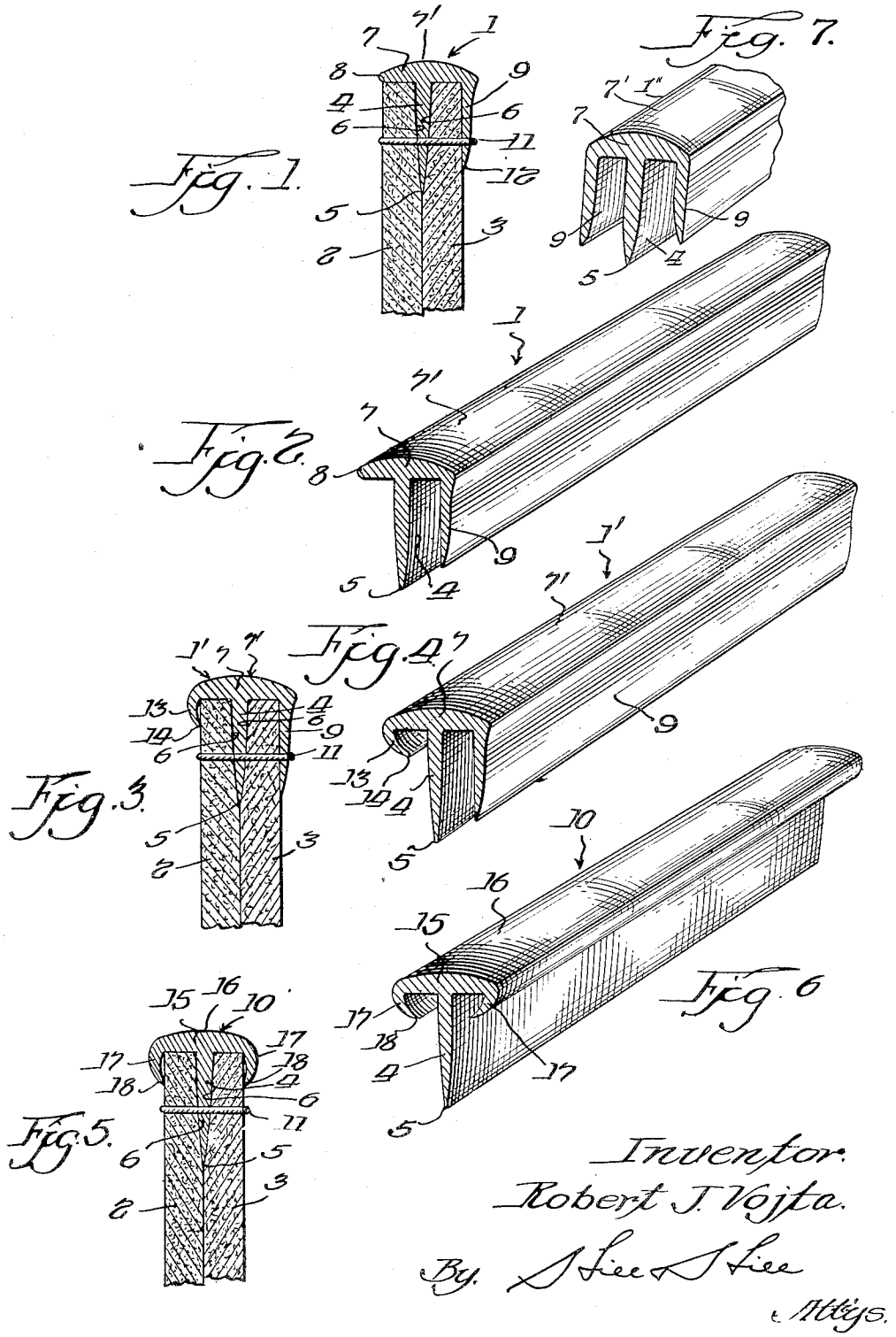
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BINDING FOR LUGGAGE SEAMS AND THE LIKE

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BINDING FOR LUGGAGE SEAMS AND THE LIKE

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3 Claims. (Cl. 190—54)

1

The invention relates generally to a reinforcement structure, and more particularly to an edge reinforcement for luggage seams, and the like.

The invention has among its objects the production of an edge reinforcement structure adapted to protect the edges of leather sheets and the like employed in the manufacture of luggage and other leather objects, which reinforcement is simple in construction, very efficient for the purposes intended, and inexpensive to manufacture.

Another object of the invention is the production of such a reinforcement which is designed to completely enclose the edges of the leather, or other material, including a marginal portion of the outer surface thereof, and which is constructed of a flexible material whereby it may be flexed with the sheet material with which it may be associated, and which may be in continuous lengths and coiled prior to use and requires no preforming or the like in its incorporation in the finished article.

A further object of the invention is the production of such a reinforcement which may be so constructed that stitching securing the reinforcement in position passes through a plurality of elements of the reinforcement to provide a very strong and durable reinforced construction.

A further object of the invention is the production of such a reinforcement which is so designed that a pleasing appearance is imparted, at the same time not materially increasing the thickness or bulk of the edge portion of the structure.

Many other objects and advantages of the construction herein shown and described will be obvious to those skilled in the art from the disclosure herein given.

To this end my invention consists in the novel construction, arrangement, and combination of parts herein shown and described, and more particularly pointed out in the claims.

In the drawings, wherein like reference characters represent like or corresponding parts:

Fig. 1 is a transverse sectional view of a reinforcement embodying the present invention mounted on the edges of a pair of adjoining sheets of material, as for example, in the edge seam of a piece of luggage;

Fig. 2 is a perspective view of a portion of the reinforcement illustrated in Fig. 1;

Fig. 3 is a sectional view similar to Fig. 1 illustrating another embodiment of the invention;

Fig. 4 is a perspective view of a section of the reinforcement illustrated in Fig. 3;

2

Fig. 5 is a sectional view similar to Figs. 1 and 3 illustrating still another embodiment of the invention;

Fig. 6 is a perspective view similar to Figs. 2 and 4 of the embodiment of the invention illustrated in Fig. 5; and,

Fig. 7 is a perspective view of another embodiment similar to the embodiment of Fig. 2.

In the past, there have been numerous types of edge reinforcements of the general character here involved, one example being that illustrated in Patent Number 2,487,951 issued November 15, 1949 to L. Stein. Such prior constructions have generally involved a more or less T-shaped member having a stem portion adapted to be positioned between adjoining sheets of material, the edge portions of which are to be secured together, with the stem portion terminating at its outer end in a head substantially co-extensive in width with the combined thickness of the sheets of material and that of the stem portion as illustrated in the above patent. In such structures the edges of the leather, or other sheets, butt against the head portion of the reinforcement, with the joint formed therebetween being exposed at the exterior surface of the respective sheets, and as the line of securement of the reinforcement and sheets, normally stitching, is spaced from the edges of the sheet, the portions of the sheets extending from the free edges thereof to the line of securement may tend to flare outwardly and away from the reinforcement.

The present invention contemplates an edge reinforcement wherein the latter is provided with a peripheral edge portion or flange which overlies the marginal exterior surface of the adjacent sheet to which it is applied, the edge portion in one embodiment of the invention being of a size to receive the stitching or other means of securement of the reinforcing member to the sheets, and in another embodiment of the invention is constructed to frictionally engage the marginal edge portions of the sheet.

Referring to the drawings, and particularly to Figs. 1 and 2, 1 indicates generally an edge reinforcing member adapted to be mounted on the edge portions of a pair of sheets 2 and 3 of suitable material, such as leather, and the like, which type of construction is commonly used in the manufacture of leather luggage, such as brief cases, bags, and the like.

The member 1 generally is T-shaped in cross section comprising a stem portion 4 adapted to be positioned intermediate the adjoining surfaces of the sheets 2 and 3, the stem preferably

tapering in thickness toward the free edge 5 thereof, and if desired, the adjacent marginal inner surfaces of the sheets 2 and 3 may be trimmed slightly, as indicated at 6, to reduce the overall bulk of the assembled structure. The opposite end of the stem 4 is integrally connected to a head portion, indicated generally by the numeral 7, which extends outwardly from the opposite sides of the stem 4 to overlie the edges of the respective sheets 2 and 3, and as clearly illustrated in Fig. 1, the head portion preferably is relatively thin and provided with a slightly convex outer surface 7', the average thickness of the head portion being approximately equal to the maximum thickness of the stem 4. One longitudinal edge 8 of the head portion 7 of the member 1 may be rounded and more or less coextensive with the exterior surface of the adjacent sheet 2.

Integrally formed with the head portion along the opposite free edge thereof is a flange or extension member 9 extending in the same direction as the stem 4 and adapted to overlie the marginal portions of the exterior face of the sheet 3. The member 1 is secured to the sheets 2 and 3 by suitable means, such as a line of stitching 11 passing through the two sheets, the stem portion 4 of the member 1, and the flange 9, thereby securing the sheets 2 and 3 together and, at the same time, firmly attaching the member 1 in operative position. The embodiment of the invention illustrated in Figs. 1 and 2 is particularly adapted for use in the manufacture of luggage, and the like, wherein the sheet 3 represents an outer face of the article, and the sheet 2 an intermediate member, as for example, an end portion of such an article, in which case the edge 8 of the member 1 would be more or less protected, whereas the opposite edge would receive more wear, in view of which only one flange 9 is provided. It is believed apparent that in the construction above described the edge of the sheet 3 is completely enclosed, and thus effectively protected, with the flange 9 being securely retained in position by the stitching 11. The flange 9 is preferably tapered in cross section, whereby the free edge 12 thereof is substantially a feather-edge serving to reduce the possibility of engagement of the edge of the flange with other objects, as well as impart a neat and attractive appearance. The member 1 is preferably formed from a suitable, relatively flexible material such as plastic, and its design is such that it may be readily manufactured by extrusion processes. In extending the reinforcement around corners or the like, the stem member 4 and flange 9 may be suitably notched to receive excess material resulting from the bending of the member.

The embodiment of the invention illustrated in Figs. 3 and 4 is similar to that heretofore described, the reinforcing member 1' comprising a stem portion 4, tapering toward the edge 5, a head portion 7 having a slightly convex outer surface 7', and the stem 4 extending between and secured to the sheets 2 and 3 by similar stitching 11 passing through the stem 4 and the flange 9, with the head portion 7 overlying the free edges of the sheets, the inner edge portions of the latter likewise being skived slightly as indicated at 6, if desired. However, in this construction the portion of the head 7 overlying the edge of the sheet 2 is provided with a relatively short flange 13 integrally connected to the head 7 and adapted to overlie the marginal exterior surface of the sheet 2, so that the edges of both sheets are completely enclosed. As illustrated in Fig. 4, the member 1', which is likewise suitably formed from a flexible material such as plastic, or the like, and which may be manufactured as an extrusion is initially formed with the flange 13 extending angularly inward toward the stem 4, so that when the device is mounted on the edges of the sheet material, as illustrated in Fig. 3, the free edge 14 of the flange 13 must be spread outwardly away from the stem 4 a sufficient distance to permit the insertion of the edge portion of the sheet 2 between the flange and the stem. Thus, the flange 13 will frictionally engage the exterior of the surface of the sheet 2 and be firmly maintained in operative position with respect thereto.

Figs. 5 and 6 illustrate still another embodiment of the invention, and in this construction both of the flange members are constructed similar to the flange 13 illustrated in Figs. 3 and 4. The reinforcing member 10, which may be constructed of the same material as the members 1 and 1', is generally similar in construction to the members 1 and 1', and comprises a similar stem portion 4 tapering toward the edge 5 adapted to be positioned between the sheets 2 and 3, the upper end of which stem member is integrally connected to a head portion 15 having a relatively flat, slightly convexed outer surface 16, with both longitudinal edges of the head terminating in similar flanges 17, which taper in thickness toward the free edges 18 thereof. In this embodiment of the invention, the member 10 is secured to the sheets 2 and 3, the inner edge portions of which may be skived slightly, if desired, as indicated at 6, by a similar line of stitching 11, or other suitable means, which, however, in this construction passes merely through the stem 4. In forming the member 10 by extrusion, or other suitable process, the flanges 17 are initially so formed that they extend angularly toward the stem 4 prior to the mounting of the structure on the sheets, whereby each of the flanges 17 must be spread away from the stem 4 to permit the insertion of the edges of the respective sheets between the respective flanges and the stem, whereby the edge portions of the sheets 2 and 3 will, in effect, be firmly clamped between the respective flanges and the stem, and frictionally held in the desired position.

It will be noted that in all of the forms of the invention illustrated, the edge portions of one or both of the sheets, as may be required, are completely enclosed by the reinforcing member, with no possibility of such edges ultimately flaring outwardly and becoming exposed and subject to fraying, scuffing, and the like. It might be mentioned that while I have illustrated the flange 13 in the embodiment of the invention illustrated in Figs. 3 and 4 as being smaller than the flange 9, it is believed apparent that, if desired, the flange 13 could be formed substantially as a duplication of the flange 9, Fig. 7, in which case the stitching 11 would pass through both flanges and the stem. However, in most constructions on which the present invention would be employed, normally one of the sheets of material will not be subjected to as much wear as the other sheet and in most instances one large flange 9 will normally be sufficient to provide adequate protection of the structure. Consequently, either of the structures illustrated in Figs. 1 and 2 or Figs. 3 and 4 may be employed to provide adequate production. The construction illustrated in Figs. 5 and 6 likewise may provide adequate

protection in a majority of instances, particularly where the sheets are subject to a lesser amount of wear, whereby the use of the large flange 9 is not required.

As previously mentioned, the reinforcing members illustrated are preferably formed from a relatively flexible material, such as a suitable plastic, or the like, whereby pre-forming of the reinforcing members to the shape of the case or other article on which it is employed is not required, and the reinforcement may be manufactured in relatively long lengths, and readily rolled into coils to be cut off and used, as required. It will therefore be appreciated that the present invention is directed to a protective edge reinforcement which is adapted to flex with the elements on which it is applied, as distinguished from a reinforcement such as illustrated in the Stein patent heretofore referred to, wherein the reinforcing member is relatively stiff to restrict movement of the sheets or panels to which it is applied, and is pre-formed prior to its incorporation in the particular article.

It will be noted from the above description that I have provided a novel reinforcement, particularly adapted for use in connection with the manufacture of luggage, and the like, to provide a protective structure for exposed edges of leather sheets or panels, in which the protection extends not only along the edges thereof, but also along the external surface of one or both sheets or panels, as may be required. Likewise, I have provided a structure wherein the reinforcing member, if desired, may be firmly secured to the sheets or panels at a plurality of points to provide a very durable structure.

Having thus described my invention, it is obvious that various immaterial modifications may be made in the same without departing from the spirit of my invention; hence, I do not wish to be understood as limiting myself to the exact form, construction, arrangement, and combination of parts herein shown and described or uses mentioned.

What I claim as new and desire to secure by Letters Patent is:

1. In a reinforced seam and the like, the combination of an elongated strip of relatively flexible material, said strip being generally T-shaped in cross section, the stem portion thereof being positioned between adjoining faces of a pair of sheets having co-extensive adjacent edges, with the head portion of the T being of a width to overlie such edges at both sides of the stem portion, and a flange integrally formed with said head portion along one free edge thereof, said flange extending in the same direction as said stem portion with the stem portion being greater in cross sectional length than the corresponding dimension of said flange, the flange marginally overlying the exterior face of the adjacent sheet to which the strip is applied whereby the edge portion of such sheet is completely enclosed thereby, and securing means passing through the respective sheets, stem portion and flange.

2. In a reinforced seam, the combination of an elongated strip of relatively flexible material, said strip being generally T-shaped in cross section, the stem portion being positioned between adjoining faces of a pair of sheets having co-extensive adjacent edges, with the head portion of the T being of a width to overlie such edges at both sides of the stem portion, and a pair of flanges integrally formed with said head portion along the respective free edges thereof, said flanges extending laterally of the head portion and substantially in the same direction as said stem portion with the stem portion being greater in cross sectional length than the corresponding dimensions of said flanges, and one of the flanges being longer than the other, the flange marginally overlying the respective exterior faces of the adjacent sheets whereby the edge portions of such sheets are completely enclosed thereby, and securing means passing through the respective sheets, stem portion and the longer of said flanges.

3. In an edge reinforcement for luggage seams and the like, the combination of an elongated strip of relatively flexible material, said strip being generally T-shaped in cross section, with the surfaces of the stem portion converging toward the free end thereof, said stem portion being adapted to be positioned between adjoining faces of a pair of sheets of leather or the like having co-extensive adjacent edges, with the head portion of the T being of a width to overlie such edges at both sides of the stem portion, and flanges integrally formed with said head portion along the respective free edges thereof, said flanges extending transversely of the head portion and substantially in the same direction as said stem portion with the stem portion being greater in cross sectional length than the corresponding dimensions of said flanges, the flanges being adapted to marginally overlie the respective exterior faces of the adjacent sheets to which the strip is applied whereby the edge portions of such sheets are completely enclosed thereby, said flanges being so formed that pressure is applied by the stem portion and flanges to the marginal portions of such sheets positioned therebetween.

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