No. 648,615. Patented May 1, 1900.

W. F. HAMILTON & J. H. DRAKE.

BELT GUIDE

(No Model.) (Application filed July 18, 1898.)

Fig. 1.

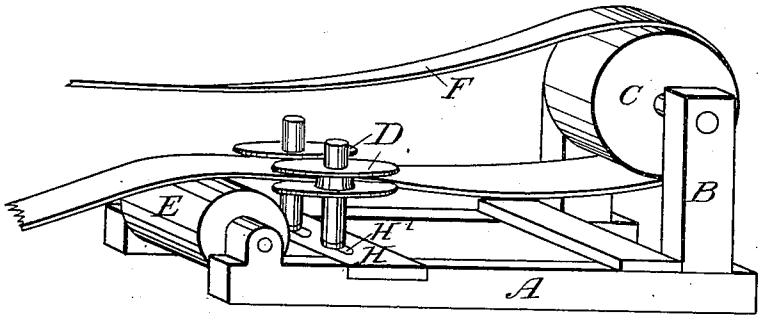
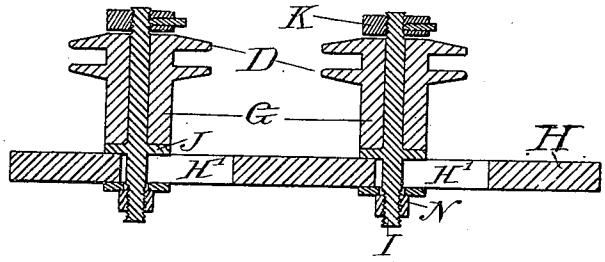


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM F. HAMILTON AND JOHN HOMER DRAKE, OF VENTURA, CALIFORNIA.

BELT-GUIDE.

SPECIFICATION forming part of Letters Patent No. 648,615, dated May 1, 1900.

Application filed July 18, 1898. Serial No. 686,302. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM F. HAMILTON and JOHN HOMER DRAKE, citizens of the United States, residing at Ventura, in the county of Ventura and State of California, have invented new and useful Improvements in Belt-Guides, of which the following is a specification.

The object of our invention is to provide a simple device which can at all times and under all circumstances be relied upon to properly guide the power-driven belt from the driving to the driven pulley and prevent the wind or any other disturbing element from in any manner interfering therewith and make the belt run true on the driven pulley, even when the driving-pulley is not true, and to cause the belt to run squarely on the center of the driven pulley under all conditions, and thereby lose no power by running to the side or off the pulley and slipping.

Our device is particularly adapted for use on threshing-machines, in the harvest-fields, or in any open situation where the driving-belt is often exposed to strong and variable winds.

We accomplish these objects by the mechanism herein described, and shown in the accompanying drawings, in which—

Figure 1 is a perspective view of our device, showing the belt in place on the same. Fig. 2 is a transverse sectional view taken on a line cutting both of the flanged guide-pulleys and the cross-piece to which they are attached in the center.

A represents the frame to which the device is attached; C, the main driven pulley, rotating in bearings on the upright supports B, attached to the frame.

F is the driving-belt; D, the flanged guide-pulleys rotatively mounted in a vertical position on the axles I. Each of these axles is provided with an annular boss J, which rests on the upper side of the cross-piece H, and are held firmly against the same when the nuts K are screwed up tightly. In the cross-piece H are longitudinal slots H′, affording a longitudinal movement therein of the axles I, whereby the guide-pulleys may be readily adjusted to suit the width of the belt to be used. The drum E affords a rest for the belt and steadies the same as it is drawn through the flanges on the guide-pulleys and over the drum. A belt mounted in this way cannot be thrown from the driven pulley, no matter how strong or variable the wind, and it will not slip on the pulley, causing thereby a loss of power.

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The herein-described adjustable belt-guide, consisting of the frame A, having upright supports B, and cross-piece H, the cross-piece H being provided with longitudinal slots H′ in combination with the pulley C, the drum E, the vertical flanged pulleys D, rotatively mounted on the axles I, the axles I, having bosses J, and being screw-threaded at both ends, the nuts K, and the belt F, substantially as shown and described.

2. In a belt-guide, two vertically-mounted rotatable pulleys, one on each side of the belt and having flanges adapted to extend, one above and the other below the edges of the belt, and means for their adjustment, in combination with a revoluble drum, horizontally mounted in line with the belt and immediately below and adapted to support the same, the driven pulley over which the belt passes, and the driving-belt, substantially as shown, whereby the belt is caused to pass directly over the center of the driven pulley.

In witness that we claim the foregoing we have hereunto subscribed our names, this 11th day of July, 1898, at Ventura, California.

WILLIAM F. HAMILTON.
JOHN HOMER DRAKE.

Witnesses:
ROBT. K. MORGAN,
WILLARD F. TRAIN.