

(No Model.)

R. D. S. TYLER.

CLIP, &c., FOR MAIL BAG AND OTHER STRAPS.

No. 518,681.

Patented Apr. 24, 1894.

Fig. 1.

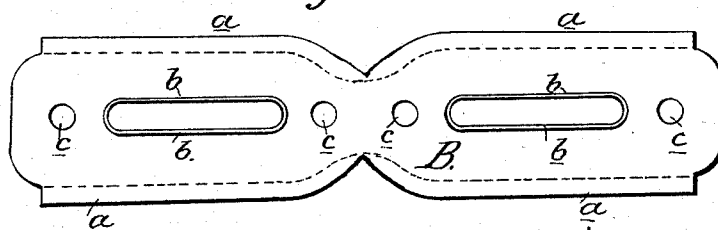


Fig. 2.

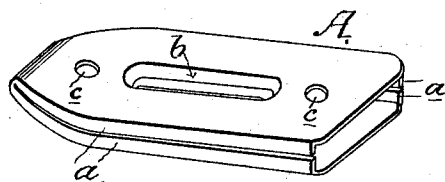


Fig. 3.

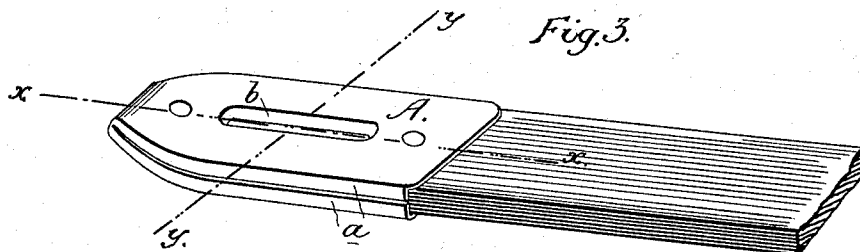


Fig. 4.

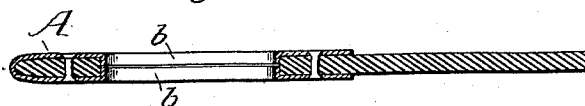


Fig. 5.

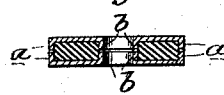


Fig. 6.

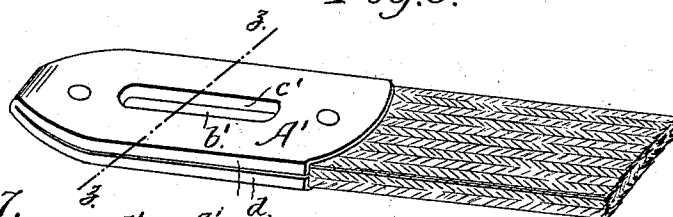


Fig. 7.

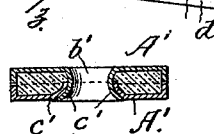
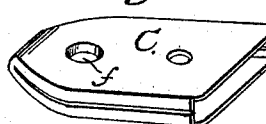


Fig. 8.



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CLIP, &c., FOR MAIL-BAG AND OTHER STRAPS.

SPECIFICATION forming part of Letters Patent No. 518,681, dated April 24, 1894.

Application filed December 27, 1893. Serial No. 494,874. (No model.)

To all whom it may concern:

Be it known that I, RADOLPHUS D. S. TYLER, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Clips, &c., for Mail-Bag and other Straps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Figure 1, represents a blank from which my improved clip or protector is formed. Fig. 2, is a perspective view of the clip or protector. Fig. 3, shows the application of my clip or protector to the end of a strap. Fig. 4, is a longitudinal sectional view of the same on the line $x-x$ of Fig. 3. Fig. 5, is a cross sectional view on the line $y-y$ of Fig. 3. Fig. 6, illustrates a protector or grommet constructed according to my invention. Fig. 7, is a cross sectional view on the line $z-z$ of Fig. 6. Fig. 8, is another form of protector.

My invention relates to clips, grommets, and other protecting devices applied to the ends of mail bag and other straps, and analogous devices, and it consists, essentially, in providing said clip, grommet, &c., with flanges bounding its side edges and also bounding the walls of the usual eye or opening, for the purpose of protecting and confining the edges of the leather, cotton-duck or other strap to which the clip, grommet or protector is secured.

My invention also consists of the improved clip, grommet or like device, which I shall hereinafter fully describe and claim.

In the construction of mail bags it is usual to provide the strap which serves as a fastening for the mouth of the bag or pouch, with a metal clip or protector usually made of one or two pieces, or with a grommet formed of two pieces, and provide the same with an eye or opening to receive the staple whereby when the hasp of the lock has been inserted the parts are locked, the mouth of the pouch or bag closed, and the contents of the pouch or bag secured against unlawful or unauthorized abstraction. These straps are usually made of leather, heavy canvas or cotton-duck, or some analogous material, and the clip or grommet is riveted in place on

the end thereof, the strap having the eye or staple opening formed in it simultaneous with the riveting in place of the clip, or being formed prior to the seating of the clip or grommet, as may be desired. When the eye or opening is made simultaneous with the applying of the clip or grommet, it has been found that the action of the punching die, will force the material laterally, causing its outer edges to be spread or expanded beyond the plane of the side edges of the clip or grommet, thereby presenting an unsightly appearance and exposing the edges of the strap and, when the latter is made of woven material, permitting the edges to unravel. It has also been found that in the use of the present form of clips or grommets upon leather straps where the side edges of the strap are exposed, it has been an easy matter for an unauthorized person to cut the material under the clip at the outer extreme end of the strap and secretly open the bag or pouch for unlawful purposes. Another objection has been that in punching or forming the eye or opening in the strap the same has often been found of greater width than the eye of the strap, thereby allowing the edges of the clip, grommet or protector to overhang the walls of the eye or opening in the strap and form an abutment against which the staple or other device would strike in inserting it through said eye. These disadvantages, and many others well known to post-office experts, are overcome by the use of my clip or grommet, and to make the construction and operation of both clip and grommet thoroughly understood and appreciated, I will now specifically describe their preferred forms.

The clip A shown in Fig. 2, is formed of a single piece of sheet metal from a blank B substantially as shown in Fig. 1. This blank is operated upon by successive steps to form its eye or staple opening, its holes for the rivets, its flanges bounding the walls of the eye, and the side edges of the blank, and then the blank is bent upon itself into the form shown in Fig. 2, which illustrates the complete article ready to be applied to the end of a strap of leather, canvas or otherwise. The complete clip A is, therefore, formed of a single piece returned upon itself with its free ends slightly rounded, while its bight end, which repre-

sents the free end of the complete strap, has its side edges rounded or curved to make a neat finish and to prevent the formation of sharp corners or angles that are liable to injure the hands of the postal clerks or others when handling the bags or pouches.

The two members of the clip are provided with inwardly turned flanges *a* which commence at the bight or point of junction of said members and extend along the side edges their whole length, and from the edges of the eye or staple opening these same members are likewise provided with inwardly projecting flanges *b*, which bound the side and end walls of the opening, so that when the rivets are driven home, through the holes *c*, the side edges of the strap, both the outer edges and the edges surrounding the eye, are securely housed or incased for the whole length of the clip thereby presenting no exposed portions to be tampered with by unauthorized persons, and forming a smooth unobstructed guide for the staple. Thus the forming of the flanges on the clips at the points indicated, when used on leather straps for mail bags or pouches, will make the securing ends of the straps much more secure than is the case with the clips now in use, because it would be almost impossible to reach the material of the strap under the clip at the outer end of the strap (as has been often done) in order to secretly open the bag or pouch for unlawful purposes.

The providing the clips with flanges as aforesaid, will, when the strap is composed of cotton-canvas or other suitable woven material, protect all of the edges embraced by the clip from spreading when cutting the eye or opening for the staple, and when driving the rivets home, and will also prevent the edges unraveling, besides imparting the additional security before mentioned, as applicable to leather straps.

My invention is also readily applied to another form of protector or fastening known as a grommet, as shown in Figs. 6, 7 and 8. These grommets are usually made of two separate pieces *A'* with an eye or opening *b'* for the staple, and surrounding this opening are the inturned flanges *c'*, one being deeper than the other to permit upsetting or crimping of the two when the grommet is affixed to the strap. My improved grommet is formed of one piece, like the clip before mentioned, and is applied to the end of the strap as previously described, and it will have its outer

side edges provided with flanges *d* similar to those on the clip and designed for the same purpose. These flanges by incasing and obscuring the edges of the strap, would make it impossible to rob a pouch or bag, *via* the outer end of the strap, without leaving such evidence of the same as would most certainly be observable as soon as the carrier or employé delivered the pouch to the postmaster. The rear end of the strap, which is to be permanently fastened to the bag or pouch, may also have a clip or grommet *C* similar to those before described, except there will be a smaller eye or opening *f* and the side edges will have inwardly turned flanges similar to those before mentioned. In addition to this the walls of the eye or opening *f*, in the members of this last named clip or grommet, may be inturned to form flanges adapted to perform the functions before noted.

The construction described is very simple, inexpensive and exceedingly desirable for the purposes described, and, as the invention is applicable to all forms of straps, as a protector for the ends thereof, I do not desire to be understood as limiting it to the straps of mail bags, pouches or sacks.

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

1. A protector for the ends of straps composed of a single piece of metal bent upon itself and having an eye or opening closed at both ends and coincident with a similar eye or opening in the strap, said protector having inwardly extending flanges bounding the sides and both ends of its eye or opening, and also the side edges of the strap.

2. As an article of manufacture, a clip, grommet or like device for a mail bag strap, composed of a single piece of metal returned upon itself, and provided with an eye or opening with closed ends, the return members of the device being provided with flanges projecting inwardly to bound the sides and both ends of the eye or opening, and also the outer side edges of the strap, to protect said outer edges and the edges contiguous to the eye or opening.

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

RADOLPHUS D. S. TYLER.

Witnesses:
ARTHUR BRISCOE,
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