L. WEGLEIN, JR.

BELT JOINER.

APPLICATION FILED FEB. 25, 1922.

1,437,031. Patented Nov. 28, 1922.

Fig. 1.

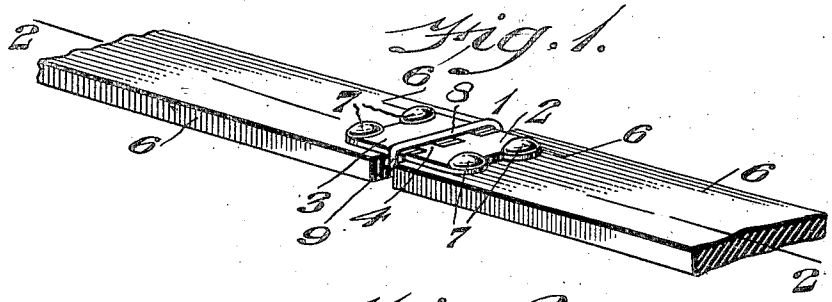


Fig. 2.

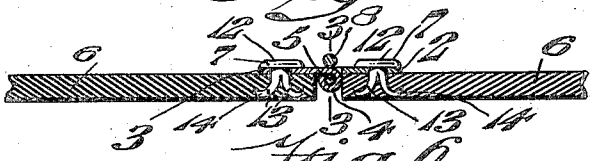


Fig. 6.

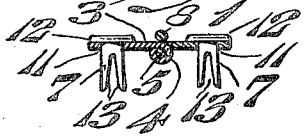


Fig. 3.

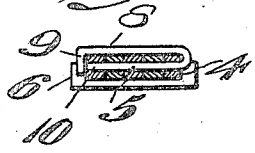


Fig. 5.

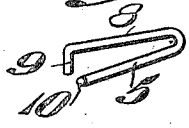


Fig. 4.

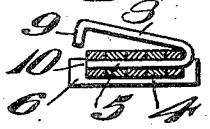
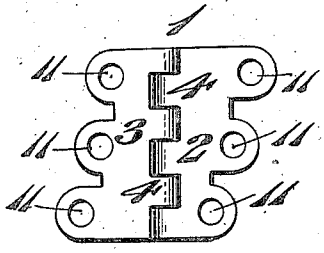


Fig. 7.



INVENTOR;
Louis Weglein Jr
BY Wiedersheim & Fairbanks
ATTORNEYS.

Patented Nov. 28, 1922. 1,437,031

UNITED STATES PATENT OFFICE.

LOUIS WEGLEIN, JR., OF PHILADELPHIA, PENNSYLVANIA.

BELT JOINER.

Application filed February 25, 1922. Serial No. 539,064.

To all whom it may concern:

Be it known that I, LOUIS WEGLEIN, Jr., a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Belt Joiner, of which the following is a specification.

My invention consists of a belt joiner formed of a hinge-like member, a pintle adapted to connect the knuckles of said member, and a guard for said pintle whereby the latter is prevented from improper displacement, and other advantages are presented as will be hereinafter described.

It consists also in providing the leaves with means primarily fitted thereto without liability to be displaced so that the device is prepared for securing the leaves to the belt when adjusted on the latter.

The invention is satisfactorily illustrated in the accompanying drawing, but the important instrumentalities thereof may be varied, and so it is to be understood that the invention is not limited to the specific details shown and described, as long as they are within the spirit or scope of the claims.

Figure 1 represents a perspective view of a belt joiner embodying my invention.

Figure 2 represents a longitudinal section thereof on line 2—2 Figure 1.

Figure 3 represents a transverse section on line 3—3 Figure 2.

Figure 4 represents a similar section with certain parts in a different position from that shown in Figure 3.

Figure 5 represents a perspective view of the connecting member of the knuckles in primary condition.

Figure 6 represents a longitudinal section of a portion on line 6—6 Figure 1 showing the normal condition of the fastenings employed for securing the hinge like member to a belt.

Figure 7 represents a plan view of a modified form of the hinge-like member of the device.

Similar numerals of reference indicate corresponding parts in the figures. Referring to the drawings.

1 designates a hinge-like structure which is formed of the leaves or butts 2 and 3, the knuckles 4 and the pintle 5, the latter being passed through said knuckles as the axis of the leaves, the latter being connected respectively with the opposite ends of the belt 6 by means of the fastenings 7 which are passed through said leaves and ends of the belt and clinched on the belt.

The pintle consists of a piece of metal such as wire having a limb 8 bent thereover forming together a comparatively U-shaped member. On the free end of the limb is the downturned tongue 9 which projects towards the free end 10 of the pintle whereby when the pintle is inserted in the knuckles the limb 8 overhangs the exterior of the knuckles and the tongue 9 is separated from the free end 10 of the pintle, the primary position of parts being shown in Figure 4. Then the limb 8 is pressed towards the knuckles and the tongue 9 being carried by said limb to the free end 10 of the pintle, thus closing said end and locking the pintle while preserving the connection of the leaves as shown in Figure 3, it being seen that the tongue forms a stop or barrier to the withdrawal of the pintle and so the latter remains in its operative position and prevents the disconnection of the leaves of the hinge-like structure 1, rendering the latter flexible in its nature as will also be the joint formed of the two ends of the belt.

It will be seen furthermore, that the least metal is exposed on the drive side of the belt and the knuckles serve as stops and guides to place the joiner square and uniform on the ends of the belt.

The belt may also run around pulleys of small diameters without strain and as smooth as an endless belt, and the joiner may be made of different dimensions for various sizes of belts, long, short, heavy or light.

In order to equip the device to be fastened to the ends of a belt, openings 11 are made in the leaves 2 and the fastenings 7 are constructed of rivet heads 12, and legs 13, the latter being somewhat flaring and pointed, all as best plainly shown in Figure 6.

The legs are inserted in the openings 11 and owing to their flaring nature are prevented from falling out of said openings. Then when the hinge like structure 1 is located on the ends of the belt, the legs are driven through the belt by blows on the heads 12, the belt being placed on a hard bed, anvil or the like, then they spread in the belt and are clinched thereon as at 14, making a firm connection of the device with the belt and providing a convenient and easy manner of accomplishing said connection. Attention is directed to the fact that when the legs 13 of the fastenings employed are inserted

in the openings 11 said legs are primarily spread or flared a limited extent as shown in Figure 6, whereby they will not drop out and so disengage from the leaves, hence the device is placed on the market with its leaves clad with said fastenings as fixtures thereof, the leaves thus being supplied with the attached fastenings ready for sale, the legs being left in condition to be positioned and secured into the belt, the fastenings then being subjected to blows when the legs spread and so clinched on the belt, as shown in Figure 2.

It is evident that when it is desired to separate or open the belt, the limb 8 is bent upwardly, whereby the tongue 9 is removed from the free end 10 of the pintle 5 as again shown in Figure 4 when the pintle may be withdrawn from the knuckles 4 when the leaves are disconnected, the effect of which is evident.

In Figure 6, the sides of the leaves are tapering so as to be wider at one end than at the other, and the openings 11 therein are in oblique direction without producing different results from the form shown in Figure 1.

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

1. A belt joiner consisting of a hinge member, a pintle in the knuckles of said member adapted to form the axis of the leaves of said member, means for connecting said leaves with the belt, and means extending from one end of said pintle overhanging the knuckles of the hinge member and adapted to engage the other end of said pintle for retaining said pintle in said knuckles.

2. In a belt joiner, a hinge-like member, a pintle adapted to occupy the knuckles of said member and form the axis of the member, a limb adapted to extend from one end of said pintle to the opposite end thereof, and a tongue on said limb adapted to engage said opposite end of the pintle to interlock the same and prevent the improper withdrawal of the pintle from said knuckles.

3. In a belt joiner, a hinge-like member, a pintle adapted to occupy the knuckles of said member and form the axis of the member, a limb adapted to extend from one end of said pintle to the opposite end thereof, and a tongue on said limb adapted to engage said opposite end of the pintle to interlock the same and prevent the improper withdrawal of the pintle from said knuckles, the leaves of said hinge-like member having openings therein, and means for fastening said leaves to a belt consisting of heads and clinching legs, the latter primarily occupying said openings and being partly spread apart sufficiently to remain as primary fixtures on the leaves preparatively to application to the belt and being clinched thereto.

LOUIS WEGLEIN, JR.

Witnesses:
PAUL F. KAUDERER,
GEORGE A. FRANK.