(No Model.)

F. A. PRIOR.

FEEDING ATTACHMENT FOR BEAN-THRESHERS.

No. 562,096. Patented June 16, 1896.

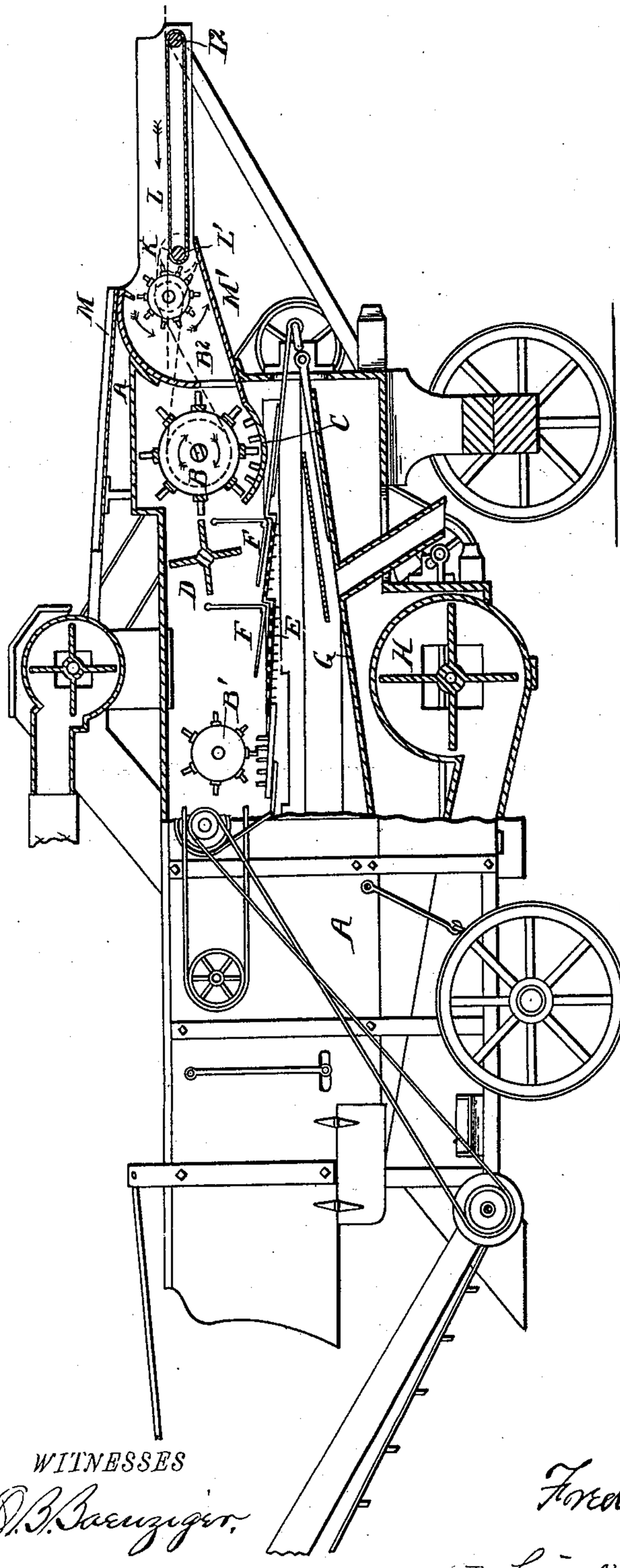

Fig. 1.

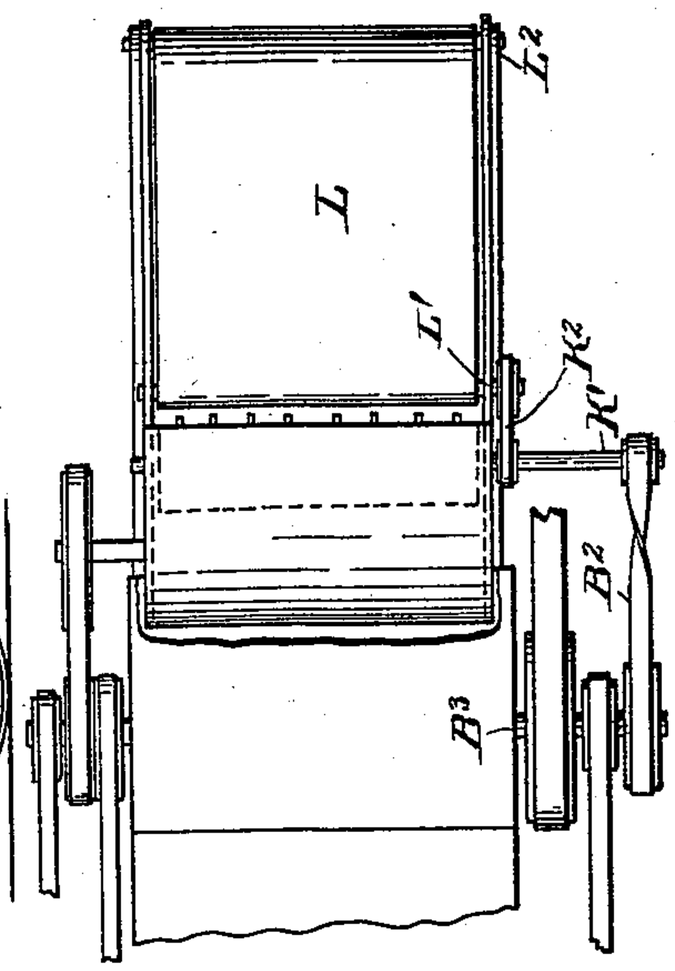

Fig. 2.

WITNESSES

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FRED A. PRIOR, OF MILFORD, MICHIGAN.

FEEDING ATTACHMENT FOR BEAN-THRESHERS.

SPECIFICATION forming part of Letters Patent No. 562,096, dated June 16, 1896.

Application filed December 21, 1895. Serial No. 572,848. (No model.)

To all whom it may concern:

Be it known that I, FRED A. PRIOR, a citizen of the United States, residing at Milford, county of Oakland, State of Michigan, have invented a certain new and useful Improvement in Feeding Attachments for Bean-Threshers; and I 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, which form a part of this specification.

My invention is designed particularly to provide a feeding attachment for bean-threshing machines whereby the vines will be automatically fed to the threshing-cylinder.

My invention is especially designed also to provide an attachment of this nature whereby stones liable to be gathered up in the harvesting of the beans will be thrown out and prevented from passing on to the threshing-cylinder.

To these ends my invention consists of the devices and appliances, their construction, combination, and arrangement, as hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a view partly in side elevation and partly in longitudinal vertical section. Fig. 2 is a plan view of parts embodying my invention.

I carry out my invention as follows:

To illustrate my present invention, the bean-threshing machine herewith shown, to which my improved feeding attachment is applied, is one such as is embodied in Letters Patent of the United States granted to me April 2, 1895, No. 536,652; but I would have it definitely understood that I do not limit the application of my present invention to a threshing-machine of that particular construction alone, or to any specific construction of a bean-threshing machine, as it may be applied and used with, and my invention contemplates and designs its use with, any bean-threshing or analogous machine to which it may be found adapted.

In the instance shown, A denotes the case of the machine. B B′ are rotatable toothed cylinders. C is a toothed concave underneath the cylinder B. D denotes a rotatable beater to the rear of the cylinder B. E denotes a corrugated sieve, and F F customary shakers. G is an inclined bottom board beneath the sieve. H is a fan. J is an elevator. These parts do not, however, constitute any part of my present invention, but simply illustrate a machine to which my automatic feeding attachment may be applied. My improved feeding attachment consists of an additional toothed feeding-cylinder K, which may be rotated by suitable connections from any desired part of the threshing-machine. For example, the shaft K′ of the feeding-cylinder K may be belted with the shaft of the cylinder B, as indicated at B^2, the feeding-cylinder K being given a rotation in the direction indicated by the arrows in Fig. 1, while the cylinder B, in the example shown, is given a rotation in the opposite.

In front of the feeding-cylinder K is an endless carrier L, engaged upon shafts L′ and L^2, whereby the carrier is caused to travel, motion being given to said carrier in any suitable manner, as by belting the shaft L′ with the shaft K′ of the cylinder K, as indicated at K^2.

The feeding-cylinder K and carrier L are supported in a suitable case or frame M, which may be joined or attached to the front end of the case A in any proper manner forward of the threshing-cylinder B.

The cylinder K is preferably elevated somewhat above the cylinder B, the base of the case M below the cylinder K being inclined, as shown at M′, to carry the bean-vines to the threshing-cylinder. The upper surface of the carrier I, I prefer to locate on a level with the center of the shaft of the feeding-cylinder K, so that the stock shall be fed to the feeding-cylinder K, by the carrier L, at the horizontal center of said cylinder.

It will be perceived, and actual application of the invention has successfully demonstrated, that when stones, mixed with the vines, are delivered by the carrier L to the feeding-cylinder, the teeth of the feeding-cylinder moving upward at the adjacent end of the carrier, strike the stones and throw them entirely out of and away from the machine, so that they are effectually prevented from passing over the feeding-cylinder with the vines, the vines alone being carried by the feeding-

cylinder thereover and to the threshing-cylinder B. It will be understood that the carrier L is located sufficiently near to the feeding-cylinder to enable the teeth of said cylinder to strike the stones effectually and hurl them away from the machine, the location of the carrier on a level with the center of the shaft of the feeding-cylinder facilitating the proper action of the teeth of the cylinder in striking the stones and hurling them away from the machine, and without damage to the teeth of the feeding-cylinder.

It will be understood that in operation the bean-vines are simply placed by an attendant upon the carrier L, the feeding attachment then automatically feeding the vines to the threshing-cylinder B and cleaning out the stones.

Where beans are grown upon stony soil, as is often the case, this attachment is of great service, as when stones mixed with the vines are fed into the threshing-cylinder much damage is liable to result.

What I claim as my invention is—

1. A feeding attachment to a bean or other threshing-machine having a rotatable toothed feeding-cylinder and an endless carrier arranged to deliver the stock to said cylinder, the upper surface of said carrier located substantially on a level with the center of the shaft of the cylinder whereby the stock will be fed to said cylinder by the carrier at the horizontal center thereof, the teeth of said cylinder having an upward movement adjacent to said carrier and in close proximity thereto, for the purpose set forth.

2. The combination with a threshing-machine provided with a threshing-cylinder, of a feeding attachment having a rotatable toothed feeding-cylinder, a carrier, and a case supporting said feeding-cylinder and carrier, said carrier arranged to deliver the stock in close proximity to the feeding-cylinder, whereby the teeth of the feeding-cylinder will throw out any stones therein, and the feeding-cylinder arranged to deliver the stock to the threshing-cylinder, the feeding-cylinder being elevated above the threshing-cylinder and in close proximity to the carrier, said case or frame arranged to direct the stock from the feeding-cylinder into the threshing-cylinder, for the purpose set forth.

In testimony whereof I sign this specification in the presence of two witnesses.

FRED A. PRIOR.

Witnesses:
N. S. WRIGHT,
MARY A. MARTIN.