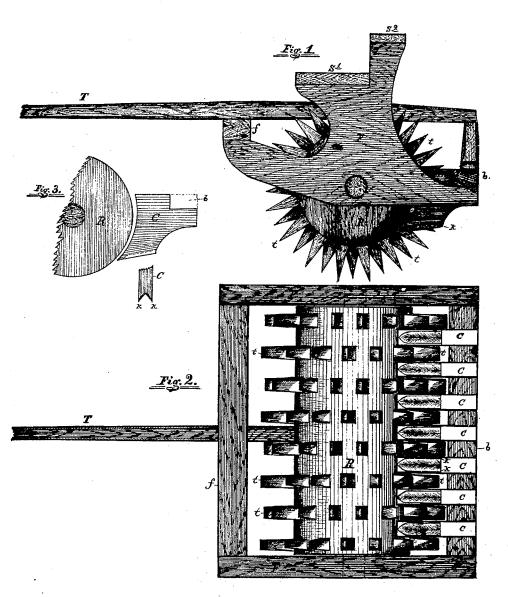
I.B.Ohry, Chal Crusher.

No. 112,071.

Patented Feb. 21.1871.



F. A. Lehr Mature

Joseph BX OKey mark Inventor

# United States Patent Office.

JOSEPH B. OKEY, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO HIMSELF AND FERDINAND A. LEHR, OF SAME PLACE.

Letters Patent No. 112,071, dated February 21, 1871.

#### IMPROVEMENT IN CLOD-CRUSHERS.

The Schedule referred to in these Letters Patent and making part of the same.

I, JOSEPH B. OKEY, of Indianapolis, in the county of Marion and State of Indiana, have invented certain Improvements in Clod-Crushers, of which the following is a specification.

### Nature and Objects of the Invention.

My invention relates to the construction of a series of stationary teeth, with two cutting-corners to each, and adjusted so as to project between the rows of teeth on a revolving toothed roller.

By this arrangement the stationary teeth perform the office of cleaners to the revolving roller, while their cutting-corners likewise act as shears, in conjunction with the teeth on the roller, and will cut up cornstalks and weeds into short pieces at the same time that the toothed roller is pulverizing the clods and grinding the surface soil to powder.

# Description of the Accompanying Drawing.

Figure 1 is a side elevation of my clod-crusher; Figure 2 is a plan of the same on its under side, the crusher being turned bottom side up; and

Figure 3 is a section of the roller, minus its teeth, and one of the stationary teeth, showing its relation to the roller; also a piece of stationary tooth, showing a cross-section of it with its cutting-corners.

## General Description.

F is the frame of the revolving roller R. f and b are cross-bars that hold the two sides F to-

gether.

The roller may be made of wood, or any other material desired. It may be three feet long, more or less, and of any desirable diameter. It journals into

This roller is filled with tapering teeth t, substantially as shown in figs. 1 and 2, of any desirable length and shape, disposed in regular rows around the roller, so as to leave spaces for the stationary teeth C C between them (see fig. 2)

tween them, (see fig. 2.)

The teeth t may be made of iron, steel, or any other suitable material. They should be square on their front face, and should play close to the cutting-corners K K on C.

The stationary teeth C, fig. 2, may be made of iron, or part wood and part metal, the body of wood, and steel knives K K secured on its sides.

These cutting-corners may be placed on a line with each other, or the two edges of the same tooth O may be on different horizontal lines, one an inch or so lower than the other. With them so arranged a stalk or weed will be cut with less force than it would require if these edges were on the same plane.

These stationary teeth C C are bolted to the crossbar b, and project forward and curve a little under the roller R, (see fig. 3.) The dotted lines in this figure show the place where the cross-bar b is fitted into C.

C, in fig. 3, shows the cutting-corners K K as they project down.

 $S^1$  and  $S^2$ , in fig. 1, are seats for the driver, whose feet can rest on the cross-bar f, to which the tongue T is secured. The rear end of the tongue is bolted to the bracket, which projects above cross-bar b.

It will be seen that when my clod-crusher is in operation, and the roller R is revolving, the teeth t t on R pass between stationary teeth C C in exactly the same manner that one blade of a pair of shears passes the other blade—commencing the cut at one end and finishing it at the other. The machine, in this way, cuts up corn-stalks and weeds most thoroughly, and mixes them in the pulverized soil.

# Claim.

In a clod-crushing machine, the stationary teeth or cutters C C, their lower surfaces being so formed as to present an acute angle with reference to their sides, in combination with the teeth of a revolving cylinder, the latter being so constructed as to nearly fill the space between the stationary ones, and thus, in conjunction therewith, form cutting-edges or devices, substantially as and for the purpose set forth.

JOSEPH B.  $\stackrel{\text{bis}}{\times}$  OKEY

Witnesses:

F. A. LEHR, ERASTUS T. BUSSELL.