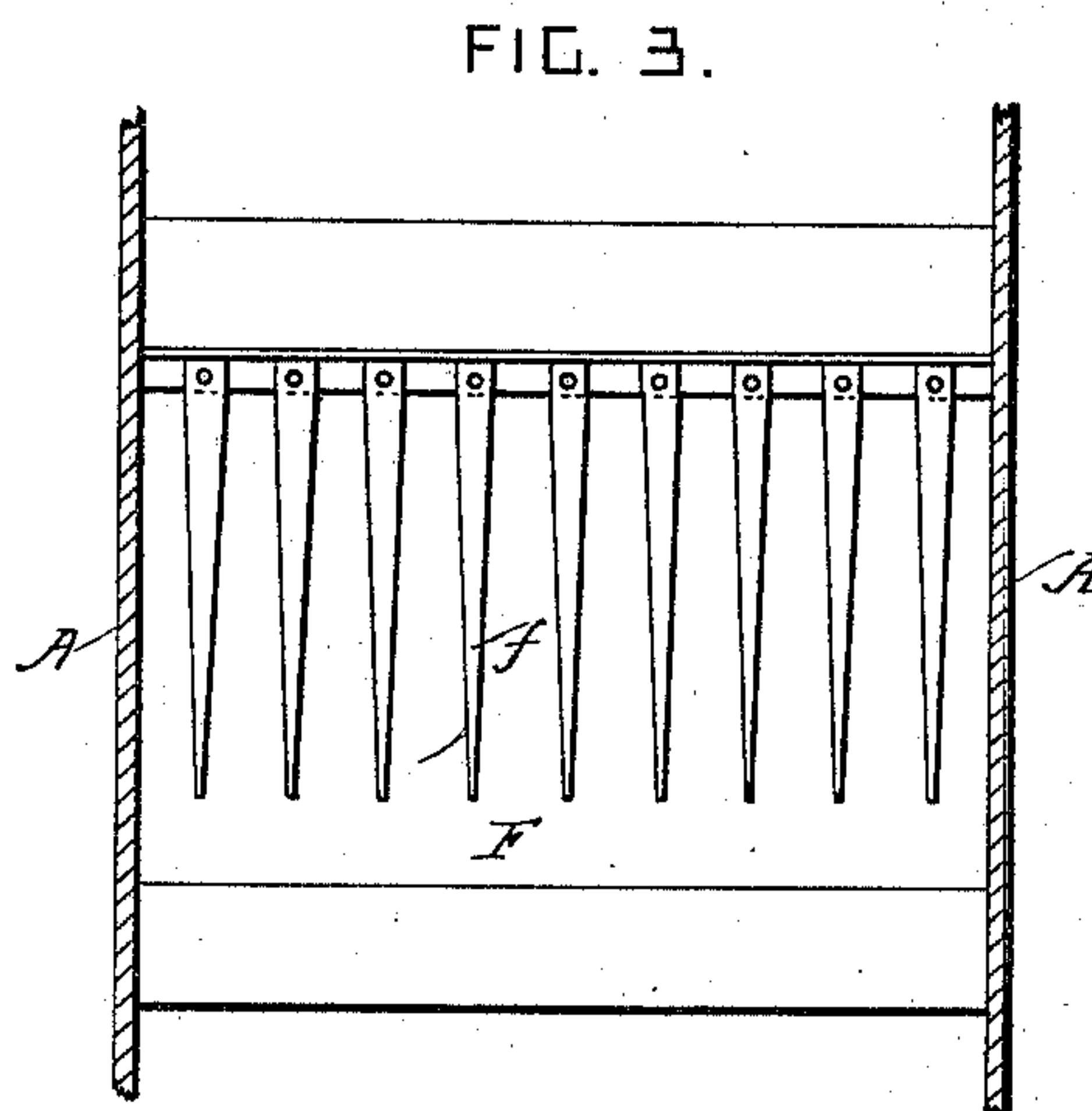
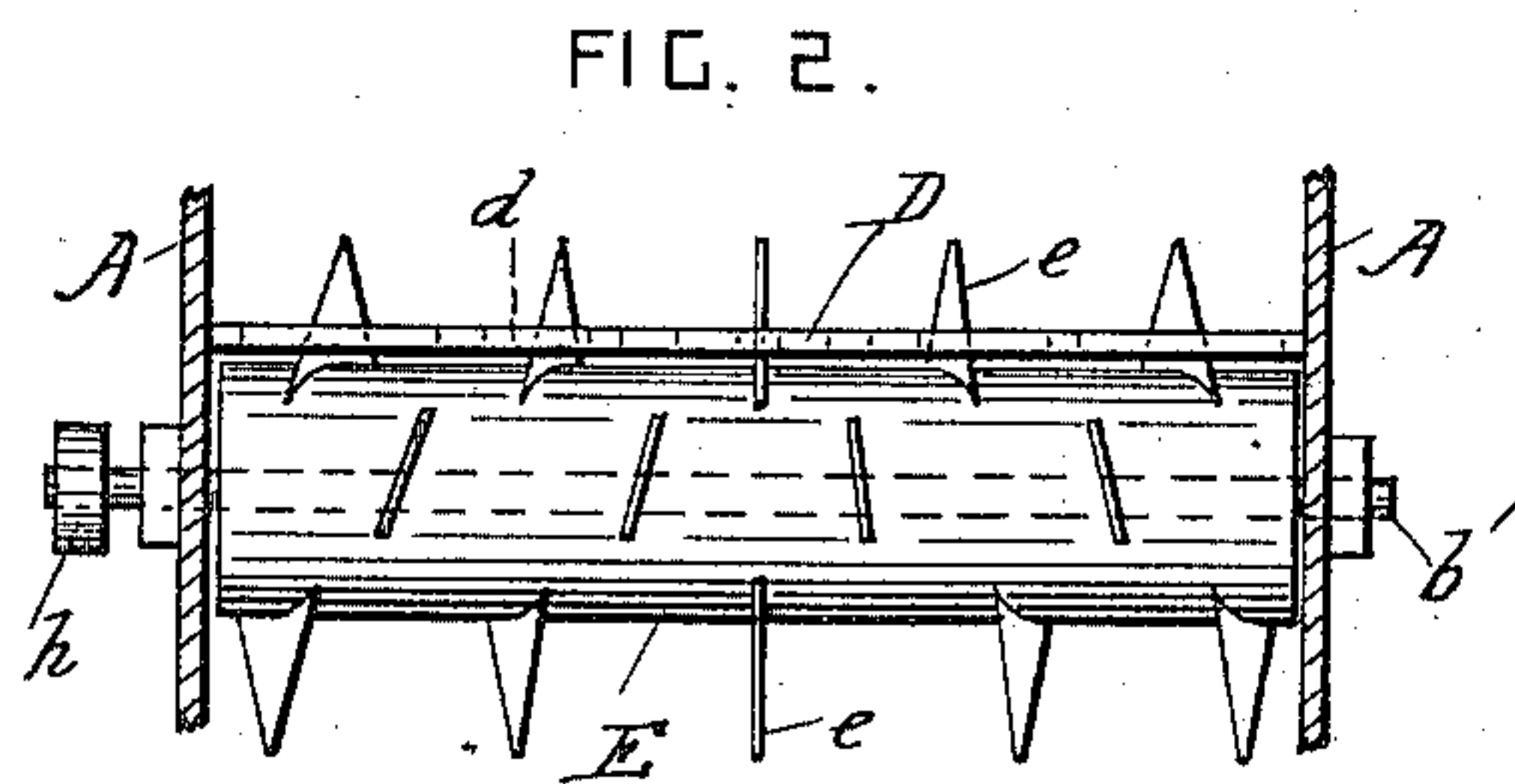
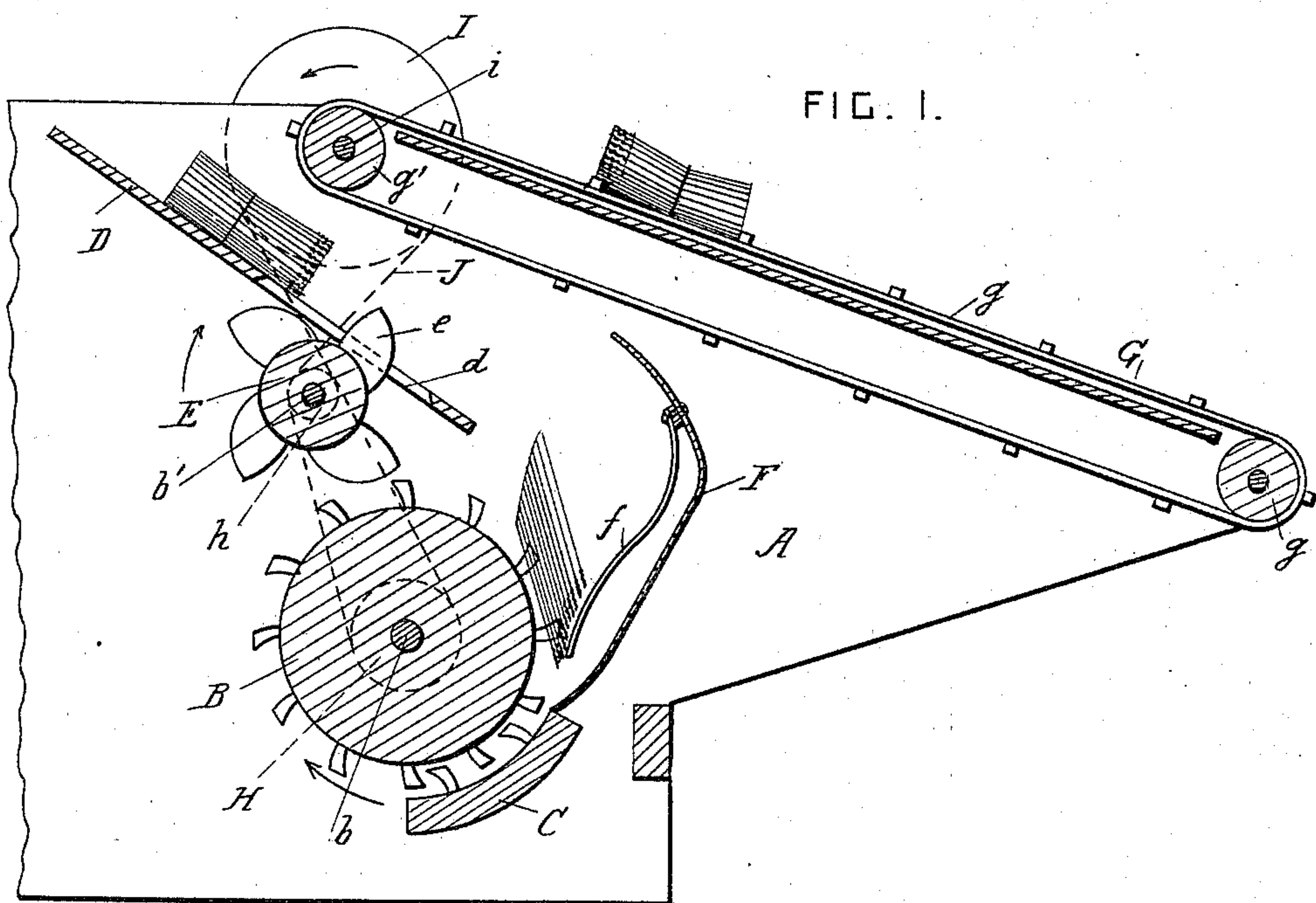


(No Model.)

L. D. PARMLEY.
BAND CUTTER AND FEEDER.

No. 584,400.

Patented June 15, 1897.



Witnesses
B. C. Pole
George H. Bliss, Jr.

Inventor
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By Attorney Robert W. Jenner.

UNITED STATES PATENT OFFICE.

LEMUEL D. PARMLEY, OF WAYNESBOROUGH, PENNSYLVANIA.

BAND-CUTTER AND FEEDER.

SPECIFICATION forming part of Letters Patent No. 584,400, dated June 15, 1897.

Application filed October 5, 1896. Serial No. 607,903. (No model.)

To all whom it may concern:

Be it known that I, LEMUEL D. PARMLEY, 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 use in connection with threshing-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 longitudinal section through the band-cutter and feeder. Fig. 2 is a rear view of the cutter-roll and the inclined support. Fig. 3 is a rear view of the spring-guide.

A are portions of the sides of a casing of a threshing-machine of any approved construction, or they may be plates secured to the said casing.

B is the threshing-cylinder, and C is the concave, both being of any approved construction.

D is a forwardly and downwardly inclined support arranged between the sides A above the cylinder and in rear of its center.

E is the cutter-roll, provided with knives *e*, which project through the support D.

When the support D is formed of a solid plate, it is provided with slots *d* for the knives to project through; but the support may consist of separate bars or parts arranged between the knives.

The knives may be radially straight, or they may be inclined, so as to spread the grain after cutting the band.

F is a guard-plate in front of the cylinder, and *f* are spring-fingers secured to the guard-plate and arranged at an acute angle with the periphery of the threshing-cylinder. These spring-fingers *f* form a spring-guide for the grain.

The sheaves are dropped on the support with the heads downward, and they slide rapidly down it by gravity, the band being cut and the sheaves spread open by the knives in the downward passage of the sheaves. The

loose grain falls against the spring-fingers and is drawn in between the cylinder and the concave, gradually and in layers, by the action of the cylinder-teeth, which engage with the grain on one side of the loose bundles of grain and do not drag in the bundles bodily. Any grain which passes between the spring-fingers slides down the guard-plate and is drawn in between the cylinder and the concave. The sheaves are dropped upon the support by any approved means.

G is a conveyer of approved construction comprising an endless traveling belt *g* and rollers *g'*, arranged in an inclined position between the sides A. The sheaves are carried up by the conveyer and are turned over and dropped upon the upper part of the support D. The sheaves are raised slowly and continuously by the conveyer, but slide down the support rapidly, so that they are separated from each other while being acted on by the cutter-roll. The action of the spring-guide operates to make the feed of grain practically continuous at the cylinder. Motion is imparted to the cutter-roll and to the conveyer in the direction of the arrows by any approved driving mechanism.

H is a belt-pulley on the cylinder-shaft *b*, and *h* is a belt-pulley on the cutter-shaft *b'*.

I is a belt-pulley on the shaft *i* of the upper conveyer-roller.

J is a crossed belt which passes over the pulleys H and I and bears upon the pulley *h*; but any equivalent driving mechanism may be used.

What I claim is—

1. The combination, with a threshing-cylinder, and a series of spring-fingers arranged in front of the cylinder and at an acute angle to its periphery; of a forwardly and downwardly inclined support arranged above and behind the cylinder, and knives operating to sever the bands while the sheaves are sliding down the said support, substantially as set forth.

2. The combination, with a threshing-cylinder, and a spring-guide arranged in front of the cylinder and at an acute angle to its periphery; of a forwardly and downwardly inclined support arranged above and behind the cylinder, and knives operating to sever the bands while the sheaves are sliding down

the said support onto the said spring-guide, substantially as set forth.

3. The combination, with a threshing-cylinder, of a spring-guide arranged in front thereof and at an acute angle with its periphery, a forwardly and downwardly inclined support arranged above and behind the cylinder, knives operating to cut the bands as the sheaves slide down the said support, and

a conveyer operating to raise the sheaves and drop them on the upper part of the said support, substantially as set forth.

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

LEMUEL D. PARMLEY.

Witnesses:

S. V. MONTICH,

A. B. STOLER.