No. 21,628.

F. W. ROBINSON. LLIC RIDDLE.

Patented Sept. 28, 1858.

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UNITED STATES PATENT OFFICE.

F. W. ROBINSON, OF RICHMOND, INDIANA.

RIDDLE FOR THRESHING-MACHINES.

Specification of Letters Patent No. 21,628, dated September 28, 1858.

To all whom it may concern:

Be it known that I, F. W. ROBINSON, of Richmond, in the county of Wayne and State of Indiana, have invented a new and 5 useful Improvement in Metallic Riddles for Threshing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to 10 the annexed drawings, making a part of this specification, in which—

Figure 1, is a perspective view of my invention. Fig. 2, shows a longitudinal section. Fig. 3 shows a longitudinal section 15 of the iron, separate from wood.

A, A, A, A, is the frame of an ordinary riddle.

B, B, B, are wooden slats two and one half inches in width and half an inch thick.

It will be seen by the drawings that there are two rows of apertures and tongues between each pair of slats.

Operation: This riddle is used similarly 45 to other metallic riddles.

I am aware that metallic riddles are now in use, formed of a thin plate of metal and punched with a semicircular instrument, for the purpose of producing semicircular aper- 50 tures, and at the same time leaving the parts thus partly punched from said plate overhanging said apertures at an angle of thirty or forty degrees, for the purpose of allowing the grain to pass through said apertures 55 and at the same time preventing the straw and chaff from entering them, but the difference between my invention and the above. will be understood when it is observed that while those lips or tongues turn up, point- 60 ing backward mine turn downward and forward, and while those are left for the purpose of preventing the straw and chaff from passing through the riddle, mine are for the purpose of deflecting the wind up- 65 ward thereby lifting the straw and chaff and separating them from the grain. The wooden slats being used to prevent the passage of the chaff and straw. Now what I claim as my invention and 70 desire to secure by Letters Patent, is— as shown and described, in combination with slats, B, B, B, B, for purposes herein set forth.

20 They are secured between the sides of the frame at an angle of about 35 degrees. Their edges being beveled so as to be upon a plane with the edges of the frame. They are also secured to the metallic plate, C, by 25 nails driven from the under side when deemed necessary.

C, is a metallic plate punched with apertures of suitable shape, at the same time the portions of metal that are freed by the 30 punch are bent down to an angle of forty five degrees more or less. These deflect the blast from its straight forward direction and turn it upward through the riddle. This upward current of air has a tendency 35 to lift the straw and chaff upon the riddle thereby assisting it in passing from the riddle, and also freeing the grain from the chaff and straw and allowing a direct escape.

F. W. ROBINSON.

Attest:

S. C. MENDENHALL,

40 c, c, c, c, are the metallic lips or tongues formed as above described.

R. A. HOWARD.