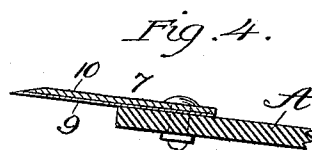
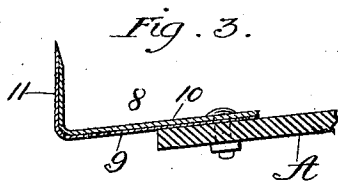
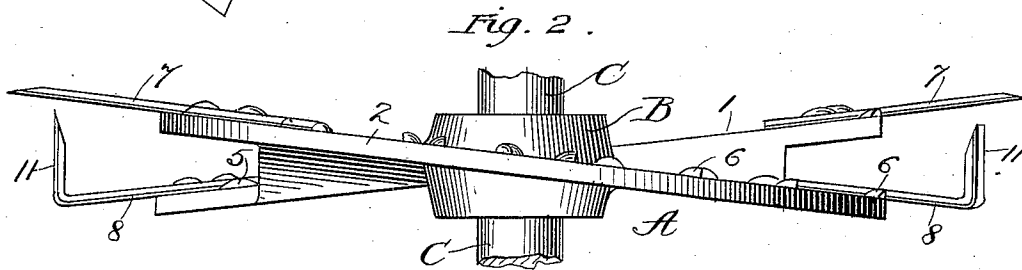
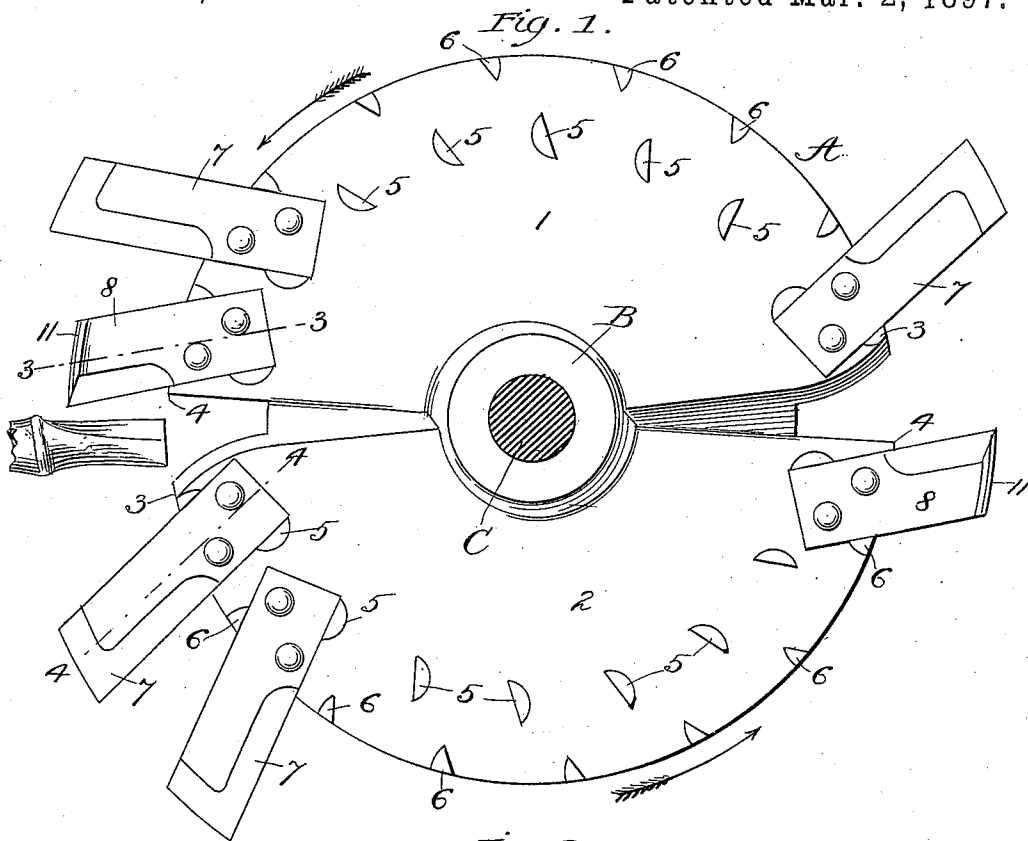


(No Model.)

L. HOLLAND-LETZ.
FODDER SHREDDER.

No. 578,250.

Patented Mar. 2, 1897.



Witnesses:
George Goseh
Daniel Neis

Inventor:
Louis Holland-Letz
By Rudolph M. Lutz
Atty.

UNITED STATES PATENT OFFICE.

LOUIS HOLLAND-LETZ, OF CROWN POINT, INDIANA.

FODDER-SHREDDER.

SPECIFICATION forming part of Letters Patent No. 578,250, dated March 2, 1897.

Application filed September 28, 1896. Serial No. 607,182. (No model.)

To all whom it may concern:

Be it known that I, LOUIS HOLLAND-LETZ, a citizen of the United States, residing at Crown Point, in the county of Lake and State of Indiana, have invented certain new and useful Improvements in Fodder-Shredders; 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.

My invention relates to a novel construction in a fodder-shredder, the object being to provide a device of this construction which is particularly adapted to shred cornstalks; and it consists in the features of construction hereinafter fully described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a side elevation of a fodder-shredder constructed in accordance with my invention. Fig. 2 is an edge elevation of the same. Figs. 3 and 4 are detail sectional views of the knives I employ, taken on the lines 3 3 and 4 4, respectively, of Fig. 1.

My device consists, essentially, of a plate A, provided with a hub B, which is adapted to be mounted upon a shaft C. The said plate is, as I term it, divided into two "halves" 1 and 2, which stand at an incline to a transverse plane intersecting the shaft C and at opposite inclines to each other, in this manner forming two cams crossing each other at their centers. The outer edges of said halves 1 and 2 will move in a cylindrical plane equal in width to the distance between the adjacent corners 3 and 4 of said plates, and thus each portion of said outer edges of said halves will pass a given point a slight distance to one side of the preceding portion. Lugs 5 and 6 are cast integral with said plate A, adjacent the outer edge of the same, between which knives 7 and 8 are riveted or otherwise suitably secured. Said lugs 5 engage the inner ends of the forward edges of said knives 7 and 8, which said lugs 6 engage the lower middle portions of the rear edges of said knives. In this manner the positions of said knives upon said plate are determined. Said knives project a given distance beyond the edge of said plate A, the knives 7 extending, preferably, about one and one-half inches and said knives 8 about one inch and incline slightly in the direction of motion of said

plate, as indicated by the arrows. Each of said knives consists, preferably, of a thin sheet of steel 9, which is sweated to a wrought-iron plate 10, so as to form one piece, which is ground sharp at its edges by grinding the iron down until the steel is reached and the same is sharpened. In this manner the sharp edges of said steel are protected from wear to a large extent and will remain sharp for a long time. The said knives 8 are provided with a bent end 11, extending practically parallel with the shaft C and equal in length to the distance between said adjacent corners 3 and 4. Said knives 8 project from said plate A a shorter distance than said knives 7, and the portion 11 thereof extends from the face of one of said halves toward the corresponding face of the other thereof.

From the form of my plate it will be obvious that, when revolving, each of the knives 7 on one of said halves will cut endwise into the cornstalk a slight distance to one side of the preceding knife and thus slice said cornstalk a short distance inwardly from its end. The portions 11 of the knives 8 serve to cut off said sliced end of the cornstalk twice during every revolution of said plate A, and insure a very finely-cut fodder.

I am aware that a saw bent practically as the plate A has been patented, and I have tried the same, but the effect thereof is to tear the stalk into shreds of a very uneven character, for the reason that the stalks are generally not dry and brittle enough to offer sufficient resistance to the teeth of a saw to be cut off, and the result is that the fodder consists of long, stringy, and tough fibers instead of fine shreds. A saw also requires greater power than knives such as I employ.

My device has the great advantage in that all of the shreds cut thereby are of even length, and the fodder is cut so fine that it is as easily eaten by cattle as cut hay.

I claim as my invention—

1. A fodder-shredder comprising a plate consisting of two parts set at opposite inclines to each other and crossing at their centers, a plurality of straight, outwardly-projecting knives mounted upon the periphery of said plate, and knives provided with bent portions at their outer ends, mounted upon each of said two parts of said plate, said bent por-

tions thereof extending from the face of one part toward the adjacent corresponding face of the other of said parts of said plate.

2. A fodder-shredder comprising a plate
5 consisting of two parts mounted upon a hub set at opposite inclines to each other and crossing at their centers, lugs upon said plate adapted to engage and determine the positions of knives mounted thereon, a plural-
10 ity of straight outwardly-projecting knives mounted upon the periphery of said plate, and knives provided with bent portions at

their outer ends mounted upon each of said two parts of said plate, said bent portions thereof extending from the face of one part to the adjacent corresponding face of the other of said parts of said plate. 15

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

LOUIS HOLLAND-LETZ.

Witnesses:

GEORGE GOSEH,
DANIEL WEIS.