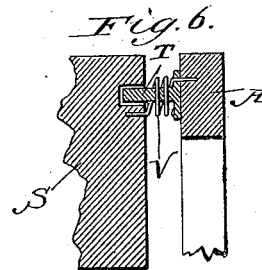
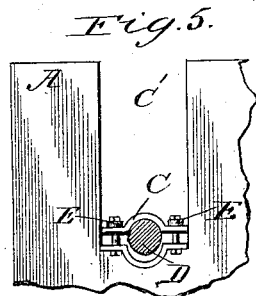
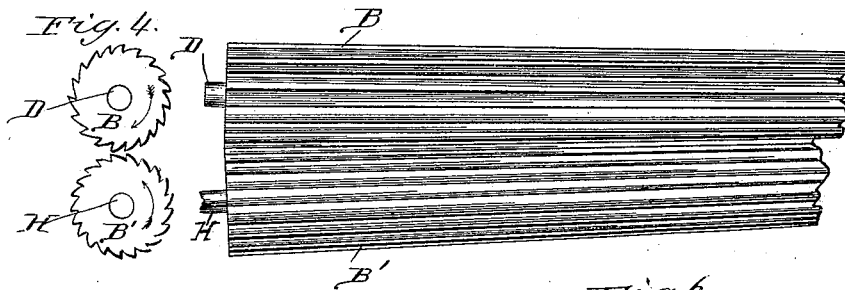
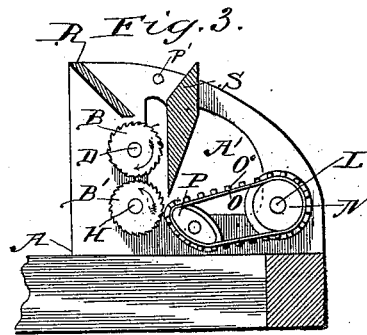
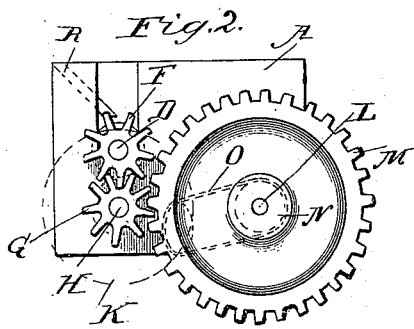
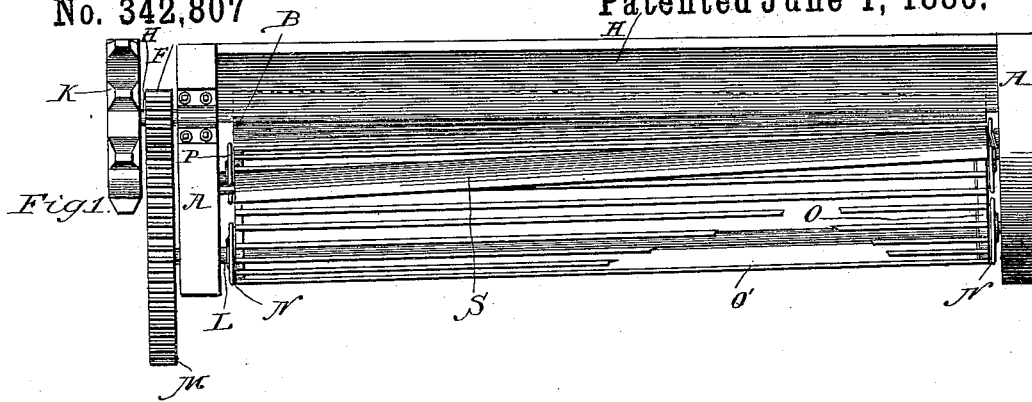


(No Model.)

D. T. PHILLIPS.  
CORN HUSKER.

No. 342,807

Patented June 1, 1886.



Witnesses.

W. Rogers  
Frank S. Chauland

Inventor:  
Darius J. Phillips  
By Wm B. Lutz, Co  
Atty's.

# UNITED STATES PATENT OFFICE.

DARIUS T. PHILLIPS, OF CHICAGO, ILLINOIS.

## CORN-HUSKER.

SPECIFICATION forming part of Letters Patent No. 342,807, dated June 1, 1886.

Application filed July 2, 1885. Serial No. 170,481. (No model.)

*To all whom it may concern:*

Be it known that I, DARIUS T. PHILLIPS, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Corn-Huskers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improved corn-husker; and it consists in certain novel combinations of parts, hereinafter described and claimed.

Reference is made to the accompanying drawings, in which Figure 1 is a top plan view of the husker, partly broken away; Fig. 2, an end elevation thereof; Fig. 3, a cross-section of the same; Fig. 4, side and end elevations of the rollers; Fig. 5, a detail showing the bearing at one end of the upper roller; and Fig. 6, a detail of certain parts.

Like letters refer to like parts in each view.

In the drawings, A represents the framework of the husker, one end piece of which is formed with an opening, A', Fig. 3, through which the husked ears are discharged, as will be described.

B B' represent the husking-rollers, which, as clearly shown in Fig. 4, are placed one above the other. These rollers are grooved or corrugated longitudinally, as shown, or otherwise constructed to assure a certain hold upon the ears to be operated upon thereby. Rollers B B' are cone-shaped, the small ends thereof being at the discharge end of the machine. Any suitable means may be employed to gradually feed the ears from one end of these rollers to the other, such as placing the said rollers on a slight incline, or any other well-known arrangement may be made. At their small ends rollers B B' each have a stationary bearing in the frame A, and roller B' also has such a bearing at its large end. The bearing-box C for the large end of roller B is situated in a slot, C', formed in that end of frame A, and is so arranged as to allow the stud D of such roller a certain vertical play. This end is obtained by holding the two plates of the box a certain distance apart by means of suitable rubber washers, E, mounted upon the holding-bolts, all as clearly shown in Fig. 5. The stud D above referred to passes

through slot C', and upon its outer end is keyed a cog-wheel, F, arranged to mesh with and be operated by a similar cog-wheel, G, mounted upon the stud H of roller B'. Keyed to the outer end of stud H is a sprocket-wheel, K, connected with any suitable power. Motion is imparted to the two rollers by the arrangement of the gearing thus described.

L represents a shaft, to the outer end of which is keyed a large cog-wheel, M, which is arranged to mesh with and be operated by the cog-wheel G, described as mounted upon the stud of roller B'. At its opposite end this shaft has its bearing in the end piece of the frame A, and at suitable points near each end, but within the frame, it carries pulleys N, around which an endless apron, O, carrying transverse slats O' is passed, said apron being also passed around pulleys P, situated each upon a suitable stud mounted in the end pieces of frame A and within close proximity to roller B'. Pulleys P are oval in shape, whereby the ears of corn which fall upon the apron are revolved by the revolving motion imparted to the apron and forced up and down by the peculiar motion imparted to such apron by the pulleys P.

R represents an inclined feeding-board mounted in frame A above roller B.

S is a strip or board, which extends from end to end of the frame A, the lower end of which occupies a position directly in front of rollers B B'. This strip is pivotally mounted at its upper end upon studs T, (one shown in Fig. 6,) which have bearings in the ends of frame A. Around one stud T there is coiled a spring, V, one end of which is inserted into the strip and the other into the frame A, the coil being such as to force the lower free end of the strip toward the rollers unless its force is overcome. At its upper end strip S is formed on an incline opposite to that of board R, in conjunction with which it forms a feed-hopper, and in its lower end it is cut away to make it as light as possible.

The operation and manner of using the husker is as follows: Motion being imparted to rollers B B' and to the apron O through the medium of the line of gearing described, the ears of corn with the husks thereon are fed to the rollers at their large ends between them and the strip S. Because of the pivotal

and spring-pressure arrangement of this strip it will give sufficiently as the corn is fed, but at the same time will exert sufficient pressure against the ears to keep them in contact with the rollers. As the ears pass the upper roller they will fall upon the end of the apron O, and by the slats O' will be revolved, the lower end of strip S being within sufficiently close proximity to the said apron, and its movement limited by a stud, P', Fig. 3, to prevent the ears being carried away. Because of the oval pulleys P and the peculiar motion imparted thereby to apron O the ears, as they are revolved by the slats, will be thrown up toward the rollers by which the husks are removed. During the operation described it will be understood that because of the peculiar shape of rollers B B' the ears are gradually fed toward the opening A' in the end of the machine, and finally discharged therethrough. It will be understood that should any obstruction enter between the rollers the upper roller will be allowed by the arrangement of the bearings of roller B described sufficient vertical play to allow it to pass off. The strip S is preferably placed at an incline, as shown in Fig. 1, and the spring with which one of its pivoting studs is provided is situated at that end nearest the small ends of the said rollers, this arrangement being desirable, as it is found that more pressure is desired at that point than at the large ends of the rollers.

It will be understood that the operative parts of the machine may be driven from any suitable power and through any suitable line of gearing other than that described; and, further, that the husker described is adapted for use in connection with a corn-harvester, from the mechanism of which it may be operated.

What I claim is—

1. In a corn-husker, the combination, with husking-rollers and a strip situated in close proximity thereto, of an endless apron and round and oval shaped pulleys for such apron, as set forth.
2. In a corn-husker, the combination, with cone-shaped husking-rollers and a strip situated in close proximity thereto, of an endless apron and round and oval shaped pulleys for such apron, as set forth.
3. In a corn-husker, the combination, with husking-rollers and a pivoted and spring actuated board, of an endless apron and round and oval shaped pulleys for such apron, as set forth.
4. In a corn-husker, the combination, with cone-shaped husking-rollers and a pivoted and spring-actuated strip, of an endless apron and round and oval shaped pulleys for such apron, as set forth.
5. In a corn-husker, the combination, with cone-shaped and corrugated husking-rollers, of a spring-actuated and pivoted board, a stop to limit the movement of such board, an endless apron, and round and oval shaped pulleys for such apron, as set forth.
6. In a corn-husker, the combination, with a husking-roller mounted in fixed bearings and a second roller mounted at one end in an adjustable bearing, of a strip situated in close proximity to such rollers, an endless apron, and round and oval shaped pulleys for such apron, as set forth.

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

DARIUS T. PHILLIPS.

Witnesses:

FRANK S. BLANCHARD,  
A. M. HIRSCH.