

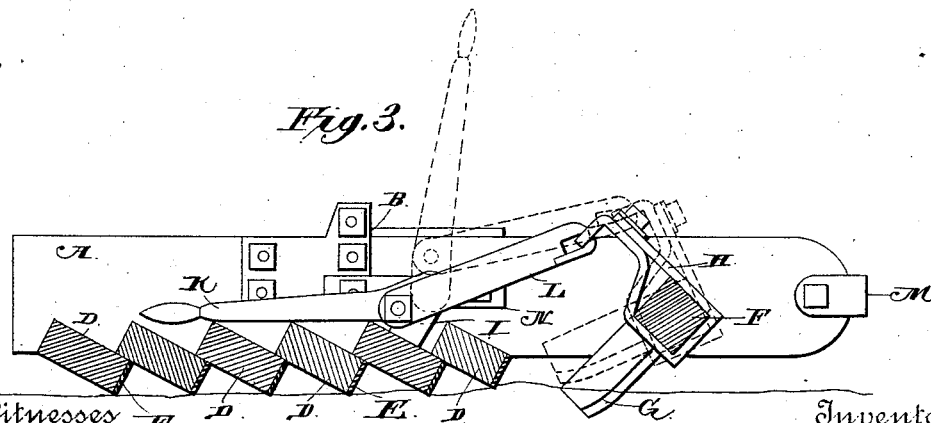
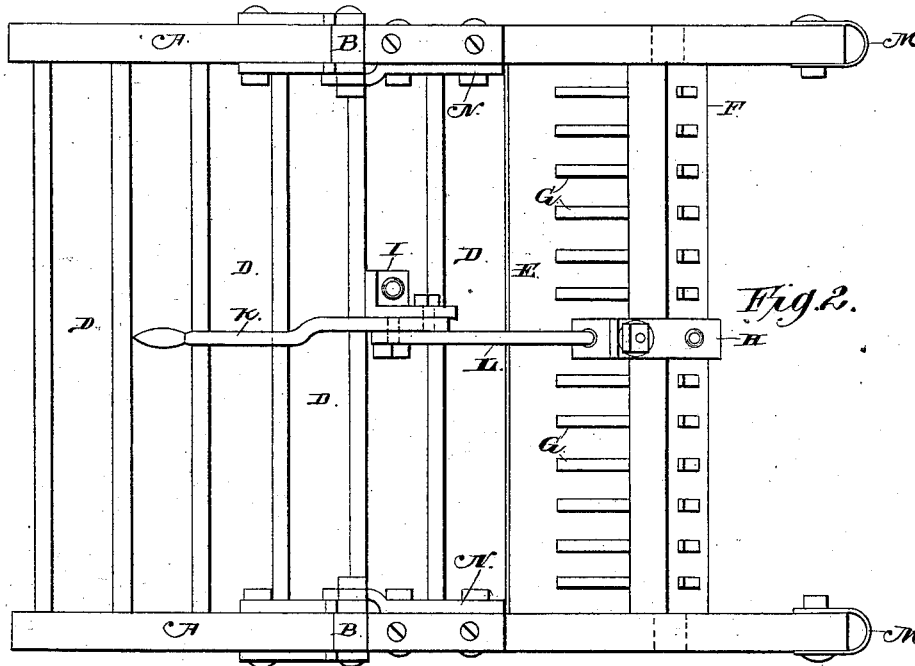
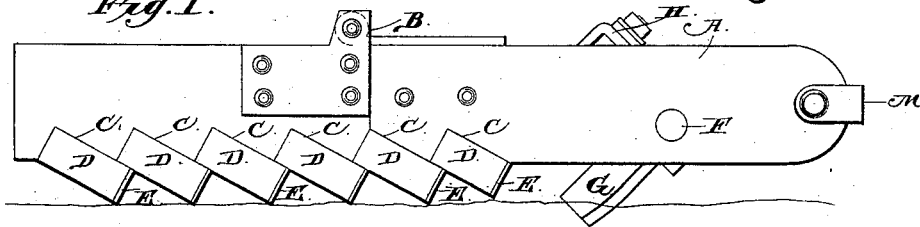
(No Model.)

F. EVISON.

CLOD CRUSHER AND PULVERIZER.

No. 347,098.

Patented Aug. 10, 1886.



Witnesses
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UNITED STATES PATENT OFFICE.

FRANCIS EVISON, OF MORENCI, MICHIGAN.

CLOD CRUSHER AND PULVERIZER.

SPECIFICATION forming part of Letters Patent No. 347,098, dated August 10, 1886.

Application filed April 29, 1886. Serial No. 200,586. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS EVISON, a citizen of the United States, residing at Morenci, in the county of Lenawee and State of Michigan, have invented a new and useful Improvement in Clod Crushers and Pulverizers, of which the following is a specification.

My invention relates to an improvement in clod crushers and pulverizers; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation of my invention. Fig. 2 is a top plan view of the same. Fig. 3 is a vertical longitudinal section.

A represents the side beams of the pulverizer, which are hinged at their centers, as at B, and thereby divide the pulverizer into a front and a rear section. On the under sides of the side beams for a suitable distance from the rear ends thereof are made a series of forwardly-inclined serrations, C, to which are secured cross-bars D, which form the bottom of the pulverizer. These cross-bars incline forwardly, their front edge being the lowest, and the rear edge of each cross-bar overlaps the front edge of the cross bar in rear thereof, as shown. The front edges of the cross-bars are faced with metallic strips E, in order to prevent them from wearing. From this construction it will be readily understood that the pulverizer is made in two sections, which are hinged together. The front ends of the side beams, A, project forwardly in advance of the cross-bars for a suitable distance, and are connected together by a rock-shaft, F, the ends of which are journaled in the front end of the beams A. This rock-shaft carries a transverse series of knives or cutters, G, which are attached separately to the rock-shaft, and are detachable therefrom and extend from the lower side of the rock-shaft in a line with each other. The front edges of these knives or cutters are sharpened, as shown, and to the center of the rock-shaft is attached an arm, H.

I represents a bracket, which is bolted to one of the cross-bars D at a suitable distance from the front end of the machine, and to the upper end of the said bracket is pivoted a

hand-lever, K. This lever is connected to the rear end of the arm H by means of a rod, L.

To the front ends of the beams A are attached clevises or loops M, for the attachment of the draft-animals.

N represents removable connecting-bars, which are bolted to the inner sides of the hinged jointed side beams, so as to connect the said beams rigidly together when it is not desired to allow one section of the pulverizer to play independently of the other, and in order to make the entire pulverizer form a single inflexible section, which is necessary in stiff soil.

When it is desired to use the pulverizer and permit the two sections thereof to play independently of each other, the connecting-bars N are unbolted from the side beams and removed.

The operation of my invention will be very readily understood. As the pulverizer is drawn along, the transverse bars D bear upon the clods and thoroughly break and disintegrate them. The cutting-knives, which travel in advance of the bars D, serve to loosen the soil in advance of the bars, and to cut up the trash and brush. When it is not desired that the said cutters shall run in the ground, they may be raised out of contact therewith by throwing the hand-lever forwardly in the position shown in dotted lines in Fig. 3.

Having thus described my invention, I claim—

1. The pulverizer comprising the side beams, A, and the transverse forwardly-inclined bars D, secured on the lower sides of the beams A, the said beams being hinged at their centers, and thereby dividing the pulverizer into a front and a rear section, substantially as described.

2. The combination of the pulverizer comprising the side beams, A, divided and hinged at their centers, for the purpose set forth, and the cross forwardly-inclined bars D, secured on the under sides of the said beams, with the connecting-bars N and the bolts or means to secure the said bars to the side beams over the joints or hinged portions thereof to render the pulverizer inflexible, substantially as described.

3. The combination of the pulverizer comprising the side beams and the forwardly-in-

clined cross-bars secured under the said beams, with the transverse rock-shaft journaled in the forward-projecting ends of the side beams, and having the cutting-teeth and the arm H, the
5 bracket I, secured to one of the cross-bars, the lever K, fulcrumed to the said bracket, and the link or rod L, connecting the said lever with the arm H, the said lever being curved or bent, and thereby adapted to lie horizon-

tally on the bottom of the pulverizer when the teeth are lowered, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

FRANCIS EVISON.

Witnesses:

WM. EATON, Jr.,

HENRY C. SMITH.