

No. 834,273.

PATENTED OCT. 30, 1906.

J. M. DENNEY.
FASTENING DEVICE.
APPLICATION FILED DEC. 14, 1905.

Fig. 6.

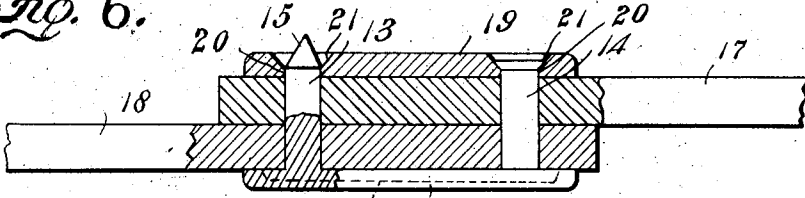


Fig. 7.

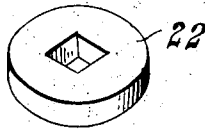
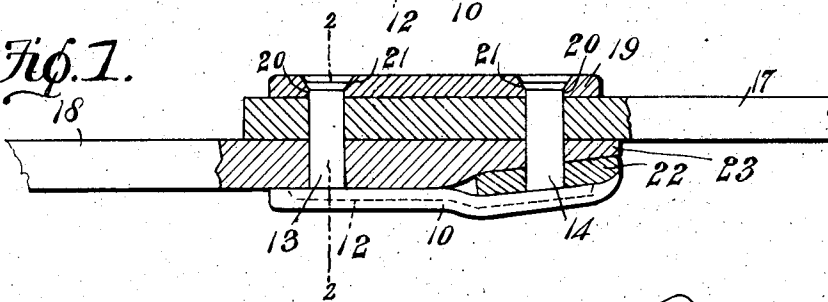


Fig. 5.

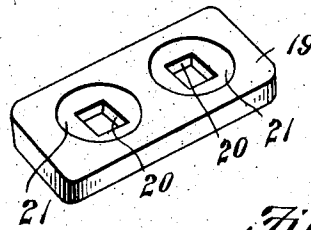


Fig. 3.

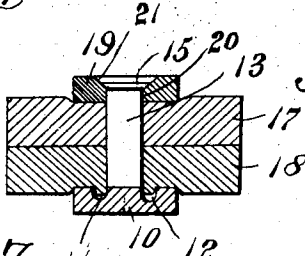


Fig. 2.

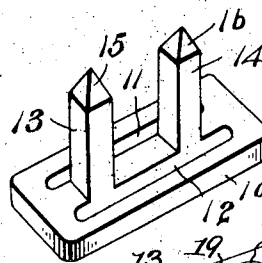
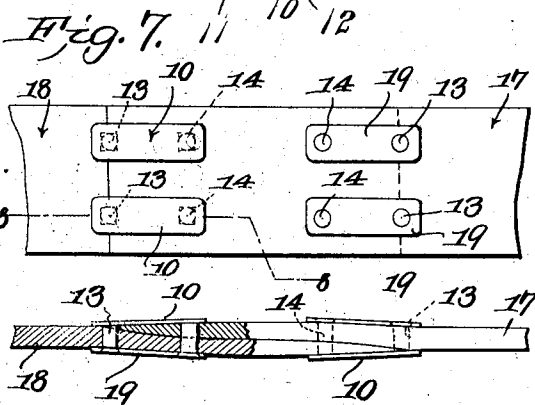


Fig. 4.



WITNESSES:

E. J. Edwards
C. H. Woodward

Joseph M. Denney,
INVENTOR

By C. A. Snow & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

JOSEPH M. DENNEY, OF HUNTSVILLE, WASHINGTON.

FASTENING DEVICE.

No. 834,273.

Specification of Letters Patent.

Patented Oct. 30, 1906.

Application filed December 14, 1905. Serial No. 291,762.

To all whom it may concern:

Be it known that I, JOSEPH M. DENNEY, a citizen of the United States, residing at Huntsville, in the county of Columbia and State of Washington, have invented a new and useful Fastening Device, of which the following is a specification.

This invention relates to fastening devices, more particularly for uniting two bodies of leather, such as the ends of belts, and for like purposes, and has for its object to improve the construction and increase the efficiency of devices of this character.

With these and other objects in view, which will appear as the nature of the invention is better understood, the invention consists in certain novel features of construction, as hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of the embodiment of the invention capable of carrying the same into practical operation, it being understood that various changes in the form, proportions, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention within the scope of the appended claims.

Figure 1 is a sectional view of the device applied. Fig. 2 is a transverse section on the line 2 2 of Fig. 1. Fig. 3 is a detached perspective view of the clamp-plate. Fig. 4 is a perspective view of the base-plate and its spaced studs. Fig. 5 is a perspective view of the reinforcing-washer detached. Fig. 6 is a view similar to Fig. 1, illustrating a modification in the construction. Fig. 7 is a plan view of a strap coupling, representing another manner of utilizing the improved device. Fig. 8 is a section on the line 8 8 of Fig. 7. Fig. 9 is a perspective view, and Fig. 10 is a side view, partly in section, illustrating the manner of supplying the improved device in constructing a keeper or ferrule.

The improved device comprises an oblong base-plate 10, having spaced channels or grooves 11 12 extending longitudinally therein, and with studs 13 14 extending from between the channels and spaced from the ends of the same and from the ends of the base-plate. The studs 13 14 are formed with parallel sides and with pyramidal terminals 15 16, as shown. The studs are designed to be

forced through the straps or other material to be connected and represented at 17 18, the pyramidal ends serving as awls to puncture the material as they are forced therethrough with the base-plate bearing against one of the straps. Bearing against the other strap is a clamp-plate 19, having spaced apertures to receive the studs 13 14.

Each of the apertures in the clamp-plate 19 is square or non-circular at its inner end, as indicated at 20, and is flared or countersunk at its outer end, as indicated at 21, so that when the studs 13 and 14 are fitted through the clamp-plate their pyramidal ends 15 and 16 can be riveted or upset in a well-known manner.

The full strength of the stock of each of the studs is thus retained and the full strength portion extended into the clamp-plate for a sufficient distance to utilize the same.

The studs 13 14 are preferably square in transverse section, as this form will puncture leather or like material with less resistance.

One of the belt or strap ends is formed with a chamfered terminal, as at 23, and surrounding the stud which passes through the chamfered portion is a washer 22, the latter thus bearing upon the relatively thin belt material and extending the bearing-surface and increasing the strength of the device and likewise increasing the "grip" between the parts.

The end of the clamp-plate 10 adjacent to the washer 22 is reduced and adapted to be bent or "clenched" over the washer, as shown in Fig. 1, and thus still further increase the holding force of the base and washer.

When the parts are drawn together by the riveting action, the relatively soft material of the straps will be compressed into the channels 11 12 and the portions of the base-plate outside the channels compressed into the material, as represented in Fig. 2, thereby very materially increasing the grip between the parts and preventing all tendency to lateral movement and relieving the studs to a large extent from lateral strains.

In Figs. 7 and 8 another way is shown for utilizing the improved device, where a joint is required without abrupt lateral enlargements. In this modification the strap ends are uniformly chamfered where they overlap and the improved fastening device applied at each end with the base-plate 10 and clamp-plate 19 extending beyond the thin wedge-like ends of the straps, as shown. In this

way the ends of the straps are guarded and protected from being torn loose by any obstructions with which the straps may come in contact when in use.

5 In Figs. 9 and 10 is shown the way in which the device is employed for connecting the ends of a billet-keeper or like device or where it is desired to unite two straps end to end and without overlapping.

10 Two or more of the devices may be employed, arranged side by side, as in Figs. 7, 8, 9, and 10, if preferred.

Having thus described the invention, what is claimed is—

15 1. In a fastening device, a base having spaced channels extending longitudinally thereof and bearing against one face of the belt, studs spaced apart and extending from said base between said channels and adapted
20 to extend through the belt members, and a clamp-plate bearing upon the other face of the belt and provided with apertures for receiving said studs whereby when said studs are riveted upon said clamp-plate the belt
25 members will be closely engaged and the material of one belt member compressed into the channels of the base.

30 2. The combination with overlapping belt ends one of which is formed with a chamfered terminal, of a fastening device comprising a base bearing against said chamfered portion and with spaced studs adapted to extend through both thicknesses of the belt, a clamp-plate bearing against the unchamfered belt
35 portion and apertured to receive said studs and a washer upon one of said studs between

said base and the chamfered belt portion and bearing over the same.

3. The combination with overlapping belt ends one of which is formed with a chamfered
40 terminal, of a fastening device comprising a base bearing against said chamfered portion and with spaced studs adapted to extend through both thicknesses of the belt, said
45 base having spaced channels extending longitudinally thereof and bearing against the adjacent face of the belt a clamp-plate bearing against the unchamfered belt portion and apertured to receive said studs, and a washer
50 upon one of said studs between said base and the chamfered belt portion and bearing over the same.

4. The combination with overlapping belt ends one of which is formed with a chamfered
55 terminal, of a fastening device comprising a base bearing against said chamfered portion and with spaced studs adapted to extend through both thicknesses of the belt, one end
60 of said base being reduced, a clamp-plate bearing against the unchamfered belt portion and apertured to receive said studs, and a washer upon the stud adjacent to the reduced end of the base and bearing upon the chamfered belt portion, and over which said reduced
65 portion of the base is clenched.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOSEPH M. DENNEY.

Witnesses:

A. J. BLACKARD,
I. W. HARDY.