

UNITED STATES PATENT OFFICE.

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BELT HOOK OR CLAMP.

SPECIFICATION forming part of Letters Patent No. 526,757, dated October 2, 1894.

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To all whom it may concern:

Be it known that I, JOHN W. TAYLOR, a citizen of the United States, residing at Cape Girardeau, in the county of Cape Girardeau and State of Missouri, have invented certain new and useful Improvements in Belt Hooks or Clamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to provide a simple and inexpensive belt fastener by which the meeting ends of a driving or power belt of any description can be so securely coupled together as to produce, between the two ends of the belt, a joint which will be practically as strong as any other part of the belt; and a further object is to so dispose the clinchable prongs that they will not protrude beyond the surface of the fastening, the whole appliance being so constructed that it can be readily fitted and applied to the belt and the parts being organized so that they will coact to relieve, to a great extent, the strain of the belt upon the clinchable prongs.

With these and such other ends in view as pertain to my invention, it consists in the construction and combination of parts which will be hereinafter fully described and claimed.

To enable others to understand my invention, I have illustrated the preferred embodiment thereof in the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a plan view of my improved belt fastener. Fig. 2 is an end view, looking at the edge of the belt. Fig. 3 is a vertical transverse sectional view on the plane indicated by the dotted line $x-x$ of Fig. 1, and Fig. 4 is a longitudinal sectional view on the plane indicated by the dotted line $y-y$ of Fig. 1. Fig. 5 is a detail perspective view of the lower or base member of the fastener, and Fig. 6 is a like view of the upper member of the fastener.

Like letters of reference denote corresponding parts in all the figures of the drawings, referring to which—

A designates the lower, base member, and B the upper member, of my improved belt fastener. These members are of correspond-

ing form and size to enable them to be fitted in alignment with each other, and each member is cast, struck up, wrought, or otherwise made of a single piece of metal.

The base member A is provided with two series of clinchable prongs a, b , one series a being disposed at intervals along one edge of the solid plate forming the base member, and the other series of prongs b , is disposed along the opposite side edge of the solid base plate. This solid plate of the base member is further provided with two lines of spurs or teeth, c, d , which are disposed within the lines of the clinchable prongs a, b , and which spurs or teeth are furthermore disposed between the prongs so as to alternate therewith, that is, the spurs or prongs, are between lines drawn through adjacent pairs or groups of the prongs a, b, a, b , on opposite side edges of the member A.

The upper member B of the fastener is provided with a series of long central slots e, e , and it is further provided, near its side edges, with two series of narrow slots, the slots f, f , of one series being near one edge of the member B and being separated from the larger transverse slots e by the bridges or bars f', f' and the other series g, g , of narrow slots being near the opposite edge of the member B and being separated from said large transverse slots e by the intervening bridges or bars g', g' . It will be seen that three series of slots are provided in the upper member B, and that they are arranged or disposed in groups, each group consisting of three slots, e, f, g , which are in line across the width of the member B but separated from each other by the intervening bridges or bars f', g' . The groups of slots e, f, g , are spaced from an adjoining group or groups for a distance or distances corresponding to the space or spaces between a pair or pairs of the clinchable prongs a, b , and the narrow side slots f, g , of each group are so disposed that, when the members A, B, are properly adjusted, the prongs a, b , will pass through the narrow side slots f, g , so that they can be bent or clinched inward toward each other, over the bars or bridges f', g' and have their pointed or sharpened extremities passed through the long transverse slots e and again forced back into the belt, thereby disposing of the prongs

so that they will not have their sharp extremities protrude beyond the belt or the fastener and insure a firmer hold or grip on the belt. The upper member B of the fastener is further provided with two series of spurs or teeth *i, j*, which are placed on the lower surface thereof, between the groups of slots, and in such position that they will bear or take upon the belt close to but not in line with the corresponding teeth or spurs *c, d*, on the lower member A, the spurs or teeth *c, d, i, j*, on the inner opposing faces of the two fastener members being disposed to grip the belt between the lines of clinchable prongs and their corresponding slots, and the said prongs on the two members being disposed alternately in relation to each other transversely across the plates when they are brought together as indicated by Fig. 2.

To fasten the ends of a belt together, one punctured end of the belt is brought over the member A so that the prongs *a* pass through the punctures therein and the end of the belt lies upon one series of teeth or spurs, *c*, and the other punctured end of the belt is brought so the other series of prongs *b* pass through the punctures in said end of the belt, which laps the other series of teeth or spurs *d*, the two ends of a belt thus meeting along a line between the two series of prongs *c, d*, on the member A. The upper plate or member B of the fastener, is now placed upon the belt so that the prongs *a, b*, will pass through the narrow slots *f, g*, at the sides of the plate or member, and the latter is now pressed down upon the belt to force the prongs *i, j*, thereof into the belt close to but not in line with the teeth *c, d*, on the base member A, after which the prongs *a, b*, on opposite side edges of the member A are bent inward toward each other, over the bars or bridges *f', g'* and through the long central slots *e* so that their sharp-

ened extremities are forced back into the belt and thereby disposed of in a manner to lie practically flush with the fastener and avoid any projection beyond the surface of the belt or the fastener.

The teeth or spurs *c, d*, and *i, j*, on the opposing faces of the members A, B, serve to grip and hold the ends of the belt between the lines of prongs which operate to hold the plates together, and said spurs serve to relieve, to a great extent, the strain of the belt upon the prongs and thereby obviate any tendency to rupture the prongs and separate the members of the fastener.

By my improved construction of the fastener, the meeting ends of a belt can be securely coupled or united together in a very strong and secure manner, and the fastener can be quickly and easily applied without the aid of special tools and appliances, and by an unskilled person.

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

A belt fastener comprising the member A having the series of clinchable prongs *a, b*, at the sides thereof and the spurs or teeth *c, d*, between the lines of prongs, and the member B provided with groups of slots *e, f, g*, and the teeth or spurs which are out of line with the corresponding spurs on the member A, each group of slots having the narrow side slots *f, g*, separated by the bars or bridges from the middle slot *e*, substantially as and for the purposes described.

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

JOHN W. TAYLOR.

Witnesses.

JOHN W. REED,
GEORGE W. WALTERS.