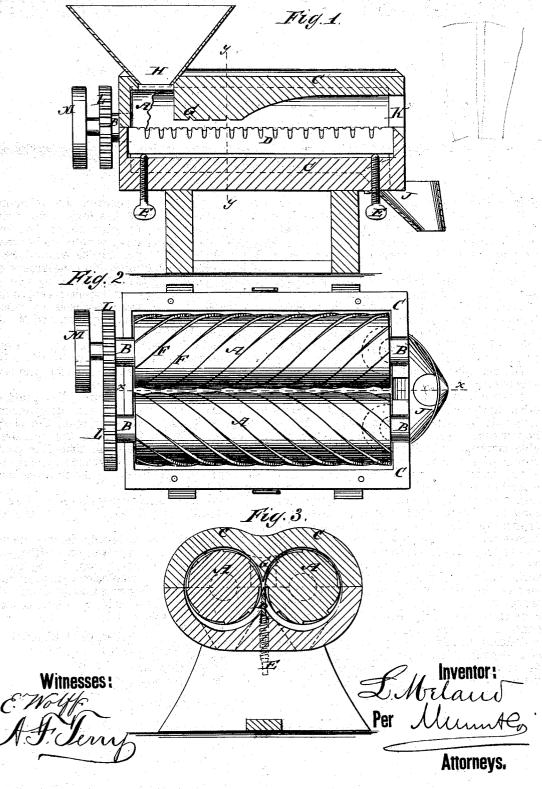
## L. MELAND. Corn and Feed Mills.

No.155,662.

Patented Oct. 6, 1874.



## UNITED STATES PATENT OFFICE.

LAURITZ MELAND, OF IOWA FALLS, IOWA.

## IMPROVEMENT IN CORN AND FEED MILLS.

Specification forming part of Letters Patent No. 155,662, dated October 6, 1874; application filed August 10, 1874.

To all whom it may concern:

Be it known that I, LAURITZ MELAND, of Iowa Falls, in the county of Hardin and State of Iowa, have invented a new and Improved Corn and Feed Mill, of which the following is a specification:

The invention will first be fully described,

and then pointed out in the claim.

Figure 1 is a longitudinal sectional elevation of my improved mill, on line x x of Fig. 2. Fig. 2 is a plan view with the top of the case removed; and Fig. 3 is a cross-section, taken on the line y y of Fig. 1.

Similar letters of reference indicate corre-

sponding parts.

A represents a pair of cylinders, of steel or other approved material, arranged horizontally side by side, on journals B, in a double hollow case or shell, C, of metal or other suitable material, with a vertical steel blade, D, rising up between them to the middle or thereabout, from the lower portion of the shell, wherein it is fixed, so that it can be adjusted higher or lower, as may be required, by setscrews E. These cylinders have spiral grooves or furrows F formed in them at suitable distances apart, said grooves having one wall radial to the axis of the cylinder, or thereabout, while the other forms an acute angle to the surface of the cylinder, and precedes the former as the cylinder revolves, to present a sharp cutting angle to the grain. The furrows of the two cylinders are pitched or inclined in opposite directions, so that as the cylinders turn toward each other, the furrows of both tend alike to convey the grain from the receiving end to the discharging end of the mill. G is a guard, projecting down from

the top of the case between the cylinders, near to the middle, at the lower side of the passage, by which the grain enters from the hopper H, to insure its passing down between the cylinders, and prevent its escape along them to the discharging end in the groove or channel formed by the cylinders lying side by side. J and K represent escape-passages for the meal. L represents cog-wheels, by which the cylinders are geared together, and M the driving-pulley.

The mill is intended merely for grinding corn and feed, and is adapted to be driven by

horse-power, thus making a cheap and serviceable mill for farmers' use.

The operation is as follows: The grain is first cracked as it falls between the cylinders at one end, and is carried against the blade and then pulverized between the cylinders and case, while, at the same time, it is gradually transferred to the discharge-openings at the upper and lower sides of the chamber containing the cylinders.

Having thus described my invention, I claim as new and desire to secure by Letters Pat-

ent-

The cylinders A A, having correspondent acute-angled spiral furrows and edges, arranged in a case, C, and placed in the same horizontal plane, in combination with the blade D, projecting up intermediately nearly or about to the middle of said cylinders, as and for the purpose specified.

LAURITZ MELAND.

Witnesses: CHR. MELLEN, THO. TENNYSON.