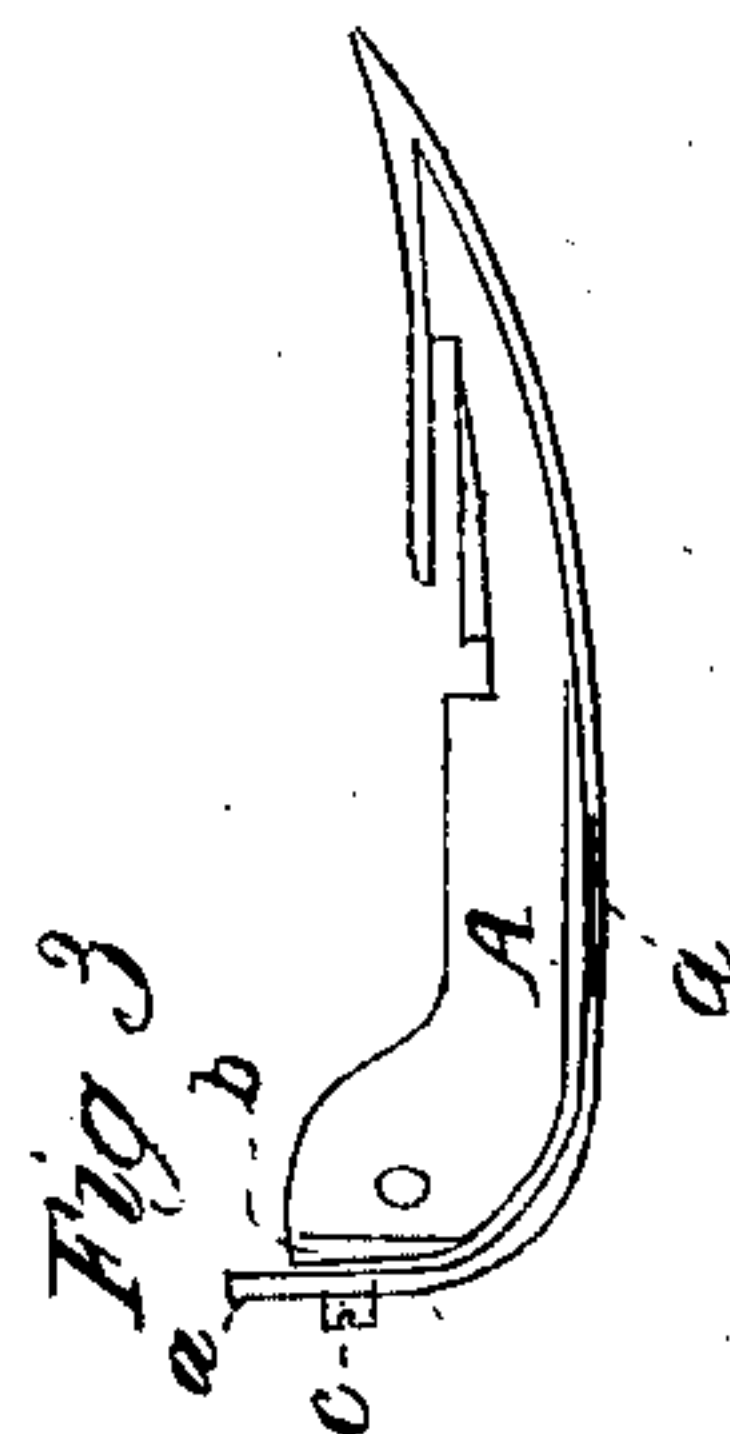
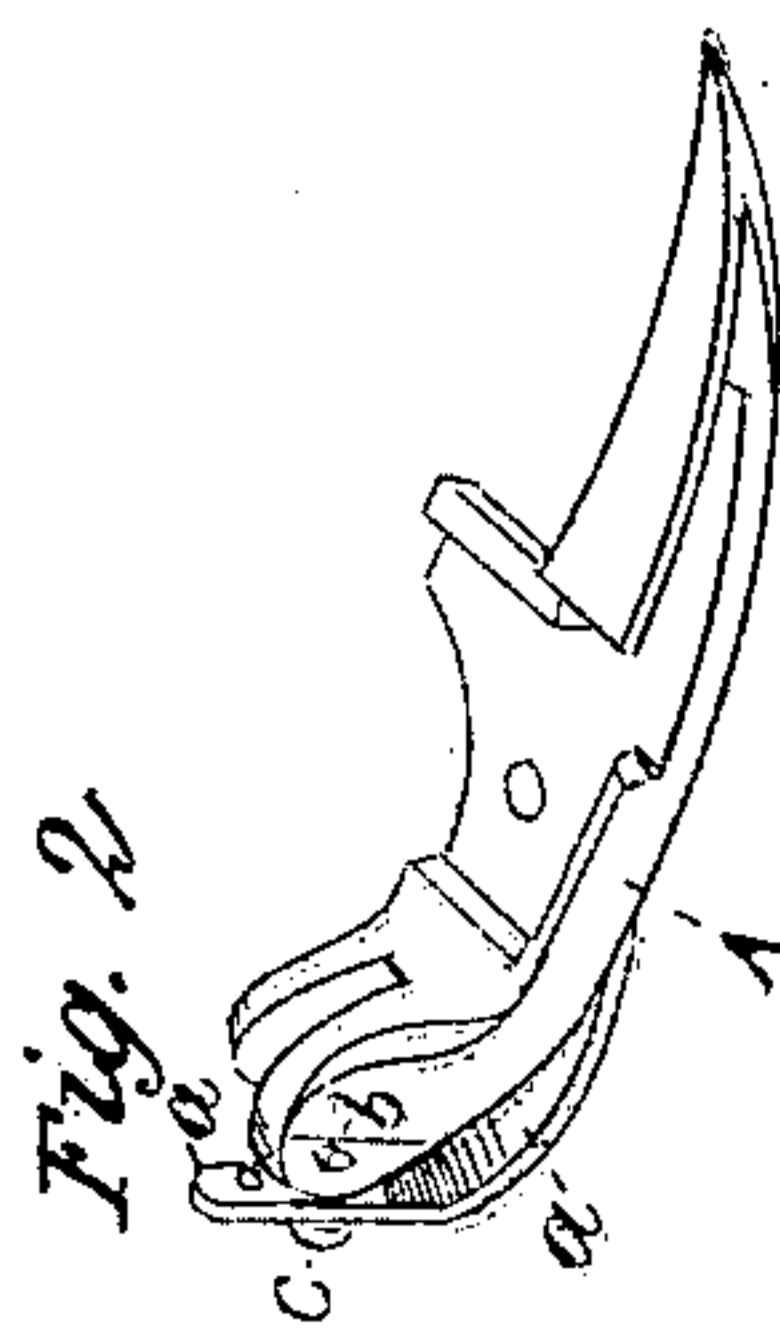
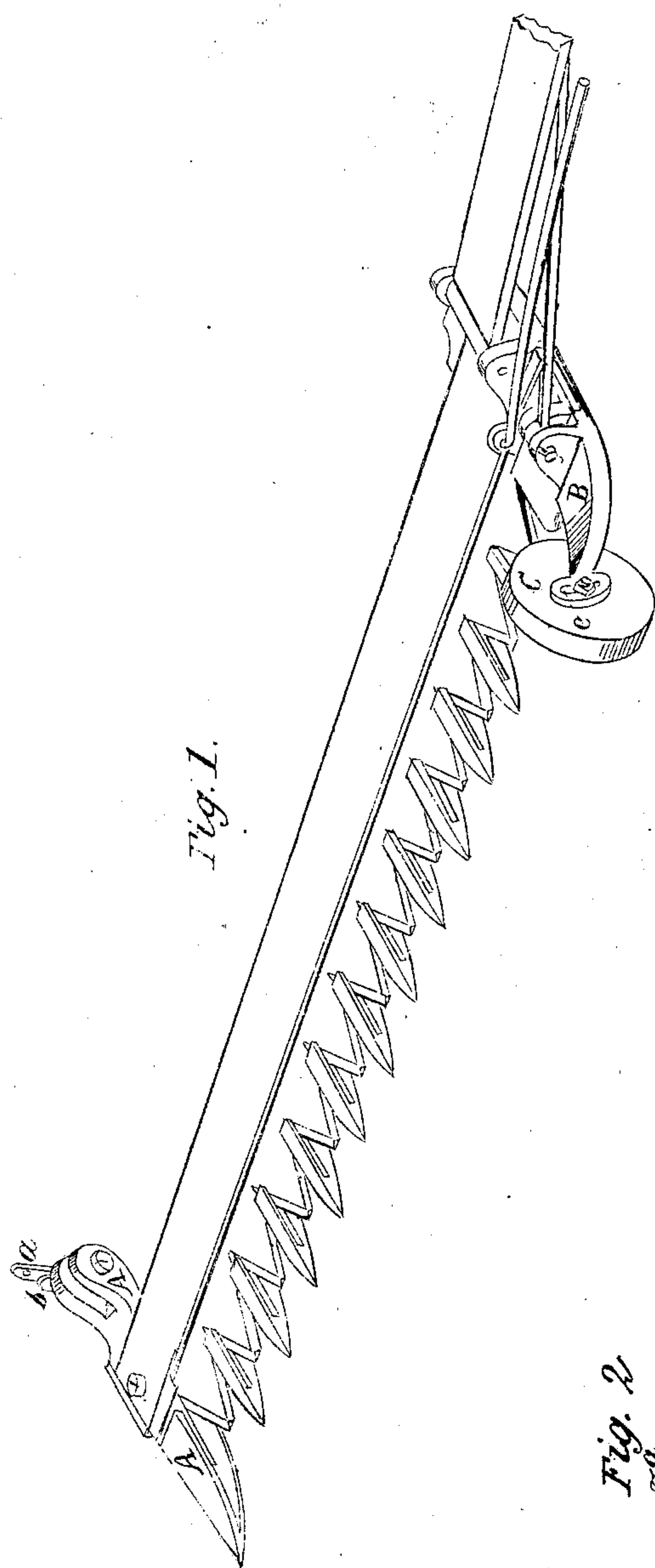


*L. Miller.*  
*Harvester Cutter.*

*No 20181*

*Patented May 4 1858*



# UNITED STATES PATENT OFFICE.

LEWIS MILLER, OF CANTON, OHIO, ASSIGNOR TO C. AULTMAN & CO., OF  
SAME PLACE.

## IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 20,181, dated May 4, 1858.

*To all whom it may concern:*

Be it known that I, LEWIS MILLER, of Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in the Shoes or Dividers of Harvesting-Machines; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents in perspective the finger-bar, fingers or guards, cutters, and inside and outside dividers or shoes, with broken portions of the parts that connect them with the main frame. Figs. 2 and 3 represent different views of the outside divider or shoe.

Similar letters of reference, where they occur, denote like parts of the apparatus in all the figures.

In all mowing-machines there is a shoe or divider, or should be, at each end of the cutter or finger bar; and as the functions of these shoes or dividers are different they themselves must be different, though each adding to the general result, and both equally inseparable from that result. The outer shoe is to divide the grass or grain that is to be cut from that which is to be left standing, while the inner or opposite one has to do mainly with the grain or grass that has been cut.

My invention consists in combining with the inner shoe of a harvesting-machine an adjustable supporting-wheel, when said wheel is in advance of the point of the divider or shoe.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A represents the outer shoe, which is provided with all the necessary flanges and recesses for receiving the finger-bar, the track-clearer, and the opening for the cutter-bar or cutter to pass through in their vibration.

To the bottom of the shoe I attach a sole or runner, *a*, which is permanently fixed to the point or toe of the shoe, and extends back and turns up at the rear of the shoe, being loose from the shoe in all its rear portion. There is a lug, *b*, connected to the shoe, which

receives a screw, *c*, that passes through one of a series of adjustable holes in the bent-up end of said sole. Now, by means of said screw, lug, and adjustable holes the shoe can be raised or let down, as may be required.

I am aware that a spring-sole has been used on a shoe for the purpose at which I aim; but a spring-sole fails to accomplish the purpose, because the grass, gum, &c., are constantly gathering under it and forcing it out, and the difficulty of removing this packed gum and grass is one of the greatest annoyances of harvesters and the most difficult to avoid. My sole, when adjusted, is permanent. Nothing can affect its adjustment except when done by the conductor. It is therefore reliable and unchanging as a spring-sole would be.

B is the inner shoe. It also is furnished with all the necessary parts that make it effective for its purpose. My improvement in this shoe consists in placing a supporting adjustable wheel, C, in the front part of and in advance of the shoe, so that the said wheel will have rolled or passed over the cut grass before the shoe comes to it. The object is obvious, for when the wheel is placed behind the point of the shoe the dividing is commenced before the wheel reaches the cut grass, and when the wheel does reach the cut grass it either holds it against the action of the divider or else rolls it up and tangles it.

Wheels placed behind the point of the shoe do not effect the purpose, and I lay no claim to such, as they interfere with the proper action of the divider. By means of the slot *e* and journal or axle of the wheel C passing through it I raise or lower the shoe, so as to give it the desired position with regard to the surface of the ground.

Having thus fully described the nature and object of my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

In connection with the inner shoe, an adjustable supporting-wheel, when said wheel is in advance of the point of the divider or shoe, as herein set forth.

LEWIS MILLER.

Witnesses:

DANIEL GOTSHALL,  
ELI WAGNER.