

No. 649,274.

Patented May 8, 1900.

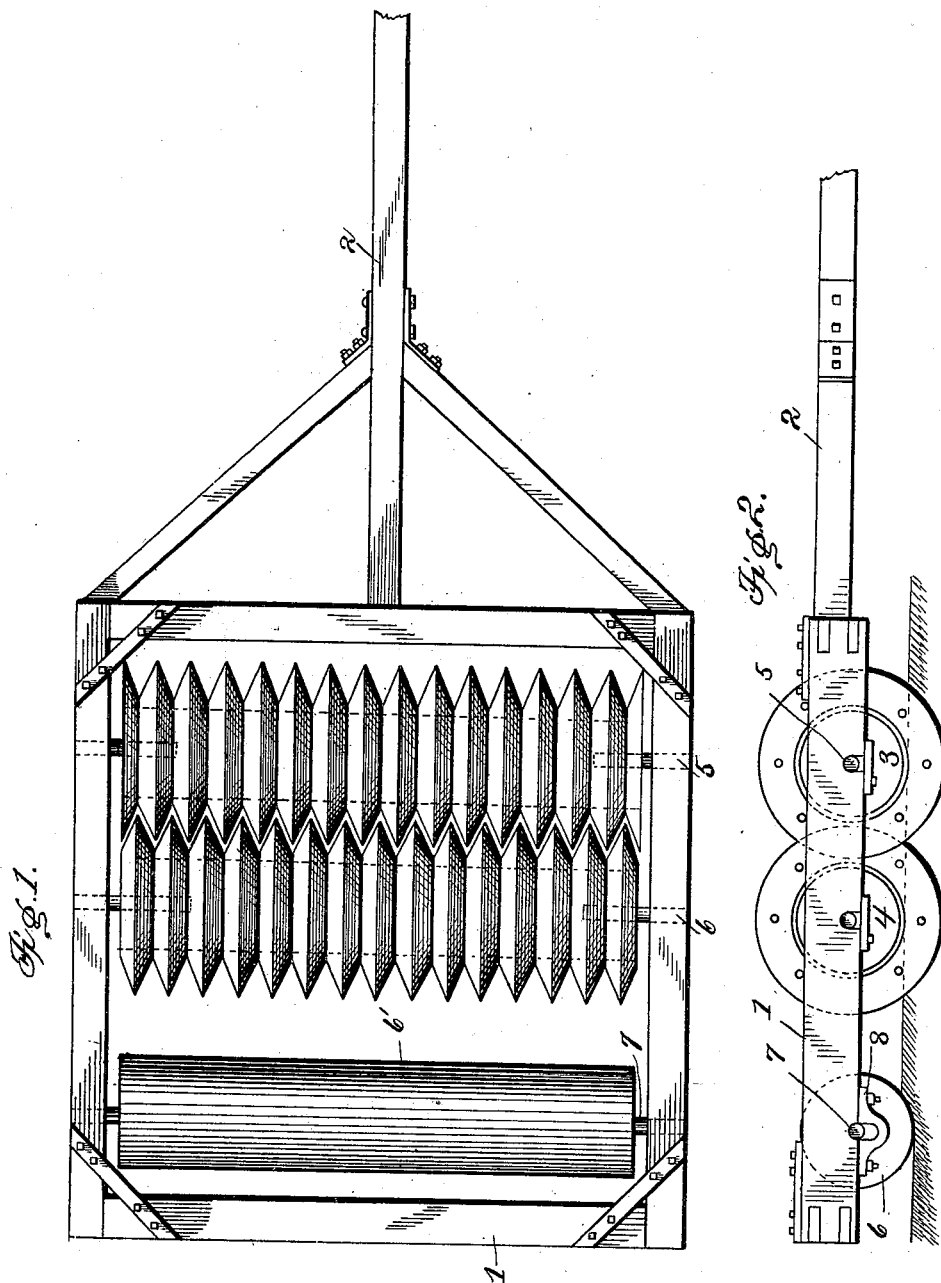
H. DAVERKOSEN & L. NIELSON.

COMBINED CLOD CRUSHER, PULVERIZER, AND LAND ROLLER.

(Application filed Jan. 11, 1900.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses

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2 Sheets—Sheet 2.

Fig. 3.

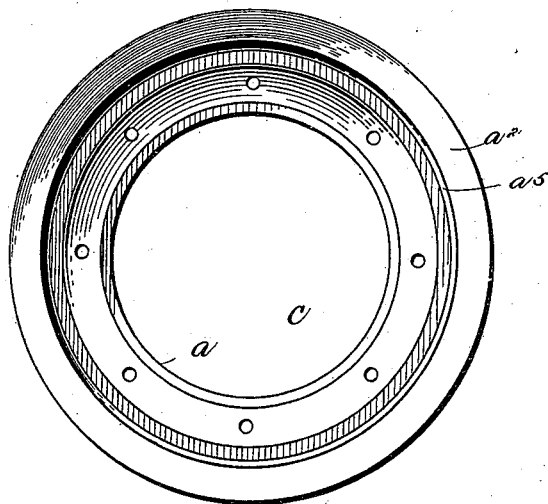


Fig. 4.

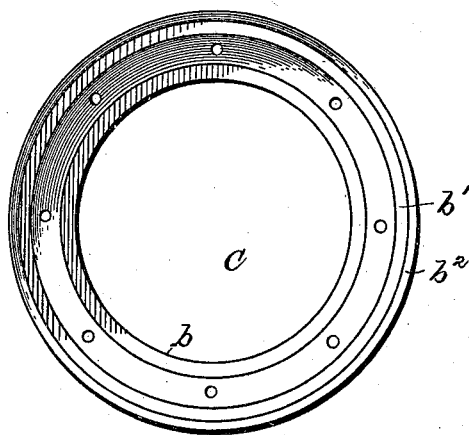
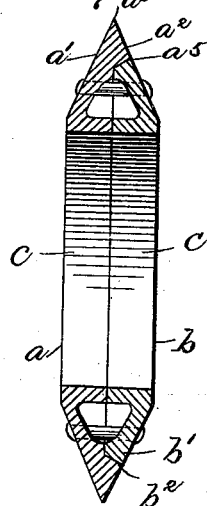


Fig. 5.



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UNITED STATES PATENT OFFICE.

HARRY DAVERKOSEN AND LUIS NIELSON, OF JANESVILLE, WISCONSIN.

COMBINED CLOD-CRUSHER, PULVERIZER, AND LAND-ROLLER.

SPECIFICATION forming part of Letters Patent No. 649,274, dated May 8, 1900.

Application filed January 11, 1900. Serial No. 1,108. (No model.)

To all whom it may concern:

Be it known that we, HARRY DAVERKOSEN and LUIS NIELSON, citizens of the United States, residing at Janesville, in the county of Rock and State of Wisconsin, have invented certain new and useful Improvements in a Combined Clod-Crusher, Pulverizer, and Land-Roller; and we do 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.

The invention relates to a combined clod-crusher, pulverizer, and land-roller.

The object of the invention is to provide a machine of this character which shall be simple of construction, durable in use, comparatively inexpensive of production, and efficient in operation.

To this end the invention consists in certain features of construction and combination of parts, which will be hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a top plan view of the machine. Fig. 2 is a side elevation. Figs. 3 and 4 are views of the sections forming one of the pulverizing-rings. Fig. 5 is a vertical sectional view through one of the pulverizing-rings.

In the drawings the same reference characters indicate the same parts of the invention.

1 denotes the frame of the machine, preferably rectangular in construction, and 2 the draft-tongue, suitably connected to said frame.

3 and 4 denote wooden cores, the axes 5 and 6 of which are journaled in the side bars of the frame 1. Upon these cores are arranged the clod crushing and pulverizing rings. Each ring consists of two sections a and b , having an enlarged aperture c to fit the core. The section a has inclined surfaces a' and a'' , which converge to a sharp edge a^3 . The surface a'' has an angular recess a^5 . The section b has an inclined side b' , with an angular annular shoulder b^2 to correspond with the angular recess a^5 . A bolt or rivet is inserted through the sides of the two sections and securely holds them together.

Each core 3 and 4 is provided with a gang of these rings, which are arranged to mesh or alternate, as shown in Fig. 1, so as to be self-cleaning in operation. At the rear of these pulverizers and clod-crushers is arranged a land-roller 6, which has its axis 7 journaled

in bearings 8 to permit of the side pieces of the frame moving up and down with respect to the land-roller, and thereby not interfere with the pulverizers in their penetration of the ground.

In operation as the machine is drawn along the pulverizers will penetrate the ground and break up and pulverize the clods, and the roller 6, being arranged directly at the rear of the pulverizers, will smooth the ground.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of our improved combined clod-crusher, pulverizer, and land-roller will be readily apparent without requiring an extended explanation. It will be seen that the machine is simple of construction, that said construction permits of its manufacture at small cost, and that it is exceedingly well adapted for the purpose for which it is designed.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. The combination with the main frame, of pulverizers journaled therein and of a land-roller journaled in said frame at the rear of the pulverizers and having a vertical movement within said frame, substantially as and for the purpose set forth.

2. As an article of manufacture, a pulverizer-ring consisting of two sections, one section being provided with inclined faces a' and a'' terminating in a sharp periphery a^3 and formed with an annular angular recess a^5 , and the other section having an inclined side b' and formed with an angular annular shoulder b^2 to engage said recess, and bolts or rivets for securing the two sections together, substantially as and for the purpose set forth.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

HARRY DAVERKOSEN.
LUIS NIELSON.

Witnesses:

F. C. BURPEE,
MAGGIE C. SMITH.