March 26, 1935. H. L. BASS 1,995,287

HOGSHEAD

Filed Oct. 9, 1931 2 Sheets-Sheet 1

Fig. 1.

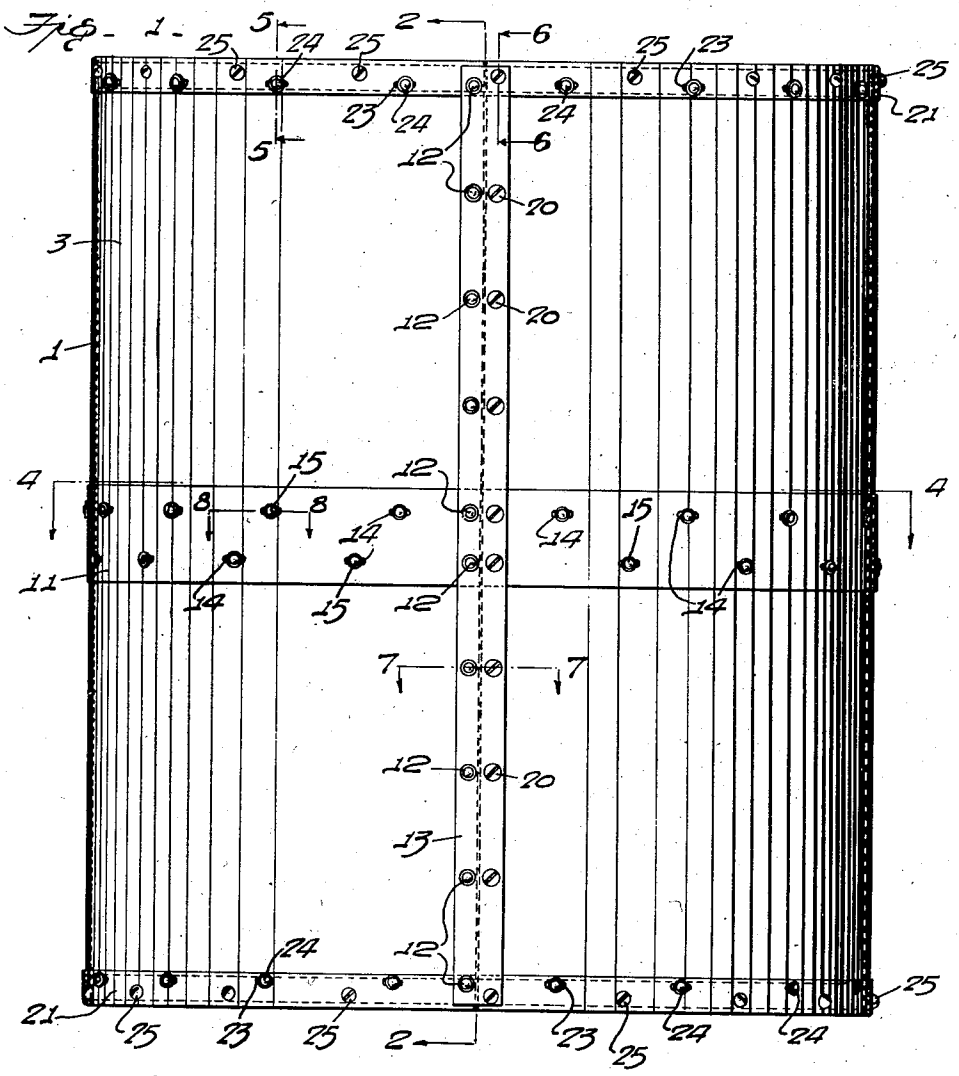


Fig. 5.

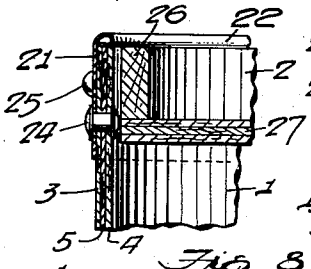


Fig. 6.

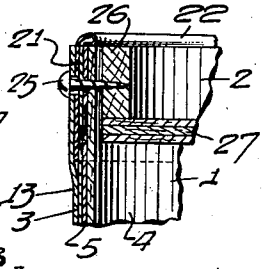


Fig. 7.

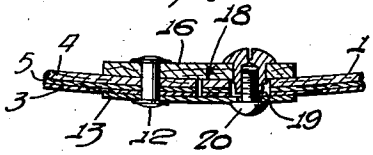
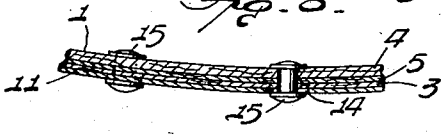


Fig. 8.



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HOGSHEAD

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Fig. 2.

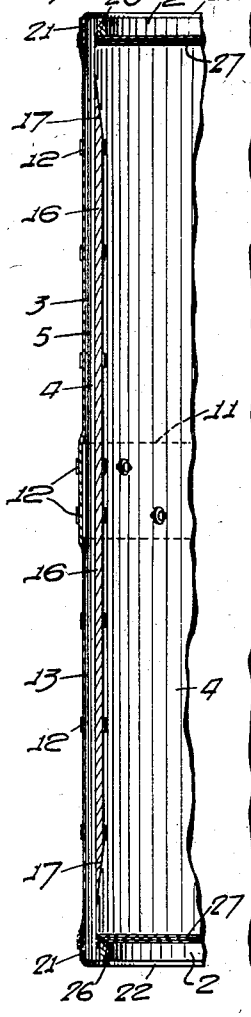


Fig. 3.

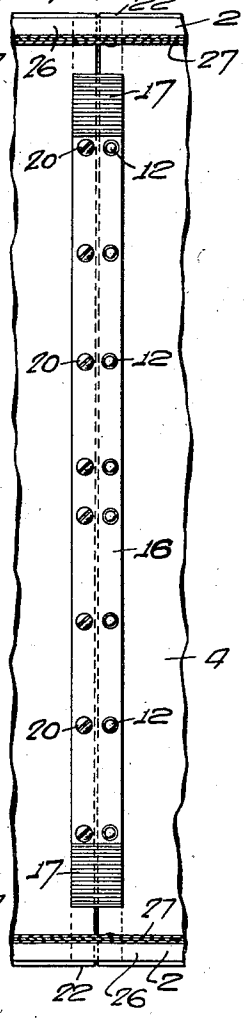


Fig. 4.

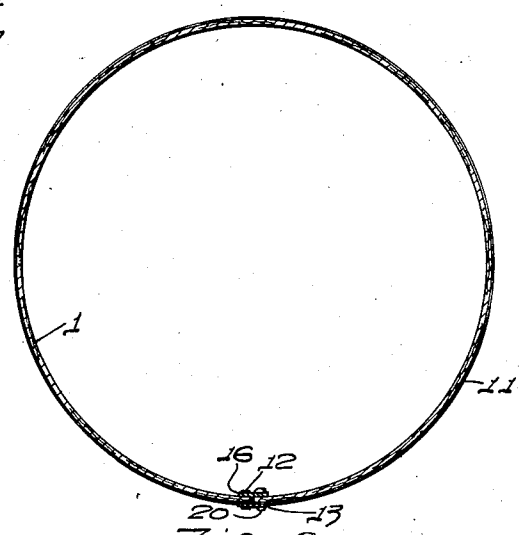


Fig. 9.

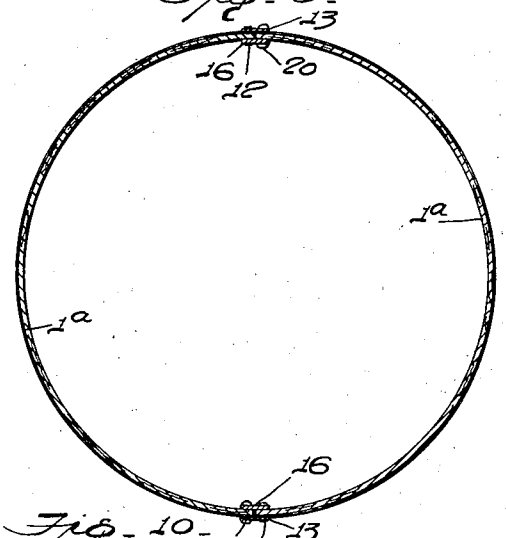


Fig. 11.

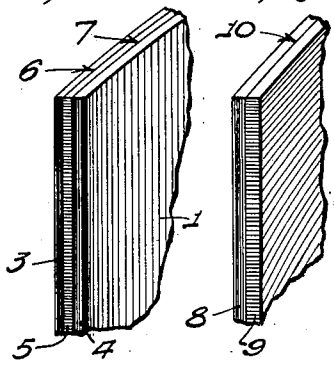
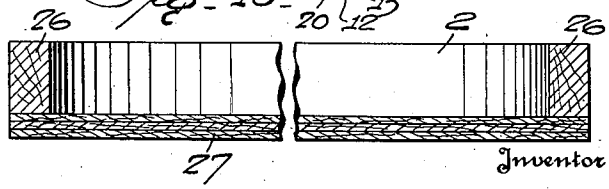


Fig. 12.

Fig. 10.



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UNITED STATES PATENT OFFICE

1,995,287

HOGSHEAD

Henry L. Bass, Hopkinsville, Ky.

Application October 9, 1931, Serial No. 567,931

10 Claims. (Cl. 217—44)

My invention relates to hogsheads and particularly to such as are used for shipping tobacco. The principal object of the invention is to provide a hogshead which is able to withstand rough usage, which is sufficiently tight to practically exclude moisture, which may be cheaply produced and which may be stored or shipped in compact knock-down form enabling it to be assembled by the user as the occasion may require and to be reshipped for further use after its contents have been removed.

Hogsheads used for the shipment of tobacco are commonly made of staves and their construction and bulkiness are such that, although they are relatively expensive, they are not generally reshipped for further use after having once been filled. To minimize the loss occasioned by discarding the hogsheads after a single use, it is usual to make them as cheaply as possible and of as low grade material as it is possible to employ. Hogsheads, therefore, not uncommonly exhibit substantial cracks between the staves, and the wood from which the staves are made frequently contains cracks and knots, the latter being apt to become knocked out during shipment of the hogshead and thereby leaving an opening through the stave. These cracks or openings in the hogshead are a matter of serious disadvantage in the export of tobacco beyond the seas, because they permit moisture to have ready access to the tobacco and to be unduly absorbed thereby. Foreign import duties on tobacco are generally at a given rate per pound and the amount of moisture absorbed by the tobacco during shipment across the ocean in a hogshead of the character commonly used is not infrequently sufficient to cause an increase in the weight of the tobacco corresponding to an increased import duty to the extent of several dollars. In extreme cases the weight of the tobacco in the hogshead may thus be increased nearly ten per cent. By my invention these disadvantages are substantially overcome and a hogshead which is practical for use and re-use is capable of economic production.

The principal feature of the invention consists in forming the body or tubular portion of the hogshead from a sheet consisting of a plurality of plies of wood veneer glued together so that the grain of the outermost ply runs lengthwise of the tube while that of the next inner ply of veneer extends circumferentially of the tube, means being provided for connecting the abutting edges of the plies lengthwise of the hogsheads to thus form the tubular body. Where three plies of glued wood veneer are used to constitute the sheet forming the tubular body, the grain of the innermost ply extends in the same direction as that of the outermost ply, namely, in the direction of length of the hogshead.

A further feature of the invention consists in forming the body or tubular portion of the hogshead from a sheet of three ply glued veneer, the outer and inner plies whereof have their grain running longitudinally of the hogshead and the intermediate ply having its grain running circumferentially of the body, the inner ply being thicker than the outermost ply as well as thicker than the intermediate ply.

Other features of the invention relating to relations of parts and advantageous structural details will hereinafter appear and be particularly pointed out in the claims.

In the drawings illustrating preferred forms of the invention,—

Figure 1 is an elevational view of a hogshead embodying the invention.

Figure 2 is a detail sectional view on the line 2—2, Figure 1.

Figure 3 is a detail elevational view of the interior of the hogshead at the longitudinally extending joint of the tubular body.

Figure 4 is a transverse sectional view on the line 4—4, Figure 1.

Figure 5 is a detail sectional view on the line 5—5, Figure 1, showing the relation of the head to the tubular body.

Figure 6 is a detail sectional view on the line 6—6, Figure 1, showing the manner in which parts are interleaved at the ends of the tubular body adjacent the longitudinal joint thereof.

Figure 7 is a detail sectional view on the line 7—7, Figure 1.

Figure 8 is a detail sectional view on the line 8—8, Figure 7.

Figure 9 is a view corresponding to Figure 4, but illustrating a modified form of the invention in which the tubular body is formed of two sheets of glued veneer instead of a single sheet.

Figure 10 is a detail sectional view taken diametrically through one of the heads.

Figure 11 is a detail sectional view of a portion of the sheet of glued three ply wood veneer such as it is preferred to employ to form the tubular body of the hogshead.

Figure 12 is a view corresponding to Figure 11 but illustrating the arrangement of plies when the sheet from which the body is formed consists of glued two ply wood veneer.

The hogshead is formed with a tubular body 1 which is closed at its ends by heads 2. The tubular body is formed of sheet glued wood veneer. As shown in Figure 4 a single sheet of sufficient size to form the complete circumference of the hogshead is preferably used but, as illustrated in Figure 9, the tubular body portion of the hogshead may conveniently be formed from a plurality of sheets 1*a* each sufficiently large to form half of the body. The sheet from which the tubular body is fashioned is preferably of rectangular form and advantageously consists of glued three ply wood veneer formed (see Figure 11) from an outermost ply 3, the grain whereof is arranged to run lengthwise of the hogshead, an innermost ply 4 whose grain likewise runs in the direction of length of the hogshead and a middle or intermediate ply 5, the grain of which extends circumferentially of the tubular body, the abutting surfaces of the outer ply and the intermediate ply being glued together as indicated at 6 and the abutting surfaces of the plies 4 and 5 being glued together as indicated at 7. By thus disposing the grain of the outer layer or ply and by relating it in the described manner to the grain of the other plies, the required strength is imparted to the tubular body without rendering the glued wood veneer sheet from which it is formed too stiff to be bent to the desired shape by a simple bending operation. To impart maximum strength to the tubular body without unduly impairing the flexibility of the sheet of glued veneer the innermost ply 4 may advantageously be made of a thickness substantially greater than that of the intermediate ply 5 as well as of the outermost ply 3, such increased thickness of the innermost ply being made possible of practical accomplishment by reason of the manner in which the grains of the several plies are related. In practice the outermost ply 3 may advantageously be made of wood one-sixteenth of an inch thick and the intermediate ply 5 may be of a like thickness, while the innermost ply 4 may be twice as thick. Where, however, as shown in Figure 12, the tubular body portion of the hogshead is formed of a sheet consisting of glued two ply wood veneer it is preferred to form each of those plies, 8 and 9 respectively, of equal thickness, their abutting surfaces being glued together at 10. But as in the construction where glued wood three ply veneer is employed, the outer ply 8 of the two ply sheet has its grain running lengthwise of the hogshead while the inner ply 9 adjacent thereto has its grain extending circumferentially.

Midway between its ends the tubular body member 1 may advantageously be provided with a metallic band or hoop 11 which may be conveniently made about six inches wide and of 29 gauge sheet metal. The band 11 forms a surface permitting the hogshead to be readily rolled and manipulated in the usual manner with the aid of a cut-stick and protects the underlying ply of veneer from being scarred or injured during such rolling, in addition to reinforcing the hogshead at this point. The band 11 is secured to the sheet forming the tubular body 1 of the hogshead so as to conform to the sheet when the latter is flat or knocked-down as well as when it assumes cylindrical shape in the assembled structure. For this purpose one end of the band 11 may be rigidly secured to the glued wood veneer sheet by means of one or more of the rivets 12 by which the sheet is secured to the metallic joint strip 13 through which the abutting ends of the sheet are attached to each other. At intervals in its direction of length the band is provided with elongated slots 14 for receiving rivets 15 connecting the band to the sheet of glued wood veneer. In this manner the band 11 is permitted to creep or slide slightly with respect to the sheet so as to adjust itself to the shape of the latter.

Secured by means of the rivets 12 to the inner side of the sheet forming the tubular body 1 is an inner joint strip 16 which is preferably of wood and which may advantageously have its ends bevelled as indicated at 16, the bevelling being for the purpose of preventing injury to the tobacco when it is forced into the hogshead by a press. The outer joint strip 13 and the inner joint strip 16 extend circumferentially of the hogshead beyond the longitudinal edge of the portion of the glued veneer sheet to which they are secured, thus providing between them a slot or recess 18 for receiving the opposite end of the sheet. To detachably connect this latter end of the sheet to the joint strips 13 and 16 said end is preferably provided with a series of slightly elongated slots 19 for receiving stove bolts 20 which also pass through the outer and inner joint strips 13 and 16 respectively. The elongation of the slots 19 in the sheet of glued wood veneer enables the stove bolts to be readily placed in assembled position and also provides for slight variations in the diameter of the hogshead. As shown in Figures 1 and 7, the stove bolts 20 at mid-length of the joint strips pass through elongated slots in the neighboring end of the band 11 encircling the middle of the hogshead.

At its opposite ends the hogshead may advantageously be provided with metal bands or hoops 21 which protect the underlying portions of the glued wood veneer tubular body 1 from injury, the outer edges of said bands being preferably bent or rolled, as indicated at 22 to form beadings overlapping and protecting the ends of the glued veneer sheet.

The end bands 21 are preferably secured to the glued wood veneer sheet of which the tubular body of the hogshead is formed in a manner similar to that in which the middle band 11 is secured to said sheet. One end of each end band 21 is permanently secured to the body sheet by one of the rivets 12 by which the joint strips, 13 and 16 respectively, are attached to said sheet. At intervals the bands 21 are provided with elongated slots 23 for receiving rivets 24 which hold the bands to the body sheet of the hogshead with capability of adjusting themselves so as to conform to the shape of the sheet when assembled in the hogshead or when disassembled for shipment. The bands 21 are also provided with a series of openings for receiving suitable screws or fastenings 25 which hold the heads 2 in place.

The heads 2 may be formed of wood and preferably are fashioned with a peripheral ring 26 to the inner end of which is secured a disk 27 of glued wood veneer. The ring 26 provides the head 2 with a flange for receiving the screws or fastening means 25 by which the head is held in place. The modified form of construction illustrated in Figure 9 contemplates forming the tubular body of the hogshead from two sheets 1*a* of glued wood veneer instead of a single sheet. Accordingly, each of said sheets is provided with two outer and inner joint strips, 13 and 16 respectively, which are the same in form and function as the joint strips previously described; and each sheet 1*a* is associated with end bands 21 and the mid-

dle bands 11 which, except that they are shorter, are like the corresponding bands heretofore described and perform the same functions.

I claim:

1. A hogshead comprising a tubular body portion open at its ends, heads therefor, said body portion being of multiple-ply glued wood veneer in sheet form bent to constitute a tube having a joint extending lengthwise of said hogshead, the grain of the exterior of said plies extending in the direction of length of said tubular body, a joint strip extending lengthwise of said body and overlapping the latter on opposite sides of said joint, means for securing said strip to said tubular body at one side of said joint, and means for detachably securing said strip to said body at the other side of said joint.

2. A hogshead comprising a tubular body portion open at its ends, heads therefor, said tubular body portion being of multiple-ply glued wood veneer in sheet form bent to constitute a tube having a joint extending lengthwise of said hogshead, said plies consisting of an exterior ply, an interior ply, and an intermediate ply, the grain of the exterior ply and the grain of the interior ply extending in the direction of length of said tubular body, and the grain of said intermediate ply extending circumferentially of said tubular body, a joint strip extending lengthwise of said body and overlapping the body on opposite sides of said joint, means for securing said strip to said tubular body at one side of said joint, and means for detachably securing said strip to said body at the other side of said joint.

3. A hogshead comprising a tubular body portion, heads therefor, said body portion being of three ply glued wood veneer in sheet form bent to constitute a tube having a joint extending lengthwise of said hogshead, the grain of the exterior of said plies and the grain of the interior of said plies extending in the direction of length of said tubular body, and the grain of the intermediate ply extending circumferentially of said body, the innermost ply being of greater thickness than the intermediate ply, a joint strip extending lengthwise of said body and overlapping the latter on opposite sides of said joint, means for securing said strip to said tubular body at one side of said joint, and means for detachably securing said strip to said body at the other side of said joint.

4. A hogshead comprising a tubular body portion open at its ends, heads therefor, said body portion being of multiple-ply glued wood veneer in sheet form bent to constitute a tube having a joint therein extending from one of said heads to the other, the grain of the exterior of said plies extending in the direction of length of said tubular body, a joint strip overlapping said tubular body portion on opposite sides of said joint, means for securing said strip to the tubular body at one side of said joint, means for detachably securing said strip to said body at the other side of said joint, a plurality of flexible metallic bands encircling said body, each of said bands being at one of the ends of said tubular body and means for respectively securing said bands to the body, said bands being provided with elongated slots for receiving said last-named means.

5. A hogshead comprising a tubular body portion open at its ends, heads therefor, said body portion being of glued wood veneer in sheet form bent to constitute a tube having a joint extending from one of said heads to the other, the grain of the exterior ply of said sheet extending in the direction of the length of said tube, a joint strip overlapping said tubular body portion on opposite sides of said joint, means for permanently securing said strip to the tubular body at one side of said joint, means for detachably securing said strip to said body at the other side of said joint, a plurality of split flexible metallic bands encircling said body, each of said bands being at one of the ends of said tubular body, and being secured at one end to said body adjacent said joint at the side of the latter to which the end of said joint strip is permanently secured, and means for respectively securing said bands to the body at points circumferentially spaced around the body, said band being provided with elongated slots for receiving said last named means.

6. A hogshead comprising a tubular body portion open at its ends, heads therefor, said body portion being of glued wood veneer in sheet form bent to constitute a tube having a joint extending from one of said heads to the other, a joint strip overlapping said tubular body portion on opposite sides of said joint, means for securing said strip to the tubular body at one side of said joint, means for detachably securing said strip to said body at the other side of said joint, a plurality of split flexible metallic bands encircling said body, each of said bands being at one of the ends of said tubular body, and having its ends secured to and terminating under said joint strip, and means spaced circumferentially of said body for respectively securing said bands to the body, said bands being provided with elongated slots for receiving said last named means.

7. A hogshead comprising a tubular pody portion open at its ends, heads therefor, said body portion being of glued wood veneer in sheet form bent to constitute a tube having a joint therein extending from one of said heads to the other, a joint strip overlapping said tubular body portion on opposite sides of said joint, means for securing said strip to the tubular body at one side of said joint, means for detachably securing said strip to said body at the other side of said joint, a split flexible metallic band encircling said body substantially midway between its ends and having a portion underlying the said joint strip, and means spaced circumferentially around said tubular body for connecting said band to said body, said band being provided with elongated slots for receiving said last named means.

8. A hogshead comprising a tubular body portion at its ends, heads therefor, said body portion being of glued wood veneer in sheet form bent to constitute a tube having a joint therein extending from one of said heads to the other, a joint strip overlapping said tubular body portion on opposite sides of said joint, means for securing said strip to the tubular body at one side of said joint, means for detachably securing said strip to said body at the other side of said joint, a split flexible metallic band encircling said body substantially midway between the ends of the latter, means for respectively securing the ends of said band to the joint strip, and means spaced circumferentially of the body for securing said band to the body, said band being provided with elongated slots for receiving said last named means.

9. A hogshead comprising a tubular body portion open at its ends, heads therefor, said body portion being of glued wood veneer in sheet form

bent to constitute a tube having a joint extending from one of said heads to the other, a joint strip overlapping said tubular body portion on opposite sides of said joint, means for securing said strip to the tubular body at one side of said joint, means for detachably securing said strip to said body at the other side of said joint, a plurality of split flexible metallic bands encircling said body, each of said bands being bent inwardly along one edge to overlap the adjacent end of said sheet, means for securing the opposite ends of the respective bands to said joint strip, and means spaced circumferentially of the tubular body for securing said bands to the body, said bands being provided with elongated slots for receiving said last named means.

10. A hogshead comprising a tubular body portion open at its ends, heads therefor, said body portion being of glued wood veneer in sheet form bent to constitute a tube having a joint extending from one of said heads to the other, a plurality of split flexible metallic bands encircling the tubular body, there being a band at each end of said body and a band substantially midway between the ends of said body, means for respectively securing said bands to the body, said bands being provided with elongated slots for receiving said last-named means, a joint strip overlapping said tubular body portion on opposite sides of said joint, means for connecting the opposite ends of each of said bands to said joint strip, means for securing said strip to the tubular body at one side of said joint, means for detachably securing said strip to said body at the other side of said joint, and means spaced circumferentially of the body for securing said bands to the body, each of said bands being provided with elongated slots for receiving said last named means.

HENRY L. BASS.