This invention relates to pulley belt applicators, and its general object is to provide a device that is primarily designed for applying a so-called V-belt to a grooved pulley, in an easy and expeditious manner, without possibility of damage to the belt or injury to the hands of the user.

A further object is to provide a pulley belt applicator that is simple in construction, inexpensive to manufacture, and extremely efficient in use and service.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawing and specifically pointed out in the appended claims.

In describing the invention in detail, reference will be had to the accompanying drawing wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is a view illustrating our device in use.

Figure 2 is a view looking toward the underside of the device.

Figure 3 is a view looking toward the outer side thereof.

Figure 4 is a sectional view taken approximately on line 4—4 of Figure 1, looking in the direction of the arrows.

While our device is primarily designed for applying a fan belt to the pulleys of a motor vehicle engine, it can be used for applying belts to grooved pulleys of any type of machinery, and referring to the drawing in detail, the letter A indicates a fan pulley and B the belt.

The device shown is cast or otherwise formed into a single unit of substantially semi-circular or general arcuate formation to follow the shape of the pulley for approximately a half of its periphery and to provide a portion I of wedge shape in cross section to fit within the groove of the pulley, as best shown in Figure 4. The portion I is formed to provide a relatively wide outer face 2 that is transversely inclined downwardly from its inner longitudinal edge to its outer longitudinal edge for the same degree throughout its length, as best shown in Figure 2.

Formed on and extending laterally from the portion I and along the inner longitudinal edge of the outer face 2 throughout the length thereof is a web shaped to provide a rib 3 that gradually decreases in height from its outer end, to merge within the web slightly beyond the transverse center thereof, and the rib is curved from its outer end in the form of a spiral, to its inner end that is partially formed on the face 2, as clearly shown in Figure 3.

The side faces of the rib are outwardly flared 4 transversely from the outer face thereof and the side face 4 is wider than the opposed side face. The web laterally from the face 4 provides the bottom wall of a channel groove 5, while the inner wall of the groove is formed by the side face 4, and a flange 6 formed on and extending along the outer edge of the web provides the outer wall of the groove 5. The bottom wall of the groove gradually increases in width from its outer end to its inner end that terminates with the inner end of the rib, as best shown in Figure 3, and the increasing width of the groove 5 is brought about by the curvature of the rib 3 and the inclined outer edge of the web. The flange likewise preferably increases in width from the outer end of the groove 5 to the opposite end of the web, and the latter end of the web merges into the portion I and the flange, so that one end of the flange is in fact formed on the portion I, as best shown in Figure 2.

In the use of our device, the wedge shaped portion I is disposed within the groove of the pulley A laterally on one side of the periphery thereof, with the wide end of the flange 6 lowermost, as shown in Figure 1, and the belt is disposed within the groove 5, thence upon movement of the pulley in the direction of the arrow of Figure 1, it will be evident that the belt is guided into the groove of the pulley by the groove 5, the flange 6, and the inclined face of the portion I, coupled with the fact that the groove 5 terminates at its inner end for directing the belt onto the inclined face, as will be apparent upon inspection of Figure 3. When the device reaches the opposite side of the pulley from that shown in Figure 1, the belt will be wholly disposed within the groove of the pulley and the device will be automatically released from the pulley.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

What we claim is:

1. A device for applying a belt to a grooved pulley, comprising arcuate means to be seated in the groove of the pulley, and means for receiving...
the belt and formed on the arcuate means to cooperate therewith for guiding the belt into the groove of the pulley upon rotation of the pulley.

2. A device for applying a belt to a grooved pulley, comprising arcuate means to be seated in the groove of the pulley and having an inclined outer face, grooved means formed on the arcuate means to receive the belt in the groove thereof, and the latter groove opening onto the inclined face to cooperate therewith for guiding the belt from the groove of the device into the groove of the pulley upon rotation of the latter.

3. A device for applying a belt to a grooved pulley, comprising arcuate means to be seated in the groove of the pulley and having an inclined outer face, flanged means formed on the arcuate means, a rib formed on the flanged means and cooperating therewith and the flange to provide a groove for receiving the belt therein, and the latter groove opening onto the inclined face to cooperate therewith for guiding the belt from the groove of the device into the groove of the pulley upon rotation of the latter.

4. A device for applying a belt to a grooved pulley, comprising arcuate means of substantially wedge shape in cross section to be seated in the groove of the pulley for fitting association therewith and having an inclined outer face, a web formed on the arcuate means and following the shape thereof, a flange formed on the web and inclined toward said face, a rib formed on the web and curved away from the flange, said rib cooperating with the web and the flange to provide a groove for receiving the belt therein, and the latter groove opening onto the inclined face to cooperate therewith for guiding the belt from the groove of the device into the groove of the pulley upon rotation of the latter.

5. A device for applying a belt to a grooved pulley, comprising arcuate means of substantially wedge shape in cross section to be seated in the groove of the pulley for fitting association therewith and having an inclined outer face, a web formed on the arcuate means and following the shape thereof, an outwardly flared flange formed on the web and inclined toward said face, said flange increasing in width from its end remote from said face to its opposite end and the latter end being joined to said face, a rib formed on the web and curved away from the flange, said rib cooperating with the web and the flange to provide a groove for receiving the belt therein, and the latter groove opening onto the inclined face to cooperate therewith for guiding the belt from the groove of the device into the groove of the pulley upon rotation of the latter.

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