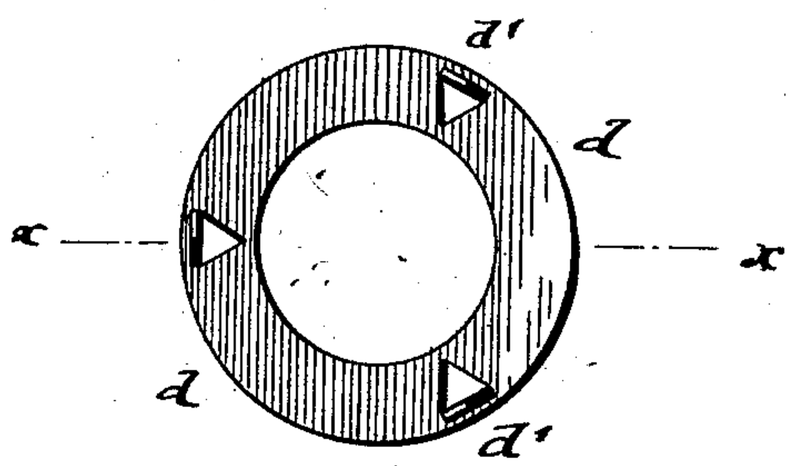
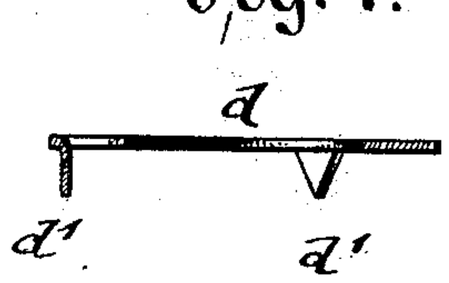


Fig. 4.



WITNESSES:

F. W. Rosenbaum.
Martin Petry.

INVENTOR
Robert Brass
BY
Foster & Freeman
ATTORNEYS.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

ROBERT BRASS, OF BROOKLYN, NEW YORK, ASSIGNOR TO JOHN BOYLE, OF SAME PLACE.

GROMMET.

SPECIFICATION forming part of Letters Patent No. 370,924, dated October 4, 1887.

Application filed March 9, 1887. Serial No. 230,178. (No model.)

To all whom it may concern:

Be it known that I, ROBERT BRASS, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Grommets, of which the following is a specification.

This invention relates to an improved grommet to be applied to sails, awnings, and other fabrics exposed to great strain; and the invention consists of a grommet composed of a flanged thimble, a ring retained by said thimble, and an intermediate pronged washer, the prongs of which pierce the fabric and are clinched between the flange of the thimble and the ring.

In the accompanying drawings, Figure 1 represents a vertical central section of my improved grommet. Figs. 2 and 3 are bottom views of the intermediate pronged washer, which forms part of the grommet; and Fig. 4 is a vertical transverse section, on line *x x*, of the washer shown in Fig. 3.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, *a* represents a flanged thimble or male part, and *b* the ring-shaped female part, of my improved grommet. Between the flange of the thimble *a* and ring *b* is interposed a pronged washer, *d*. The prongs *d'* of the washer *d* are forced through the fabric and clinched when the shank of the thimble is clinched in the usual manner over the ring. The prongs *d'* of the washer *d* may be either formed at the edge, as shown in Fig. 2, or punched out from the body of the washer, as shown in Figs. 3 and 4.

When the grommet has to be attached to the fabric—such as a sail—a hole is first pierced, the washer placed in position on the shank of the thimble, the shank of the thimble *a* passed through the hole of the fabric, the ring *b* placed on the shank of the thimble at the opposite side of the fabric, and then the shank or eye of the thimble clinched over the fabric and ring by suitable dies. Simultaneously the piercing of the fabric is produced by the prongs of the washer and the clinching of the same, so that they firmly grip the fabric and enable the grommet to resist great strains exerted thereon.

The pronged washer may be made of metal or other suitable material, or in the shape of a wire ring having barbed or protruding points, or of metal points, held in position by means of a washer of paper, cloth, rubber, leather, or other material of sufficient consistency and strength. The pronged washer is held in position on the fabric by the thimble and ring of the grommet, which fully inclose the washer and establish a rigid connection with the fabric, by the piercing of the fabric by the prongs and the clinching of the prongs.

The pronged washer can be used on any grommet heretofore in use, and increases the rigid connection of the same with the fabric and the resistance of the same to strain in a high degree.

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

A grommet composed of a flanged thimble, a ring retained by said thimble, and an independent washer interposed between the flange of said thimble and the fabric, and provided with prongs that pierce the fabric and are clinched by contact with said ring, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

ROBERT BRASS.

Witnesses:

PAUL GOEPEL,

CARL KARP.