L. B. BALL.

Horse Rake.

No. 67,705. Patented Aug. 13, 1867.

Fig. 2.

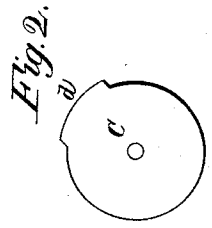
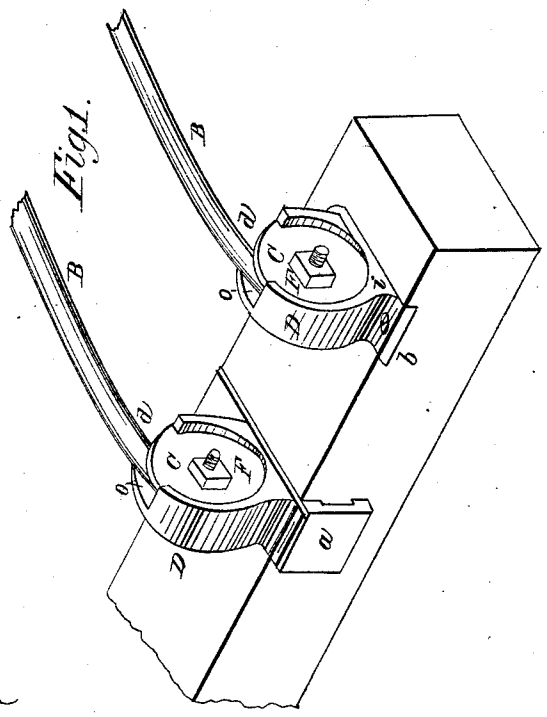


Fig. 1.



attest { J. H. Phillips
H. Marston

Inventor
Levi B. Ball,
by atty. J. C. Clayton

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

LEVI B. BALL, OF DAYTON, OHIO, ASSIGNOR TO HIMSELF AND CHRISTIAN OLDBROOK.

Letters Patent No. 67,705, *dated August* 13, 1867; *antedated February* 13, 1867.

IMPROVEMENT IN HORSE-RAKES.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, LEVI B. BALL, of Dayton, in Montgomery county, in the State of Ohio, have invented certain new and useful improvements in the Device Used for Attaching the Teeth to Hay-Rakes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification.

The nature of my invention consists in the peculiar construction (hereinafter fully described) of the device for securing the teeth of a hay-rake to the rock-bar, so as to prevent lateral motion of the points of the teeth.

In the drawing, G represents the rocking-bar, to which the teeth are to be secured. B B are the teeth, of the common form. D is the housing for receiving the end of the tooth. This housing is made of cast iron, having two flanges, *a b*, at opposite ends of its flat base *c*, so as to fit closely to the rocking-bar. The upper part of the housing marked D is a short hollow cylinder, about two inches in diameter, and half an inch deep, and having a slot, *d*, about three-fourths of an inch long through the side of the cylinder for the tooth to play in. C is a washer or plate, which fits to the housing as a head to its cylinder. F is a screw-bolt, which passes through the housing D, the eye of the tooth B, and through plate C, so as to firmly hold the tooth in the housing and prevent any lateral movement of the tooth, which is allowed to have some play in the slot *d*. I sometimes provide the housing D with a dove-tail base, *i*, to fit into a corresponding groove in the rock-bar G, so as to cheaply and firmly secure the housing to the rock-bar.

The advantages of my invention consist in its cheapness and strength.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The housing D, provided with slot *o*, in combination with plate C, provided with projection *d* and bolt F, substantially as and for the purposes set forth.

2. Providing the housing D with a dove-tail base, *i*, to fit into a corresponding groove *i* in the rocking-bar G, substantially as and for the purposes set forth.

LEVI B. BALL.

Witnesses:

WARREN MUNGER, Jr.,

J. L. H. FRANK.