

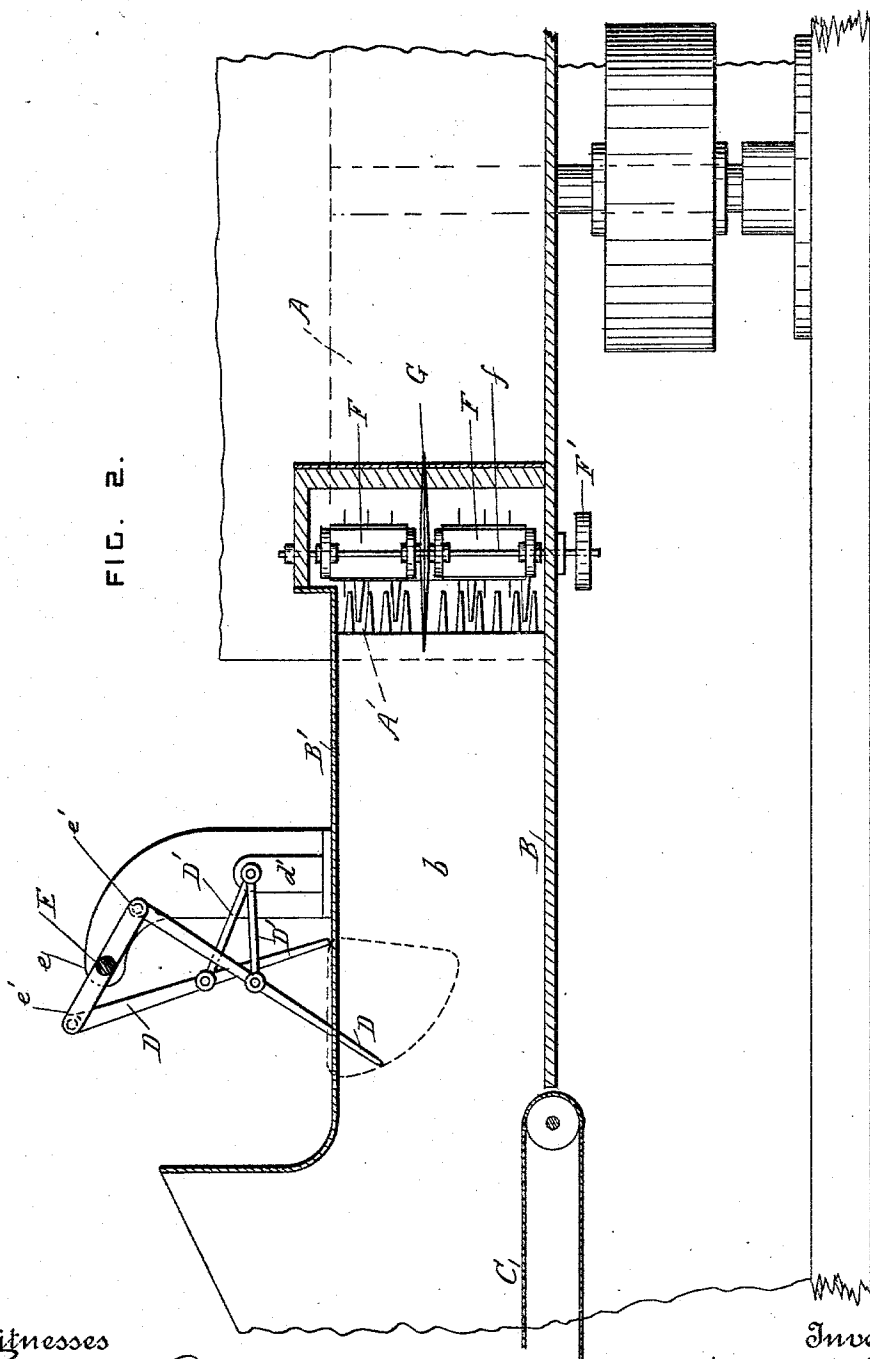
(No Model.)

2 Sheets—Sheet 2.

F. F. LANDIS.
BAND CUTTER AND FEEDER.

No. 551,501.

Patented Dec. 17, 1895.



Witnesses

George H. Ellis.

Inventor

Frank F. Landis

By Attorney *Herbert W. Jenner.*

UNITED STATES PATENT OFFICE.

FRANK F. LANDIS, OF WAYNESBOROUGH, PENNSYLVANIA.

BAND-CUTTER AND FEEDER.

SPECIFICATION forming part of Letters Patent No. 551,501, dated December 17, 1895.

Application filed September 3, 1895. Serial No. 561,247. (No model.)

To all whom it may concern:

Be it known that I, FRANK F. LANDIS, a citizen of the United States, residing at Waynesborough, in the county of Franklin and State of Pennsylvania, have invented certain new and useful Improvements in Band-Cutters and Feeders; and I do hereby 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.

This invention relates to band-cutters and feeders for thrashing-machines; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a plan view of a portion of a thrashing-machine provided with a band-cutter and feeder according to this invention. Fig. 2 is a side view of the same.

A is the thrashing-cylinder, and A' is the concave. A large horizontally-arranged cylinder is shown in the drawings, but the cylinder and concave may be of any approved construction.

B is the feeding-table below the horizontal cylinder, and b is the packing-chamber at the entrance to the cylinder.

B' is the top of the packing-chamber.

C is a portion of an ordinary conveyer, or a hopper may be used, or any other equivalent device. The sheaves are thrown on the conveyer C and are deposited by it on the feeding-table B. The sheaves are pressed together, laterally of the straw-stalks, in the packing-chamber by the arms D.

E is a crank-shaft journaled in bearings e above the top of the packing-chamber, and provided with cranks e' on opposite sides of its center. The packing-arms D are pivoted to the cranks e' and pass through slots d in the top B' of the packing-chamber.

D' are links pivoted to the arms D at about the middle of their lengths and pivotally supported by the brackets d' on top of the packing-chamber. The crank-shaft is revolved by the pulley E', and the ends of the arms have the motion indicated by the dotted loop in the drawings.

F are two conveyers arranged on the table B, substantially at a tangent to the thrash-

ing-cylinder. The conveyer-wheels are secured on two vertical shafts f and f' common to the two conveyers, and F' is a pulley secured on the shaft f for driving the conveyers.

G is a circular knife secured on the shaft f' between the two conveyers and near the periphery of the thrashing-cylinder.

The packing-arms follow one another, and as many similar pairs of packing-arms as desired may be used. The sheaves are preferably fed to the packing-arms faster than the said arms can pack them into the packing-chamber. The sheaves are packed to a substantially uniform density against the conveyers in the packing-chamber, and the bands are cut by the revolving knife. The grain is fed from the packed sheaves in layers by the conveyers, and is thrashed in its passage between the cylinder and concave in the usual manner.

When more than two packing-arms are used they need not be placed diametrically opposite each other, and when three packing-arms are used they are preferably arranged equidistant from each other. The slots for the packing-arms may be in the bottom or in the sides of the packing-chamber, but it is preferable to place them in the top, so that no grain can fall through them.

What I claim is—

1. In a band cutter and feeder, the combination, with a substantially horizontal table and two vertical shafts provided with conveyer wheels, of two conveyers arranged one above the other and running over the said wheels, and a band cutting knife secured on one of the said shafts between the conveyers, the said conveyers being arranged above the said table and crosswise of the path of the bundles thereover, substantially as set forth.

2. In a band cutter and feeder, the combination, with a packing chamber, and conveying mechanism arranged therein and operating to feed the grain longitudinally of the straw stalks; of packing arms projecting within the said chamber in advance of the said conveying mechanism and operating to pack the grain against the said conveying mechanism laterally of the straw stalks, and driving mechanism for operating the said arms, substantially as set forth.

3. In a band cutter and feeder, the combi-

nation, with a packing chamber provided with longitudinal slots, of a crank-shaft provided with cranks and journaled outside the said chamber, packing arms pivoted to the said cranks and projecting within the said chamber through the said slots, and links connected to the middle portions of the said arms outside the chamber and pivoted to stationary supports arranged, with respect to the direction of the motion of the grain, at the rear of the said arms, and constraining their motion, substantially as set forth.

4. In a band cutter and feeder, the combi-

nation, with a packing chamber, of packing arms projecting within the said chamber, and driving mechanism operating to move the said arms forward into and against the grain and to withdraw them therefrom in a direction substantially at a right angle to the direction of the motion of the grain.

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

FRANK F. LANDIS.

Witnesses:

T. S. CUNNINGHAM,
M. F. NEWMAN.