

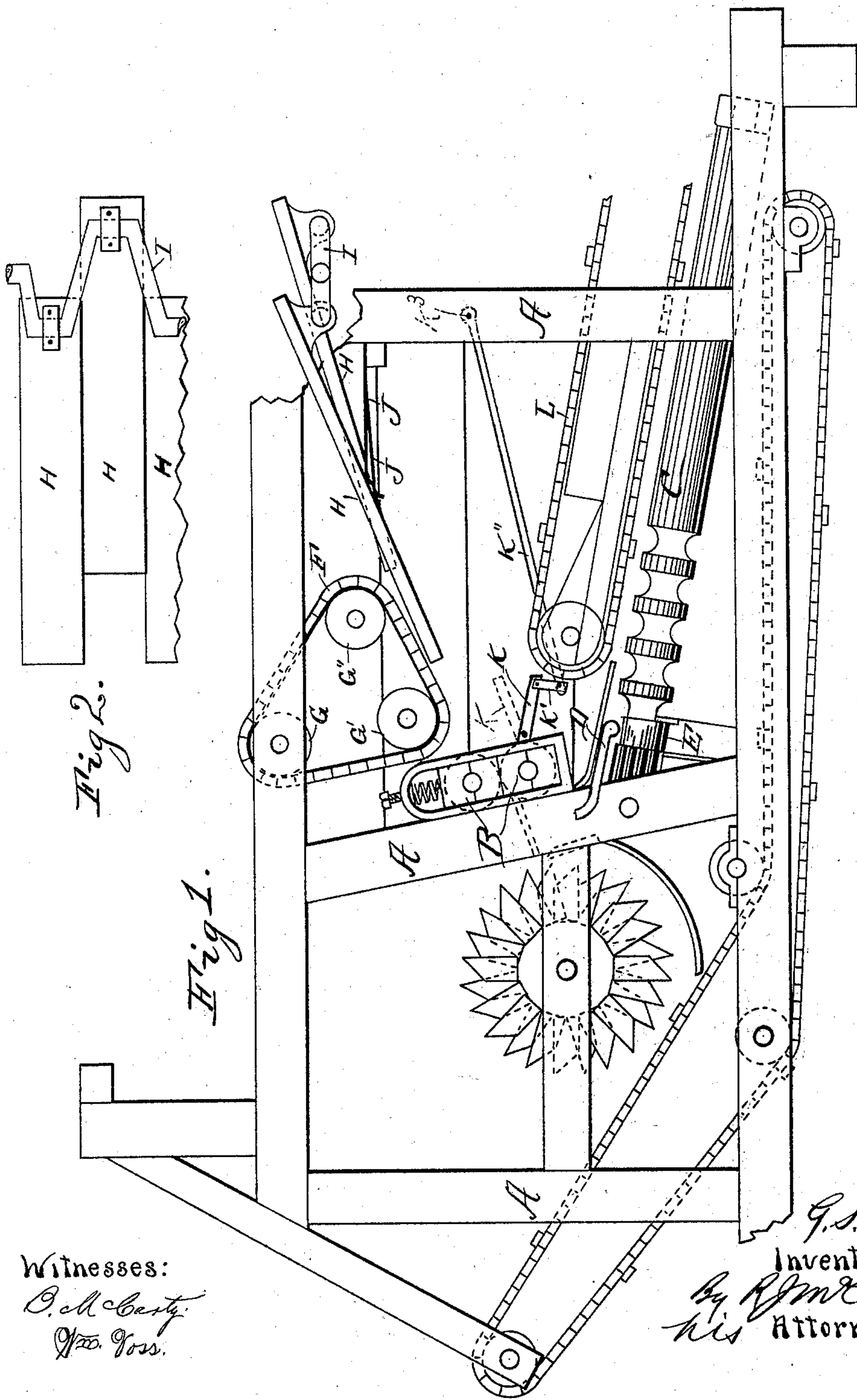
(No Model.)

2 Sheets—Sheet 1.

G. S. GUNDERSEN.  
CORN HUSKING MACHINE.

No. 603,845.

Patented May 10, 1898.



Witnesses:

C. M. Carty.  
J. M. Voss.

Inventor:

G. S. Gundersen.  
By R. M. Carty  
his Attorney.

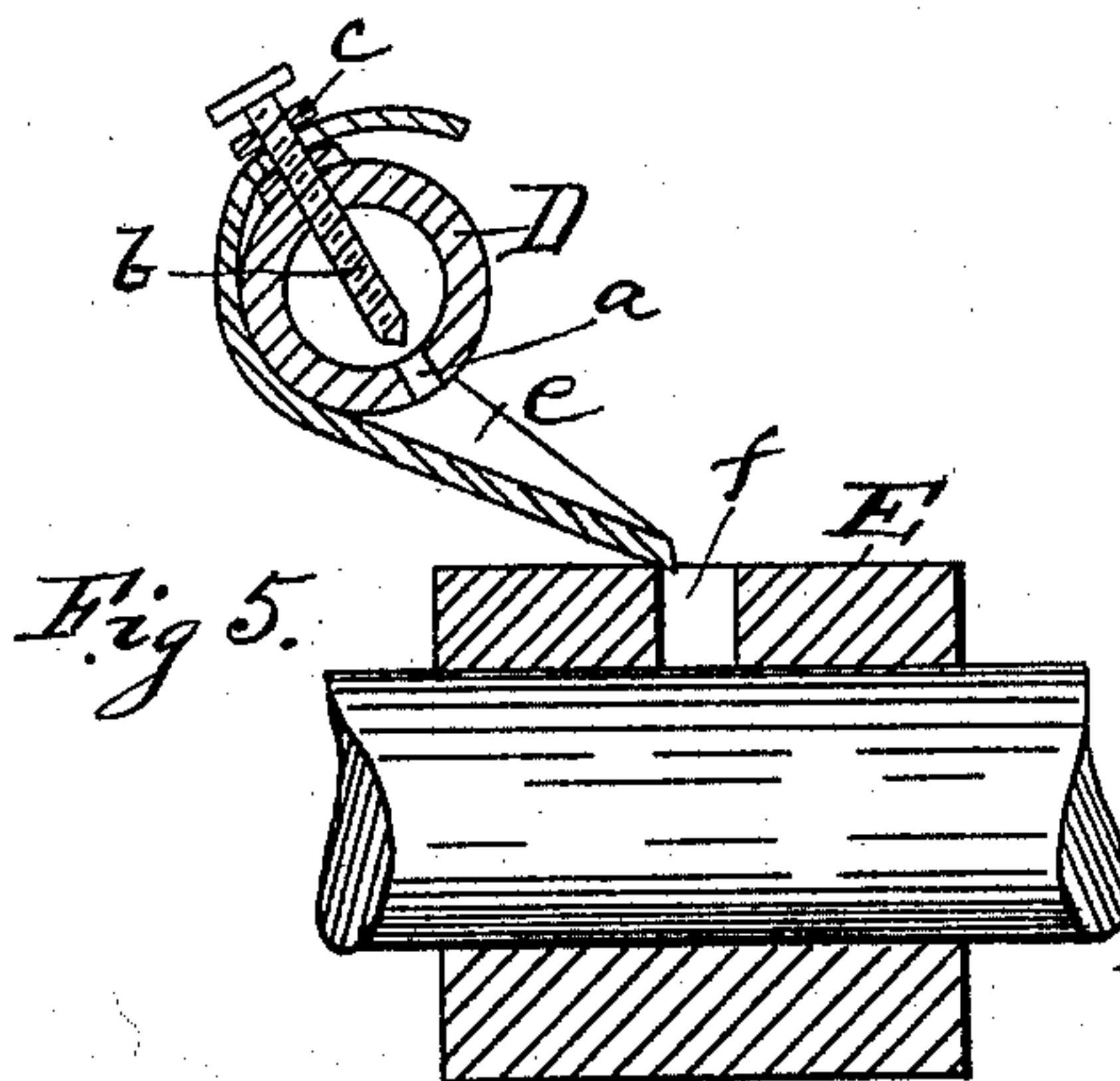
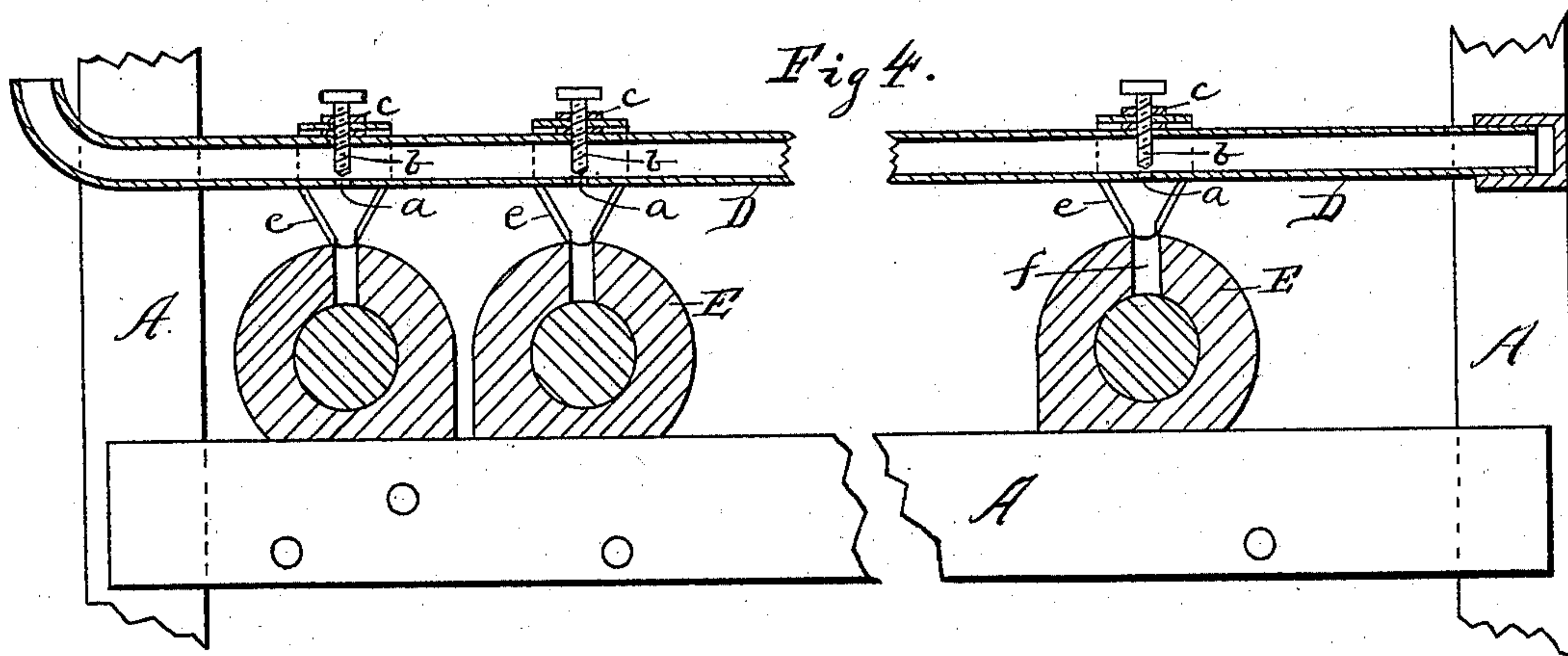
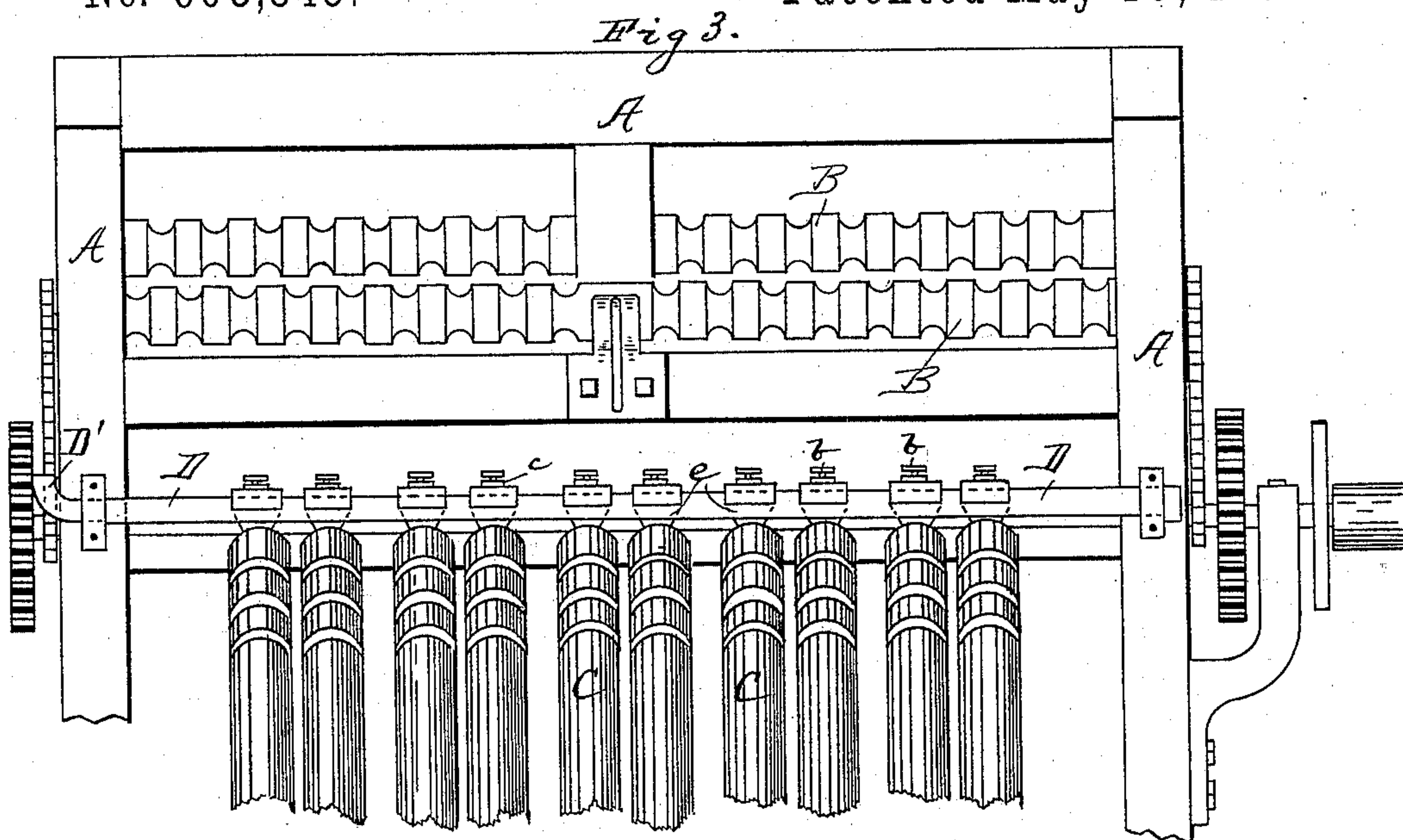
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2 Sheets—Sheet 2.

G. S. GUNDERSEN.  
CORN HUSKING MACHINE.

No. 603,845.

Patented May 10, 1898.



Witnesses:  
B. McCarty.  
O. W. Voss.

G. S. Gundersen.  
Inventor:  
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Attorney:



# UNITED STATES PATENT OFFICE.

GILBERT S. GUNDERSEN, OF MIDDLETOWN, OHIO.

## CORN-HUSKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 603,845, dated May 10, 1898.

Application filed October 11, 1897. Serial No. 654,770. (No model.)

*To all whom it may concern:*

Be it known that I, GILBERT S. GUNDERSEN, a citizen of the United States, residing at Middletown, in the county of Butler and State of Ohio, have invented certain new and useful Improvements in Corn-Husking Machines; and I do 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, and to the letters of reference marked thereon, which form a part of this specification.

15 This invention relates to improvements in corn-husking machines.

The object of the invention is to improve the feeding mechanism and to otherwise increase the efficiency of that class of machines that are provided with transverse snapping-rolls.

To these ends the improvements have reference to a series of reciprocating feed-boards arranged above and in front of said snapping-rolls, to a rotating feed-apron having a substantially broad working surface, and to a vibrating guide-board arranged between the snapping-rolls and the husking-rolls.

In a detailed description of the invention reference is made to the accompanying drawings, in which—

Figure 1 is a side elevation of a corn-husking machine having my improvements thereon. Fig. 2 is a detached plan view of the reciprocating feed-boards, parts being broken away. Fig. 3 is a rear view looking into the rear of the machine. The outer ends of the husking-rolls are broken off and the feed apron and boards are removed. The object of this view is to illustrate the relative position of the oiler. Fig. 4 is an enlarged longitudinal sectional view of the oiler and the journal-boxes. Fig. 5 is a cross-sectional view of the oiler and one of the journal-boxes.

45 In the description of the invention similar letters of reference will indicate the same parts throughout the drawings.

The snapping-rolls B and husking-rolls C are mounted in the frame A, as shown in Fig. 1, the last-named rolls being driven in a well-known way, as are also the snapping-rolls. Referring to the mechanism for controlling

the feed of stock to the snapping-rolls, this consists of a rotating apron F of a width corresponding to the width of the working surface of the rolls. This apron has a substantially broad working surface at its lower end. At its upper end it is mounted on a single roller G, while at its lower end it is mounted on two rollers G' and G'', spread apart to provide the broad working surface. The lower rollers G' and G'' are in a plane slightly above the upper one of the snapping-rolls in order to bring the working surface of the apron in a proper position to direct the stock to the snapping-rolls.

H designates a series of reciprocating feed-boards loosely attached at their outer ends to a crank-shaft I, which is mounted on the rear uprights of the frame. These feed-boards are mounted on an angle to the working surface of the feed-apron and apply a variable or yielding pressure to the stock. The said boards are supported at their centers by springs J, which have one end rigidly connected to the frame of the machine. Each alternate board is moved in an opposite direction by the action of the crank-shaft, which causes a continuous feed of the stock through a zigzag opening with a uniform amount of pressure thereon. The stock is placed upon the feed-boards, and as it enters below the feed-apron F the boards yield according to the bulk of the stock entering between them and the apron. There is, therefore, a yielding pressure that varies in proportion to the amount of stock passing to the snapping-rolls.

K is a transverse guide-board arranged between the snapping-rolls and the husking-rolls to prevent any fodder or stalks from coming in contact with the husking-rolls before it is acted upon by the snapping-rolls. This sometimes happens by a stalk passing down to the snapping-rolls in an irregular manner—for example, in a crosswise position. The guide-board is subjected to a vibratory motion and prevents such stalk from passing to the husking-rolls by holding it until operated upon by the snapping-rolls. The said guide-board holds the stalk in this manner on its upward movement to the dotted position shown in Fig. 1. The board K is pivotally mounted at each end to the frame and is connected at



each end to a link K', which in turn have pivotal connections with a long lever K'' on each side of the machine. These levers K'' have their outer ends pivoted to the frame at K<sup>3</sup>, the whole forming a toggle movement for the guide-board. The vibratory motion is imparted to said guide-board K by pieces that project from the ends of the slatted carrier L on each side. The pieces, during the rotation of the carrier, trip the levers K'' on each side and uniformly vibrate the said board. Such movement may, however, be imparted in other ways. Therefore I do not desire to confine it to any specific means, but desire to claim, broadly, means for vibrating a guide-board between the snapping-rolls and the husking-rolls to prevent stalks and fodder entering the latter rolls.

The journal-boxes for the upper ends of the husking-rolls being practically inaccessible when the parts are mounted in the frame more or less difficulty has been heretofore experienced in properly lubricating the upper bearings. One feature of the present invention is designed to overcome this objection, and consists of an oil-tube D, suitably mounted across the machine above the upper journal-boxes E. This oil-tube has a series of oil-orifices *a* in its lower side that are controlled by a like number of valve-plugs *b*, which enter the upper side of the tube and are made secure by jam-nuts *c*. Beneath each of said oil-orifices there is an oil-run consisting of an inclined metallic guide *e*, which partly surrounds the oil-tube at that point and is made secure thereto by the valve-plug *b*. The lower ends of said guides *e* taper and conduct the oil into the openings *f* in the journal-boxes. One end of the oil-tube D is closed and the other end terminates in an elbow D', turned

upwardly and projected outwardly on a side of the frame where it is easily accessible.

Having described my invention, I claim as new and desire to protect by Letters Patent—

1. In a corn-husking machine, the combination with snapping-rolls mounted across the machine, of a rotary feeding-apron mounted above said rolls, reciprocating feed-boards mounted on an incline in front of said feed-apron, the lower ends of said feed-boards being movable below the lower end of the feed-apron, springs upon which said feed-boards are held, and a crank-shaft to which the feed-boards are connected, and whereby said feed-boards are given an alternately-reciprocating motion, substantially as and for the purposes specified.

2. In a corn-husking machine, the combination with snapping-rolls mounted across the machine, of a rotary feed-apron mounted above said snapping-rolls with its lower end surrounding two rollers so as to provide a substantially broad working surface, reciprocating feed-boards mounted on an incline in the front of said feed-apron, the lower ends of said boards being movable below the lower end of the apron, springs to apply a yielding pressure to said boards, and a crank-shaft to which said boards are connected, and whereby they are driven alternately in opposite directions to feed in a continuous manner the stock to the snapping-rolls, as herein shown and described.

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

GILBERT S. GUNDERSEN.

Witnesses:

R. J. McCARTY,  
J. A. WORTMAN.