J. MATHEWS.

BELT FASTENER.

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1,052,936. Patented Feb. 11, 1913.

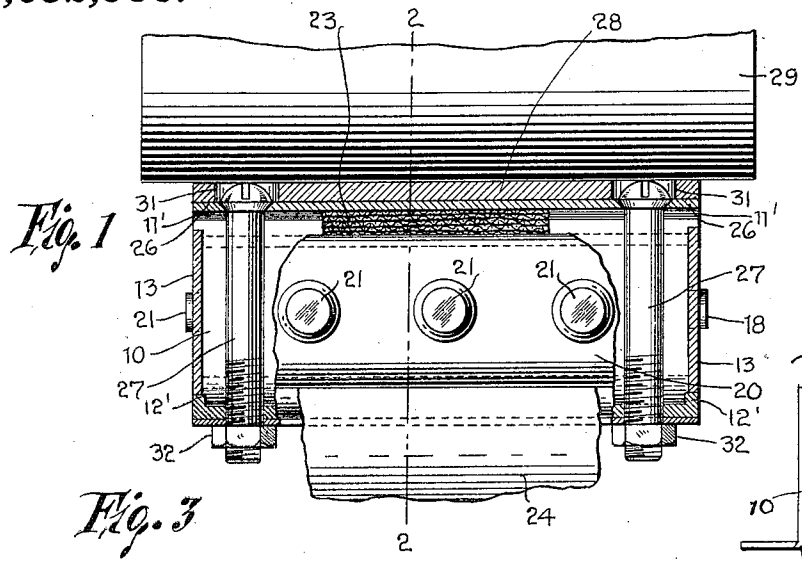

Fig. 1

Fig. 3

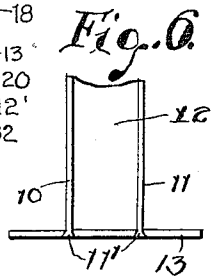

Fig. 6.

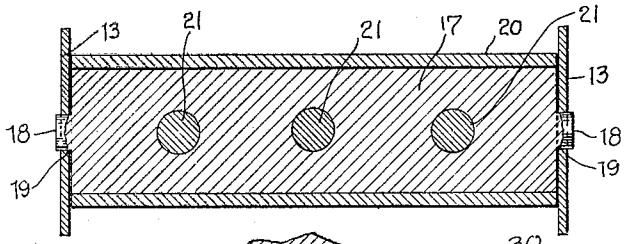

Fig. 2

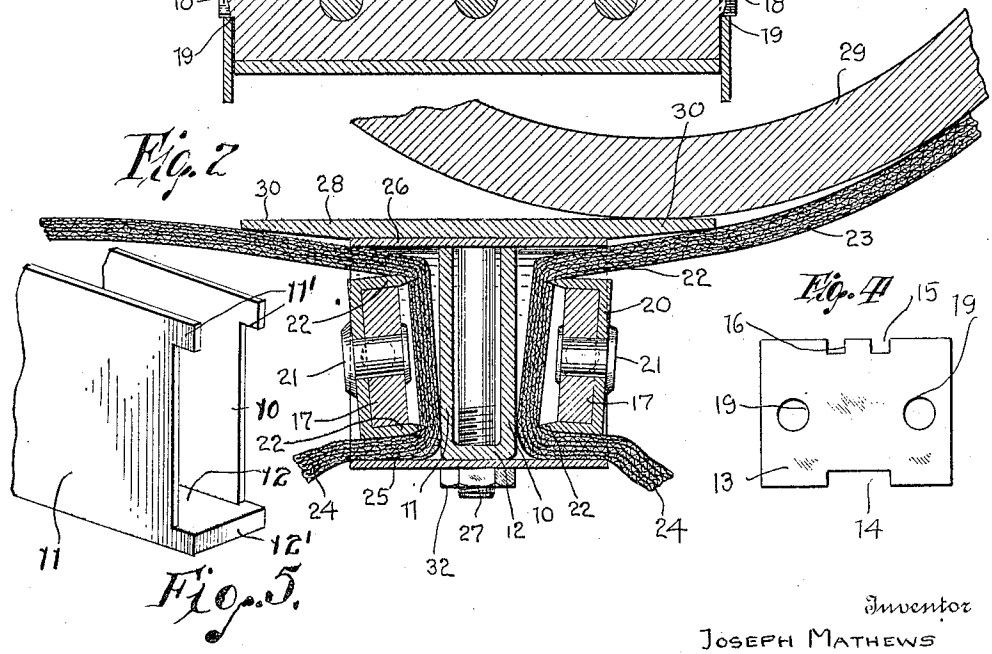

Fig. 5.

Fig. 4

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BELT-FASTENER.

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To all whom it may concern:

Be it known that I, JOSEPH MATHEWS, a citizen of the United States of America, residing at Plymouth, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Belt-Fasteners, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to belt securers, and the principal object of the same is to construct a belt securer which will securely hold the ends of the belt together and in which it is not necessary to have lacing or other means which will require that the ends of the belt be secured in a certain place. This also permits of the belt being more easily adjusted so that if the belt is tight or too loose, it can be very easily adjusted. It is noted that in belts where the ends are connected by means of rawhide lacing strings, or other similar device, that the lacing forms part of the belt and therefore the belt has no more strength than the strength of these strings since as much strain comes upon the strings as upon the belt itself. With this device, there is provided a metal form which grasps the ends of the belt and holds them in place thus making the connection as strong as the remaining portion of the belt, there being no rawhide strings or other weak connections which are liable to break or become unfastened.

With these and other objects in view, this invention consists of certain novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

This invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a side view showing the connection as it would appear when upon a pulley wheel over which the belt passes, the device being shown partially in section and partially in side elevation. Fig. 2 is a transverse sectional view taken through the belt securer along the line 2—2 in Fig. 1. Fig. 3 is a sectional view through one of the belt gripping members. Fig. 4 is a plan view of one of the end plates of the connection. Fig. 5 is a perspective view of one end portion of the U-shaped center bar. Fig. 6 is a view showing the manner of connecting the end plates with the center bar.

Referring to the accompanying drawings, it will be seen that this invention comprises a center bar which is substantially U-shaped in cross section, and is provided with the walls 10 and 11, and the connecting bridge 12. A plate 13 is secured at each end of the center bar, and is provided with the notches 14, 15 and 16, the notches being formed in alinement so that lugs 11′ and 12′ at the ends of the side walls 10 and 11, and the bridge 12 may be clenched in the notches 14, 15 and 16, thus permanently connecting the end plates with the center bar. The center bar and end plates form the body portion of the belt fastener.

Pivoted grips are mounted to each side of the center bar between the end plates 13, and each comprises a plate 17 which has pivot ears 18 extending from its ends and pivotally mounted in the openings 19 formed in the plates 13. A shoe 20 is placed upon each of the plates 17, and is held in place by means of the rivets 21 so that the shoe will be permanently secured to the plate. The edges 22 of the shoe are sharpened so that biting edges are provided to grip the ends of the belt. These edges may be a continuous sharp edge if desired but in the preferred form the edge is serrated so that a plurality of gripping teeth are formed.

From an inspection of Fig. 2 it will be evident that the ends of the belt 23 are drawn through the securer between the side walls 10 and 11, of the center bar, and the biting edges 22 of the securing devices. After the belt has been drawn through the device, the ends 24 are bent to either side as shown in Fig. 2, and this causes the securing devices to be rocked upon their pivot pins so that the blade is gripped by the teeth 22. After the ends of the belt are in place, the metallic plates 25 and 26 are placed against the center bars so that they engage the belt, the plates 25 and 26 being held in place by the bolts 27. It will be noted that each end of the belt is gripped in two places so that it is tightly gripped between the teeth and the side walls of the center bar, and is also gripped by the teeth at the opposite edge of the securing device, thus making it very tightly held in place.

A leather plate 28 is riveted or otherwise secured to the plate 26, and acts as a bridge so that the connection will ride easily over the pulley 29, the sides 30 of the plate 28 being tapered. It should be noted that the plate 28 is provided with enlarged openings

31 so that the heads of the bolts will be countersunk, thus being hidden and out of the way.

From the above description, it will be obvious that when it is desired to adjust the belt, all that is necessary is to remove the plate 25 and the ends of the belt can then be moved so that the belt will be either tightened or slackened the desired amount. After the blade has been adjusted, and the plate 25 replaced the nuts 32 can be screwed tight, and the belt will then be securely held together. It will thus be seen that there has been provided a belt connection which in no way injures the ends of the belt as it is not necessary to form holes in the belt in order to place lacings through it, and it will also be obvious that when desired the belt may be very easily adjusted, any desired amount, there being no stated place at which the belt can be gripped.

What is claimed is:—

1. A connecting device of the character described comprising a body portion having a center bar, gripping members pivotally mounted in said body portion and adapted to grip a belt against the center bar of said body portion, and plates adjustably connected with said body portion and adapted to engage a belt to assist the gripping members in holding the ends of the belt in place.

2. A connection of the character described comprising a center bar, end plates secured to said center bar, gripping members pivotally mounted between said end plates to each side of the center bar, and plates removably connected with said center bar for assisting said gripping member to hold a belt in place.

3. A belt connection of the character described comprising a center bar substantially U-shaped in cross section, end plates provided with notches in opposite edges in which the ends of said center bar are clenched, gripping members pivotally mounted between said end plates to each side of said center bar, each of said gripping members comprising a bar having pivot pins at its ends pivotally mounted in openings formed in said end plates, shoes secured to each of said bars, and having sharpened edges, plates above and below said center bar, bolts passing through said center bar, and removably securing said last-mentioned plates in place.

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

JOSEPH MATHEWS.

Witnesses:
BRUNIE GOODSKEE,
WILLIAM TEMPLETON.