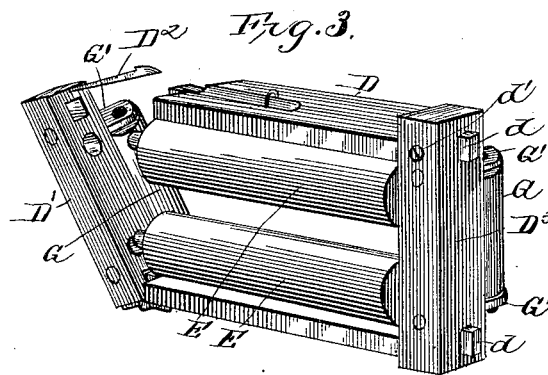


J. A. INGRAM.
BELT GUIDE.

Patented Aug. 31, 1886.



Inventor
John A. Ingram
By R. C. & A. Lacey atty

UNITED STATES PATENT OFFICE.

JOHN A. INGRAM, OF CANTON, KANSAS, ASSIGNOR OF ONE-HALF TO
WILLIAM B. KILE, OF SAME PLACE.

BELT-GUIDE.

SPECIFICATION forming part of Letters Patent No. 348,285, dated August 31, 1886.

Application filed April 24, 1886. Serial No. 200,063. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. INGRAM, a citizen of the United States, residing at Canton, in the county of McPherson and State of Kansas, have invented certain new and useful Improvements in Belt-Guides; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My present invention is a device intended to support and guide the belt running from a driving-engine to a thrashing-machine or other driven machinery which is located at a distance from the engine.

It consists in certain novel features herein-after fully described and claimed.

In the accompanying drawings, which fully illustrate my invention, Figure 1 is a front elevation. Fig. 2 is an edge elevation, and Fig. 3 is a perspective detail view.

In carrying out my invention I provide a base, A, which may be of any desired shape and size. Upon this base I erect two uprights or standards, B B', which are secured in the base by a tenon and mortise and braced by the straight and curved braces *a a*, as shown. One of the standards, B, is divided and the two parts connected by a hinge, *b*, as shown, the purpose of which will presently appear. Both the standards are grooved on one side, the grooved sides being turned toward each other. The standard B' is provided at its upper end with a spring-catch rod, C, which is secured to the said standard and extends across over its upper end to the upper end of the standard B, which is provided with a staple, C', to engage the rod and thereby hold the standards in the proper relative positions and prevent the dropping of the upper portion of the standard B. Two roller-carrying frames, D D, work between the standards B B' and are provided with lugs *d d*, which enter the grooves in the said standards and thereby hold the frames in a vertical position. These roller-carrying frames have one side, D', hinged to the bottom and secured to the top by a

spring-hook fastening, D², similar to the fastening C. The side D² is fixedly secured to the top and bottom of the frame and provided at its upper end with two pins, *d'*—one on each side—which are engaged by hooks *d²* pivoted on the standards B'. Two horizontal rollers, E E, are journaled in the side D' of the roller-carrying frame and are provided with trunnions, which enter sockets in the side D', and the belt F runs between these rollers and is supported by them. Each of the roller-carrying frames is provided with a pair of vertical rollers, G G, which are held by brackets G', secured in the side bars of the frame. These vertical rollers are provided on only one side of each of the frames, and the frames are so placed in the standards that the vertical rollers will be on opposite sides thereof, as will be understood from the drawings.

In use the device is placed in position about midway the driving-engine and the machinery driven with the sides D' of the roller-carrying frames and standards B swung out, as indicated in dotted lines, Fig. 1, roller-carrying frames being held in place by the hooks *d²* engaging the pins *d'*. The belt is then slipped in position between the horizontal rollers E E, as will be understood. The side bars, D', and the standard B are then fastened in their vertical position and the device is ready for use. The belt is placed in the roller-carrying frames in such a position that when at work it will always pass between the vertical rollers before passing between the horizontal rollers, as will be understood from the arrows in Fig. 2. The belt is thus prevented from rubbing against the side bars of the frame, binding against the same, and wearing out the edges of the belt.

When the device is in use, the hooks *d* are disengaged from the pins *d'*, and the roller-carrying frames are then free to fall. The tendency to fall will be checked by the belt, and the working in the grooves of the standards will then rise and fall with the motion of the belt, as will be understood. It will also be understood that the weight of the roller-carrying frames will generally be sufficient to cause the belt to bind against the pulleys at each end, and the use of the ordinary belt-tighteners is dispensed with. A reel, H, is

secured in the base of the device, and when not in use the roller-carrying frames are held up by the hooks *d* and pins *d'*, and the belt wound upon the reel, as shown in dotted lines in Fig. 2. After the belt has been once placed in position in my device, it will be removed only when broken or worn out, and can then be removed and replaced in a few minutes by loosening the hinged standard and side bars, as will be readily appreciated.

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

1. In a belt-guide, the combination, with the standards, of two frames adjustably held between them, horizontal and vertical rollers mounted in bearings upon each frame, the vertical rollers of one frame being located to the right of the horizontal rollers, and the vertical rollers of the other frame being arranged to the left of the horizontal rollers, substantially as shown, and for the purpose described.

2. The combination of the roller-carrying frames provided with lugs on their side bars, the standards provided with grooves on their inner sides for the reception of the lugs, one of the standards consisting of two parts hinged

together, spring-fastening bar secured to the upper end of the undivided standard and extended over to the upper end of the hinged standard, and a catch on the upper end of the hinged standard engaging the spring-fastening bar, substantially as specified.

3. The herein described and shown roller-carrying frame, consisting of the following elements: in combination with the top and bottom cross-bars, two side bars, one rigidly secured to the top and bottom cross-bars and the other hinged to the bottom cross-bar and provided with a fastening-bar which engages a catch on the top cross-bar, horizontal rollers journaled in the side bars and vertical rollers held by brackets secured in the side bars, substantially as set forth.

4. The belt-guide and support, comprising a suitable base, standards erected upon the base, roller-carrying frames working between the standards, and a reel secured in the base, substantially as and for the purpose set forth.

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

JOHN A. INGRAM.

Witnesses:

JOHN SINCLAIR,
S. A. BEVIER.