

(No Model.)

2 Sheets—Sheet 1.

W. H. RUSH.
EXTENSION FEED FOR CORN SHELLERS.

No. 483,239.

Patented Sept. 27, 1892.

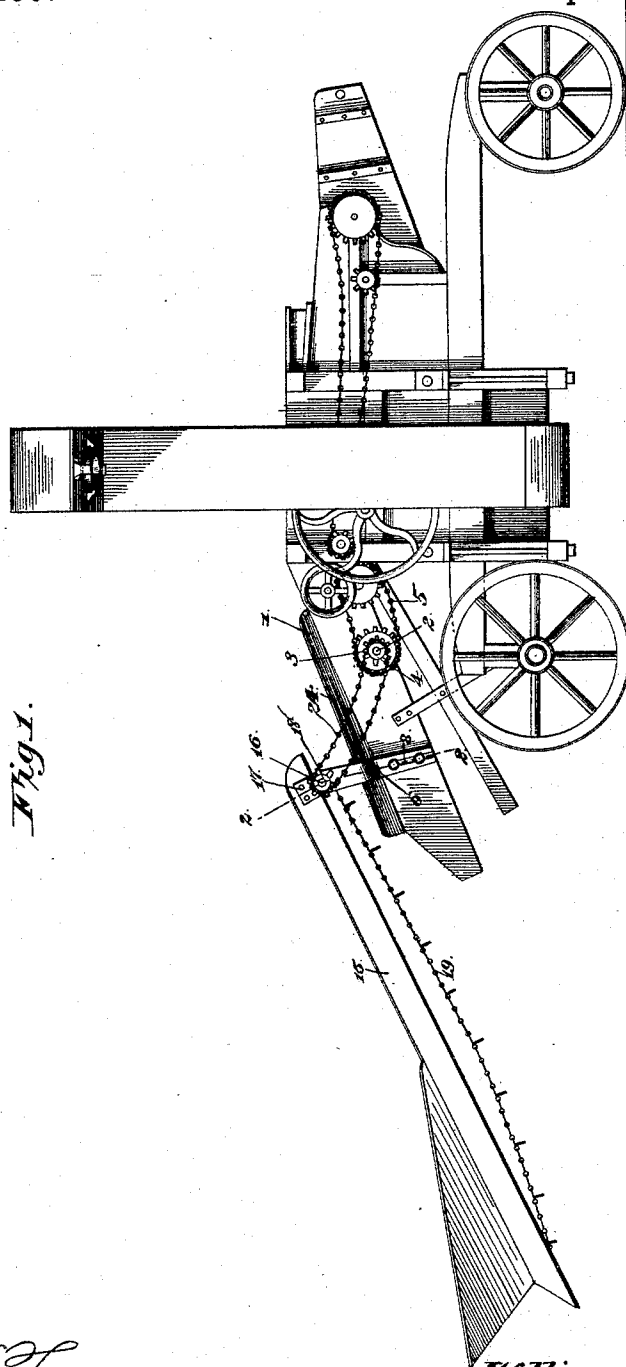


Fig. 1.

Witnesses

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John W. Tiggers

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By his Attorneys,

C. A. Snow & Co.

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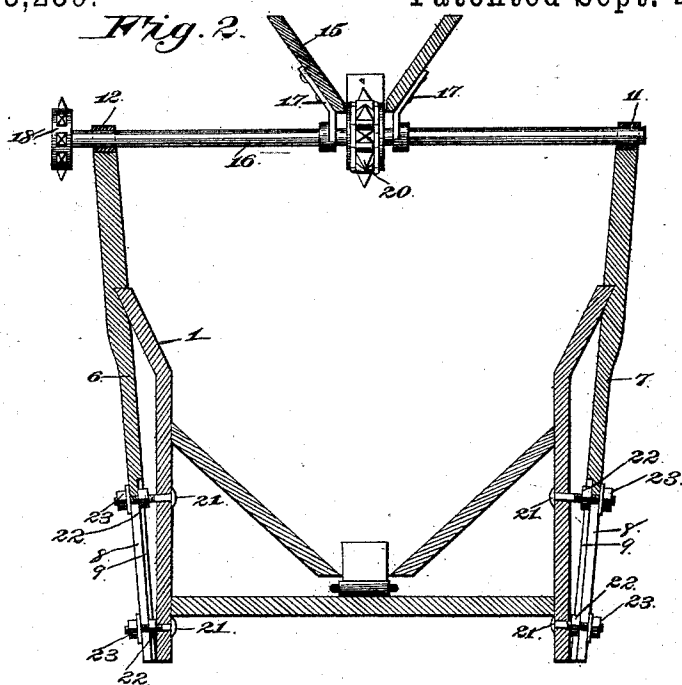
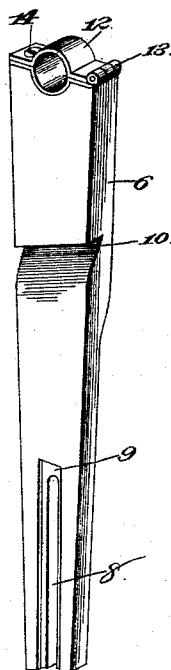


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM H. RUSH, OF ELMWOOD, NEBRASKA.

EXTENSION-FEED FOR CORN-SHELLERS.

SPECIFICATION forming part of Letters Patent No. 483,239, dated September 27, 1892.

Application filed February 10, 1892. Serial No. 421,045. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. RUSH, a citizen of the United States, residing at Elmwood, in the county of Cass and State of Nebraska, have invented a new and useful Extension-Feed for Corn-Shellers, of which the following is a specification.

My invention relates to corn-shellers, and has for its objects the provision of an improved extension-feed for the same and means for attaching the feed to the feeder and to so construct the attaching devices as to be readily applied and removed.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a side elevation of a corn-sheller provided with my improved extension-feed support. Fig. 2 is a transverse section of the extension-feed, taken through the supports. Fig. 3 is a detail of one of the supports or standards.

Like numerals of reference indicate like parts in all the figures of the drawings.

In Fig. 1 I have illustrated an ordinary corn-sheller, and in the same 1 designates the usual feeder; 2, the feed-shaft passing there-through and provided with the usual sprocket-wheel 3 at one side of the feeder. The shaft 2 is in this instance made slightly longer than is necessary for the accommodation of the sprocket 3 and outside of the latter carries a small sprocket 4. The shaft, as usual, receives motion from a belt 5, driven by the ordinary gearing of the machine, which is so well known as to require no specific explanation.

6 designates a left-hand and 7 a right-hand standard, the former being illustrated in detail in Fig. 3. These standards are slightly longer than the width or height of the feeder 1 and are tapered or gradually reduced from their upper ends to their lower ends. Their lower ends are provided with vertical slots 8, extending upwardly a suitable distance, and the inner faces of the standards adjacent to the slots are countersunk or recessed, as at 9. Each standard has its inner face provided with a transverse acute recess 10, which conforms somewhat to the flaring upper sides or guards of the feeder 1. The upper end of the

right-hand standard 7 is provided with a bearing 11, while the corresponding end of the left-hand standard is provided with a separable bearing 12, the sections of which are hinged, as at 13, at one edge and are secured in position by a screw 14 at the opposite edge, whereby, as will be obvious, the bearing may be thrown open for the reception of a shaft.

15 designates an extension-feed chute, and the same is of the ordinary construction, being provided at its upper end with the transverse shaft 16, mounted in bearings 17, and being provided with the small sprocket 18 at one end. Over this shaft passes the usual sprocket chain or elevator 19, the same running over a central sprocket 20, with which the shaft 16 is provided.

In the oppositewalls of the feeder 1 are pairs of bolts 21, the heads of the same being on the inside thereof, as best shown in Fig. 2. Each bolt carries an inner nut 22 and an outer nut 23. These bolts are arranged vertically opposite each other.

To assemble the parts or attach the extension-feed 15 to the feeder 1, the bifurcations or slots at the lower ends of the standards 6 and 7 are introduced over the opposite pairs of bolts between the inner and outer nuts 22 and 23. When in this position and the nuts tightened, the inner nuts will rest in the countersunk recesses 9 of the standards and will combine with the outer nuts to maintain the standard rigidly in position; also, the transverse acute recesses 10 will have received the upper edges of the feeder 1, which will aid the bolts in supporting the standards and weight of the extension-feed, the bolts acting more as fastening devices, as will be obvious.

In order to introduce the shaft 16 into the bearings 11 and 12, the right-hand end of the shaft 16 is moved longitudinally into the bearing 11 of the standard 7, while the left-hand end is dropped vertically into the bearing 12, for the reception of which said bearing has been thrown open by a removal of the screw 14, and subsequently to the entrance of the shaft said bearing is closed and refastened by the screw.

It will now be seen that the machine is ready for operation. While the parts are thus assembled, a chain 24 is employed to connect the pinions 4 and 18, so that motion

is conveyed from the shaft 2 of the feeder to the shaft 16 of the extension-feed.

The advantages of an extension-feed are so well known as not to require any mention, and such I do not claim as my invention; but it will be seen that I have provided an extremely cheap and simple means for conveniently attaching and detaching such extension-feed to the usual feeder of a corn-sheller.

Having thus described my invention, I claim—

1. The combination, with the feeder and extension-feed of a corn-sheller, of a pair of intermediate standards removably connected at their lower ends to the feeder and at their upper ends to the extension-feed, substantially as specified.

2. The combination, with the feeder, of a pair of standards having bearings at their upper ends, the shaft located therein, the extension-feed having bearings receiving and supported on the shaft, the endless carrier operated by the shaft, and means for communicating motion from the sheller to the shaft, substantially as specified.

3. The combination, with the feeder and extension-feed of a corn-sheller and the transverse feed-shaft of the extension-feed, of the opposite standards secured to the feeder, one of said standards being provided with a bearing-box and the other with a separable bearing-box, substantially as specified.

4. The combination, with the feeder hav-

ing the flared side walls and the extension-feed of a corn-sheller, of a pair of standards connected at their upper ends to the extension-feed, recessed below the same to receive the flared walls of the feeder, and securing devices for the lower ends of the standards, substantially as specified.

5. The combination, with the feeder, the upper edges of which are flared, the vertically-opposite pairs of bolts provided with heads at their inner ends and at their outer ends beyond the walls of the feeder with pairs of nuts, the pair of standards slotted at their lower ends to straddle the bolts and having their inner faces countersunk to receive the inner nuts, said standards being further provided with the transverse recesses for fitting the upper flared edges of the feeder, the closed bearing 11, mounted upon one standard, and the separable hinged bearing 12 upon the opposite standard and provided with the screw for locking the same, of the extension-feed 15, having the bearings 17, the transverse feed-shaft 16, mounted therein and in the bearings of the standards, the sprocket 18, and the chain 24 for driving the same, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM H. RUSH.

Witnesses:

EDWIN JEARY,
C. D. STEVENS.