(No Model.)

J. S. BAKER.

ENDLESS STRAW CONVEYER.

No. 430,372. Patented June 17, 1890.

Fig. 1

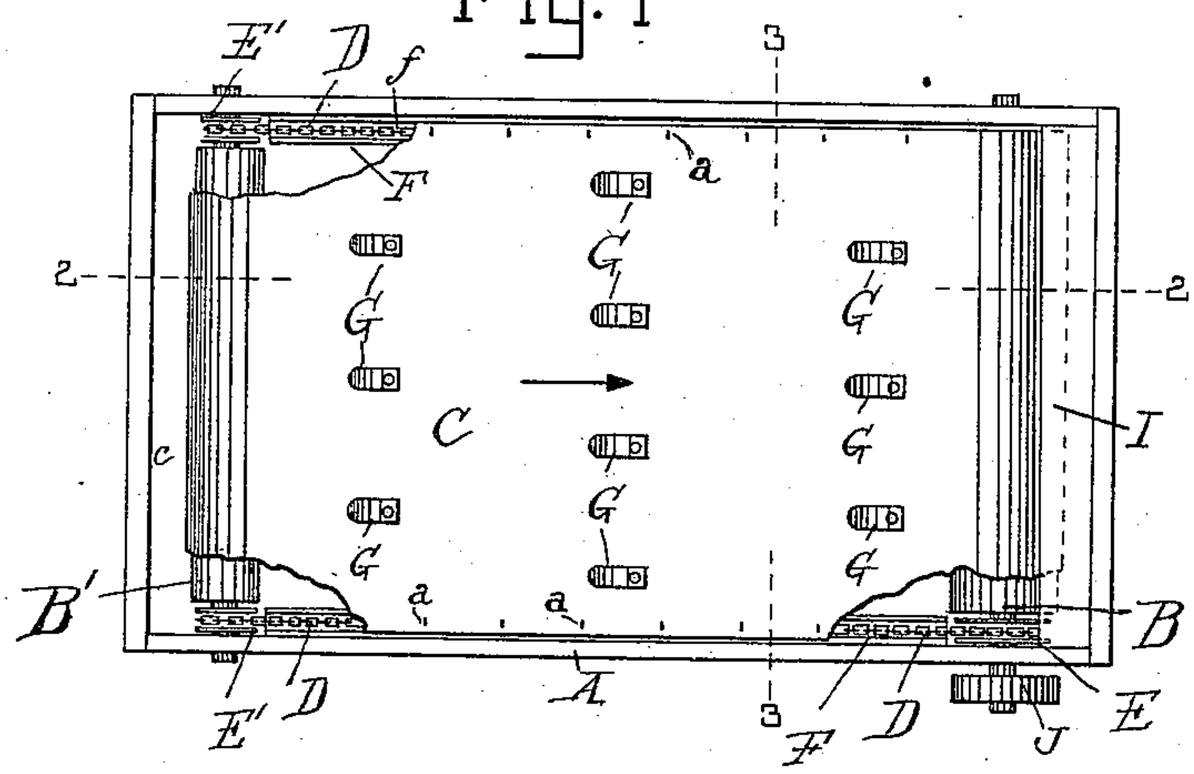


Fig. 2

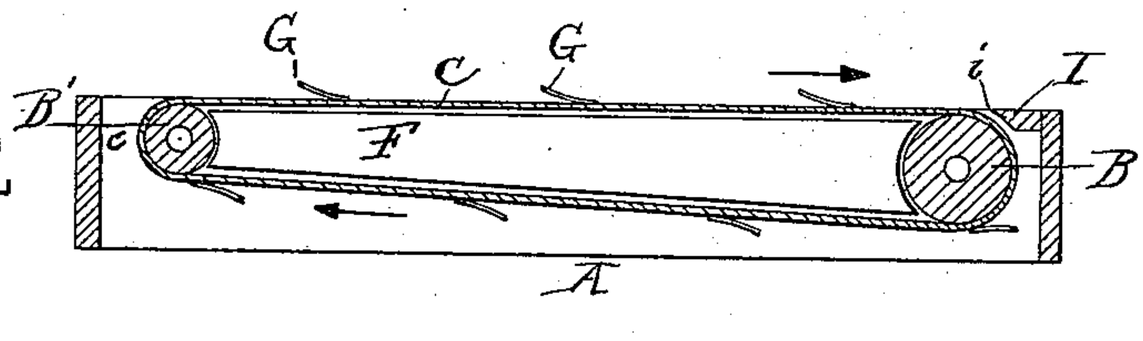


Fig. 3

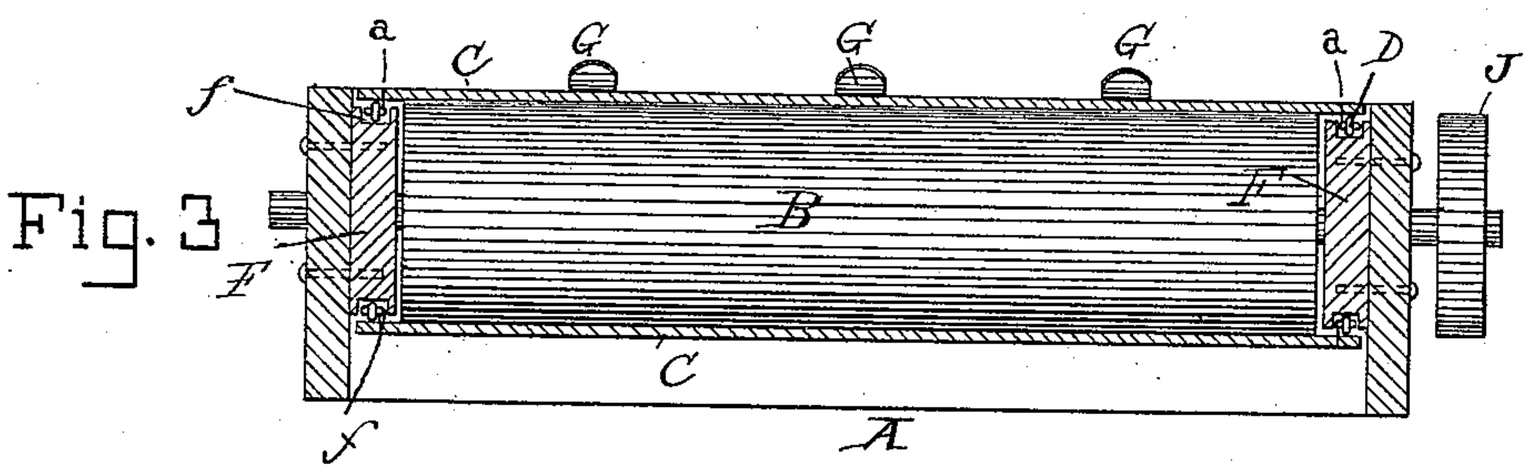


Fig. 4

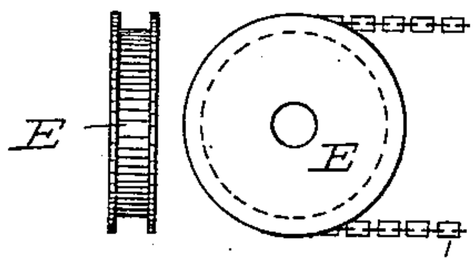
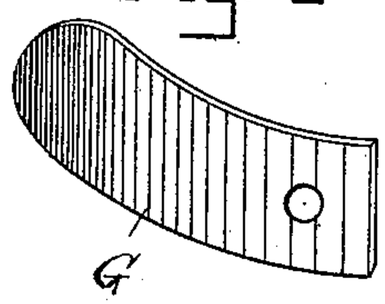


Fig. 5



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ENDLESS STRAW-CONVEYER.

SPECIFICATION forming part of Letters Patent No. 430,372, dated June 17, 1890.

Application filed January 3, 1890. Serial No. 335,760. (No model.)

To all whom it may concern:

Be it known that I, JACOB S. BAKER, a citizen of the United States, residing at Glen Rock, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Endless Straw-Conveyers, of which the following is a specification.

My invention relates to certain improvements in conveyers for straw for harvesters and thrashing-machines; and it consists in the novel construction, arrangement, and combination of parts hereinafter described and claimed.

The object of my invention is to construct a simple, inexpensive, and durable canvas conveyer.

In the accompanying drawings, illustrating the invention, Figure 1 is a top plan view of my improved conveyer, several corners of the endless belt being removed to show the interior construction. Fig. 2 is a longitudinal section on the line 2 2. Fig. 3 is an enlarged transverse section through the line 3 3. Fig. 4 is an enlarged side and an end view of one of the pulleys over which passes the means for keeping the canvas belt spread laterally. Fig. 5 is an enlarged view of one of the spring-fingers.

The letter A designates the inclosing and supporting box or frame of my improved conveyer, and B B′ designate transverse rollers, one at each end, and which have their bearings in the sides of the said frame. Passing over these rollers and driven thereby is the endless canvas conveyer C. This conveyer C is connected at its edges, by **S**-links *a* or other suitable means, to endless chains D, which pass over grooved pulleys E E′, loosely mounted at opposite ends of and on the same shaft as the rollers B B′. The pulleys are of slightly less diameter than the rollers. These chains travel in grooves *f*, formed in the edges of strips F, which are secured to the inner sides of the frame A and extend longitudinally thereof from one pulley to the other. This construction and arrangement of parts prevent the endless chains D from moving in other than a straight line, and thereby any lateral motion of the endless canvas belt cannot occur.

Suitably arranged on the outer surface of the endless conveyer C is a series of spring-fingers G, each of which is riveted or otherwise suitably secured at one of its ends to the conveyer C, and its free end inclines outward from the canvas and serves for the straw to lodge against.

A transverse or cross strip I, having an inclined face *i*, is secured to the inner end of the frame A adjacent to the roller B. The office of this strip I is to prevent the straw from passing down to the interior of the frame A or chocking between the end and the roller B, and it accomplishes its purpose by depressing the spring-fingers G as they reach this point and causing them to release their hold on the straw, which then will be shoved over the end of the frame by the continuous movement of the conveyer.

Mounted on the extremity of the shaft of the roller B is a driven pulley J, which is designed to be engaged by an endless belt.

From the foregoing the operation of my invention will be readily understood. Motion, being imparted to the driven roller B, is transmitted to the other roller B′, canvas conveyer C, the chains D, and pulleys E E′. The straw is fed to the end *c* of the conveyer, and is carried to the opposite end of the frame, at which point the spring-fingers G strike against the cross-strip I.

I do not wish to be understood as limiting myself to the precise construction hereinabove described, as certain mechanical equivalents will readily suggest themselves. For example, cables or ropes may be employed in lieu of the endless chains.

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

1. The combination, with rollers and an endless conveying band or belt provided on its surface with spring-fingers, of a rigid and stationary obstruction adjacent to one of the rollers for depressing the fingers as they pass, substantially as described.

2. The combination of an endless conveying belt or band, rollers over which the same pass, grooved pulleys loosely mounted at opposite ends of said rollers, grooved tracks between said loose pulleys extending longitudi-

nally with the conveyer-belt, endless chains on the pulleys, and connections between the edges of said belt and the chains or rope.

3. The combination, with an endless belt or band having fingers secured to its outer surface, and rollers over which the same run, of endless chains secured to the edges of said belt or band, and grooved pulleys independent of the rollers, over which said chains run.

4. The combination of an endless canvas belt or band, projections for the lodgment of straw secured to its outer surface, rollers over which said canvas belt passes, longitudinal grooved strips located at the sides between said rollers, grooved pulleys loosely mounted on the rollers, endless chains secured by links to the edges of the belt and passing along the grooves in the longitudinal strips and over the loose pulleys, substantially as shown.

5. The combination of an endless conveying belt or band C, spring-fingers G thereon, rollers B B′, endless chain D, secured to the edges of said endless belt, loose pulleys E E′, longitudinal grooved strips F between said loose pulleys, and a transverse strip I, adjacent to one roller B, all substantially as described, and for the purpose specified.

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

JACOB S. BAKER.

Witnesses:
JOHN E. MORRIS,
JNO. T. MADDOX.