

B. R. BENJAMIN.
GRAIN BINDER.
APPLICATION FILED JAN. 15, 1912.

1,029,741.

Patented June 18, 1912.

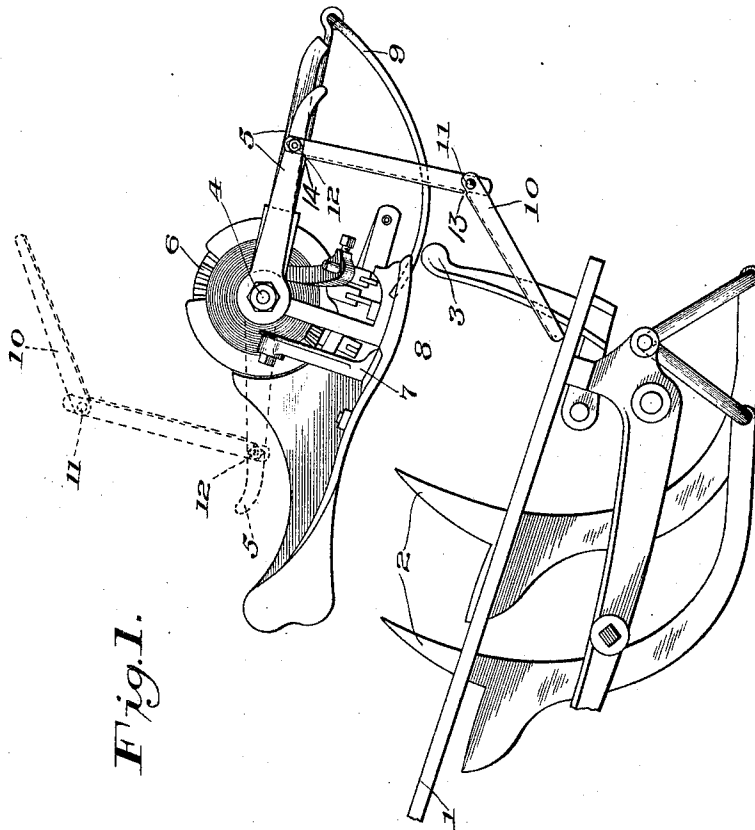


Fig. 1.

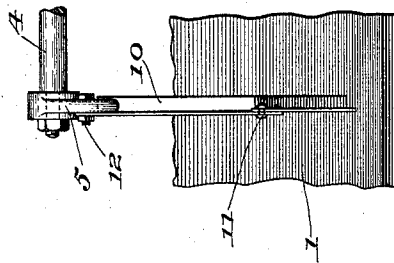


Fig. 2.

Witnesses:
C. C. Palmer.
F. W. Hoffmeister.

Inventor:
Bert R. Benjamin,
By C. W. Burgess
Attorney.

UNITED STATES PATENT OFFICE.

BERT R. BENJAMIN, OF OAK PARK, ILLINOIS, ASSIGNOR TO INTERNATIONAL HAR-
VESTER COMPANY, A CORPORATION OF NEW JERSEY.

GRAIN-BINDER.

1,029,741.

Specification of Letters Patent.

Patented June 18, 1912.

Application filed January 15, 1912. Serial No. 671,304.

To all whom it may concern:

Be it known that I, BERT R. BENJAMIN, a citizen of the United States, residing at Oak Park, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Grain-Binders, of which the following is a specification.

My invention relates to grain binders, and in particular to improved means for retarding the descent of the heads of the grain as it moves downward upon the inclined deck of the binder attachment of a harvester during the operation of the packers in forming a bundle.

It consists of a two-part retarding member having the adjacent ends thereof pivotally connected and one end of the retarder secured to the discharge arm of the binder and the opposite end thereof adapted to engage with the deck of the binder when the discharge arm is in a sheaf-receiving position, in a manner to retard the heads of the grain while the packers are collecting a bundle; the object of my invention being to provide a construction that will perform its function of a grain retarder while the grain is being collected by the packers and will be removed from the deck while the discharge arms are ejecting the sheaf, and thereby relieve the discharge arms of the power required to force the grain beyond the end of the retarder as is necessary when the common form of spring-pressed retarder mechanism is used. These objects are attained by means of the mechanism illustrated by the accompanying drawings, in which—

Figure 1 is an end elevation of part of a grain binder having my invention embodied in its construction; and Fig. 2 is a side view of part of Fig. 1 designed to illustrate the manner of connecting the two parts of the grain retarder with each other and the connection between the retarder and one of the discharge arms.

The same reference characters designate like parts throughout the several views.

1 represents the inclined deck of a grain binding attachment; 2 the packer fingers; 3 the trip and compressor arm; 4 the knotter actuating shaft; 5 the discharge arms and 6 the knotter actuating gear secured to said shaft; 7 the knotter frame; 8 the breast plate secured to the knotter frame, and 9 the discharge arm stripper, all of the above

named parts being common in the class of machines indicated.

10 represents a two-part grain retainer, preferably made of angle iron and having the adjacent ends of the two parts pivotally connected by means of a rivet 11 and provided with shoulder portions 13 that engage each other in a manner to limit a swinging movement of the parts relative to each other, the opposite end of one of the parts being pivotally connected with one of the discharge arms by means of a bolt 12, and provided with a shoulder 14 that contacts with the discharge arm in a manner to limit a swinging movement thereof relative to said discharge arm, and the opposite end of the remaining part being adapted to engage with the deck when the mechanism is in a grain receiving position, and when in that position the two parts of the retainer are prevented from swinging outward by reason of the engagement of one of the parts with the deck and the locking of the two parts against further movement on their pivotal connection beyond the limit shown by full lines in Fig. 1, wherein the shoulders on the adjacent members are shown as contacting with each other. When the knotter actuating shaft is rotated and the discharge arms carried thereby turn upward and over to engage the sheaf, the retainer is carried therewith, as shown by dotted lines in Fig. 1, and as the movement of the discharge arms is continued the retainer falls to the position shown by full lines.

What I claim as my invention, and desire to secure by Letters Patent, is:

1. A grain binder having, in combination, a deck, a knotter, a rotatable knotter actuating shaft, a discharge arm secured to said shaft, and a two-part grain retainer having the adjacent ends thereof flexibly connected and provided with shoulder portions that engage in a manner to limit a turning movement of one part upon the other and having the opposite end of one of the parts thereof flexibly connected with said discharge arm.

2. A grain binder having, in combination, a deck, a knotter, a rotatable knotter actuating shaft, a discharge arm secured to said shaft, and a two-part grain retainer having the adjacent ends thereof flexibly connected and provided with shoulder por-

tions that engage in a manner to limit a turning movement of one part upon the other, the opposite end of one of the parts thereof being pivotally connected with said discharge arm and provided with a shoulder 5 portion that engages therewith in a manner to limit a swinging movement thereon, the opposite end of the remaining part thereof engaging with said deck when said discharge arm has reached the limit of its 10 discharging movement.

BERT R. BENJAMIN.

Witnesses:

C. G. GRZEGORZEWSKI,
E. L. BACON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."