

(No Model.)

2 Sheets—Sheet 1.

J. W. TERMAN.

CORN HARVESTER.

No. 346,134.

Patented July 27, 1886.

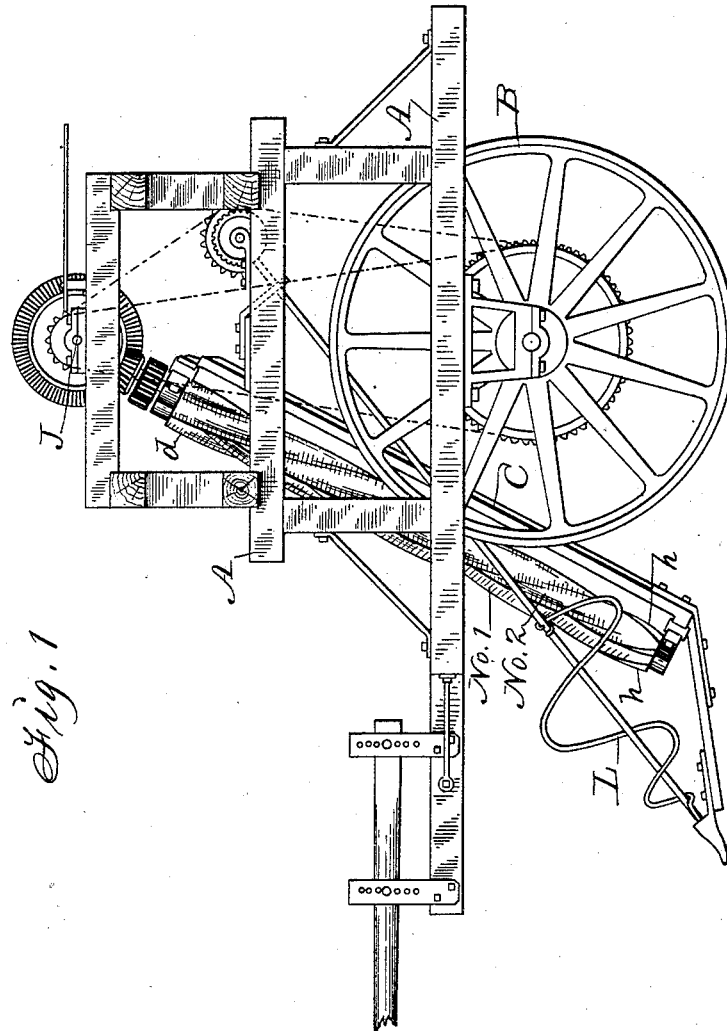


Fig. 1

Witnesses:

W. A. Anderson,
A. H. Orwig.

Inventor:

James W. Terman,
By Thomas C. Orwig, atty

(No Model.)

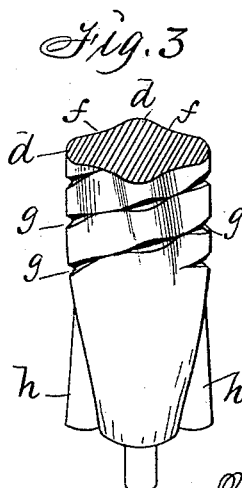
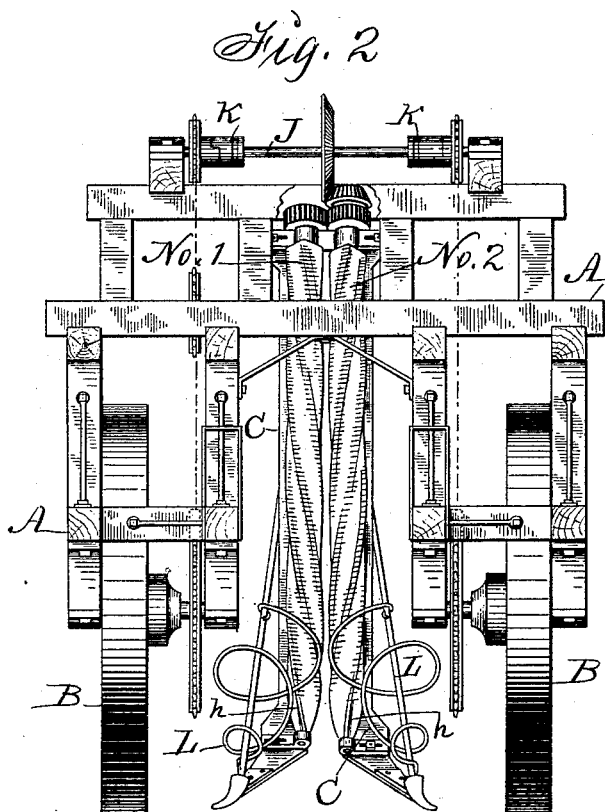
2 Sheets—Sheet 2.

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Witnesses:
W. A. Anderson.
R. H. Orwig. }

Inventor:
James W. Terman,
By Thomas G. Orwig, Atty.

UNITED STATES PATENT OFFICE.

JAMES W. TERMAN, OF DES MOINES, IOWA, ASSIGNOR TO H. S. BUTLER, OF
SAME PLACE.

CORN-HARVESTER.

SPECIFICATION forming part of Letters Patent No. 346,134, dated July 27, 1886.

Application filed February 9, 1885. Serial No. 155,357. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. TERMAN, a citizen of the United States of America, and a resident of the city of Des Moines, in the county of Polk and State of Iowa, have invented certain new and useful Improvements in Corn-Harvesters, of which the following is a specification.

My object is to improve the efficiency of the machine invented by me, and patented in the United States on the 31st day of August, 1880, No. 231,867; and my improvement consists in the construction and combination of mating rollers of peculiar shape with a yoke and frame and gathering devices and operating mechanisms, as hereinafter fully set forth.

Figure 1 of the accompanying drawings is a side view, and Fig. 2 a front view, of the machine in position as required for practical use. Fig. 3 is a perspective view of the lower end of one of the husking-rollers.

Together these figures clearly illustrate the construction and operation of my complete invention.

A represents a main or carriage frame adapted to support the operative mechanisms.

B are traction-wheels placed loosely upon revolving axles in bearings fixed to the frame, and provided with ratchet devices that will lock them to the axles in forward movements of the carriage, and release them in backward motions, in such a manner that the axles and wheels will revolve jointly, and serve to drive the operative mechanisms when advancing in a field astride of a row of corn.

Nos. 1 and 2 are mating husking-rollers, combined with the main frame by means of a roller-supporting frame or rigid yoke, C, preferably cast complete in one piece, and fixed to the upper and central part of the main or carriage frame by means of bolts and braces, so that it will incline forward longitudinally, as shown in Fig. 1. Each roller has convex surfaces *d*, extending spirally from one end to the other, and concave surfaces *f* between them. The convex spiral surfaces have transverse cuts *g*, as clearly shown in Fig. 3, which coincide with each other to form continuous screw-threads adapted to engage and elevate cornstalks that come into contact therewith, and to bite the husks on the butt-ends of the ears as they are being pinched off from the stalks and stripped from the husks which

are allowed to adhere to the stalks that pass through between the rollers and remain standing. The lower ends of the mating rollers are tapering and terminate in journals.

h h are tapering fins that project laterally from the tapering ends in such a manner that when the two rollers are rotated toward each other the fins will engage the lower portions of the stalks and pull them in between the rollers to allow the spiral and screw threaded rollers to seize the ears and pinch them from the stalks and out of their husks.

J is a shaft mounted on top of the frame. It has a gear-wheel fixed to its center to impart motion to the husking-rollers, as shown in Figs. 1 and 2. It is connected with the carriage-axles by means of chain-wheels and chains in such a manner that it will be rotated when the carriage is advanced. It is also provided with clutches *k* at its opposite ends, so that either end can be thrown in and out of gear whenever desired.

L represents cone-shaped screws, on rotating shafts, extending forward from the lower ends of the inclined husking-rollers to gather the stalks and draw them within reach of the fins *h* on the husking rollers. They are geared differently, but perform the same function as in my previous patent above referred to.

I claim as my invention--

1. A roller for corn-harvesters having spiral convex surfaces extending from its lower end upward, and screw-threads cut in said spiral convex surfaces, for the purposes stated.

2. The mating right and left husking-rollers, Nos. 1 and 2, having spiral convex surfaces extending from end to end, and screw-threads cut in said convex spirals, in combination with a roller-supporting frame or yoke fixed to the main machine-frame in a vertically-inclined position, for the purposes stated.

3. The mating right and left husking-rollers, Nos. 1 and 2, having fins *h*, projecting from their tapering lower ends, and convex spirals *d*, provided with screw-groove *g*, in combination with a roller-carrying frame or yoke fixed to the main machine-frame in a vertically-inclined position, substantially as and for the purposes stated.

JAMES W. TERMAN.

Witnesses:

THOMAS G. ORWIG,
SANFORD P. SELBY.