

No. 706,061.

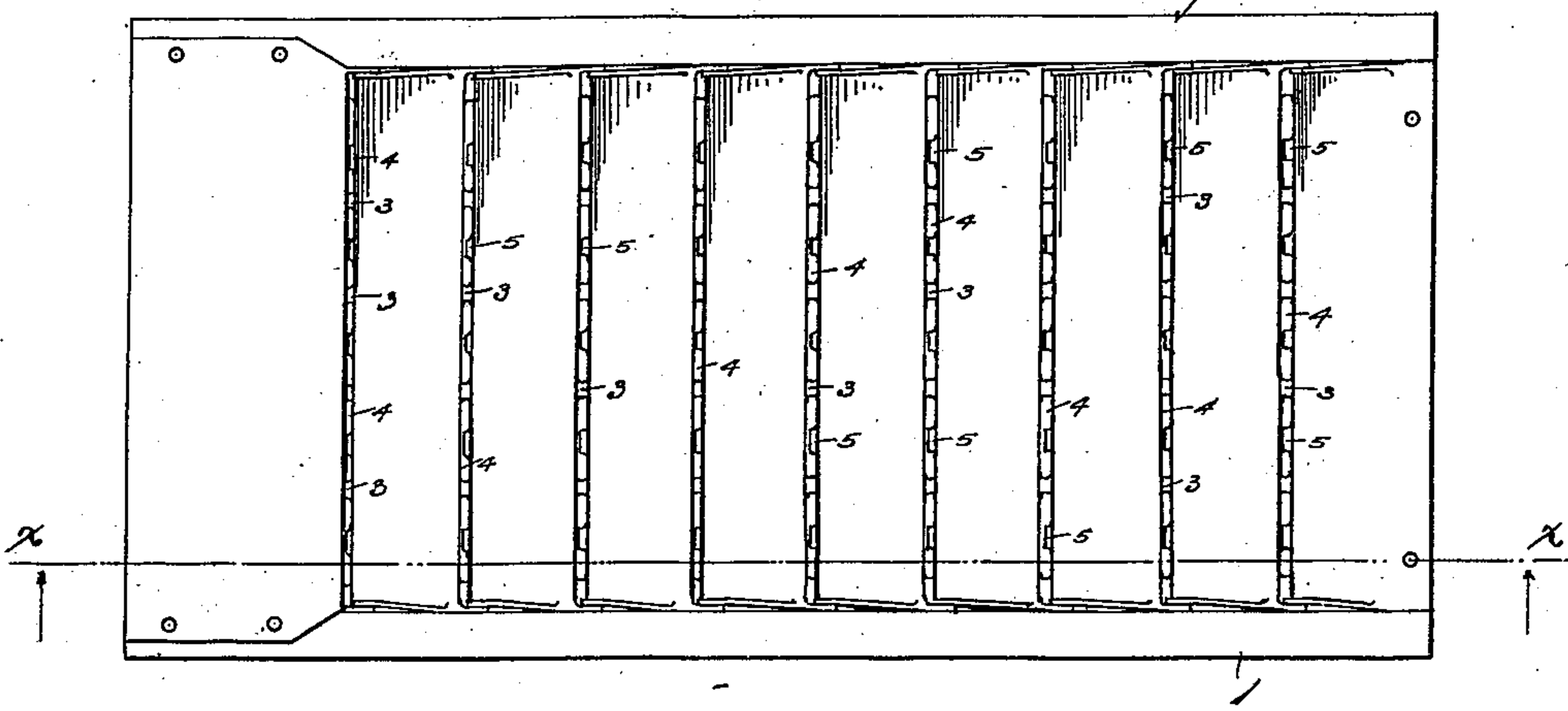
Patented Aug. 5, 1902.

E. HUBER.  
RIDDLE.

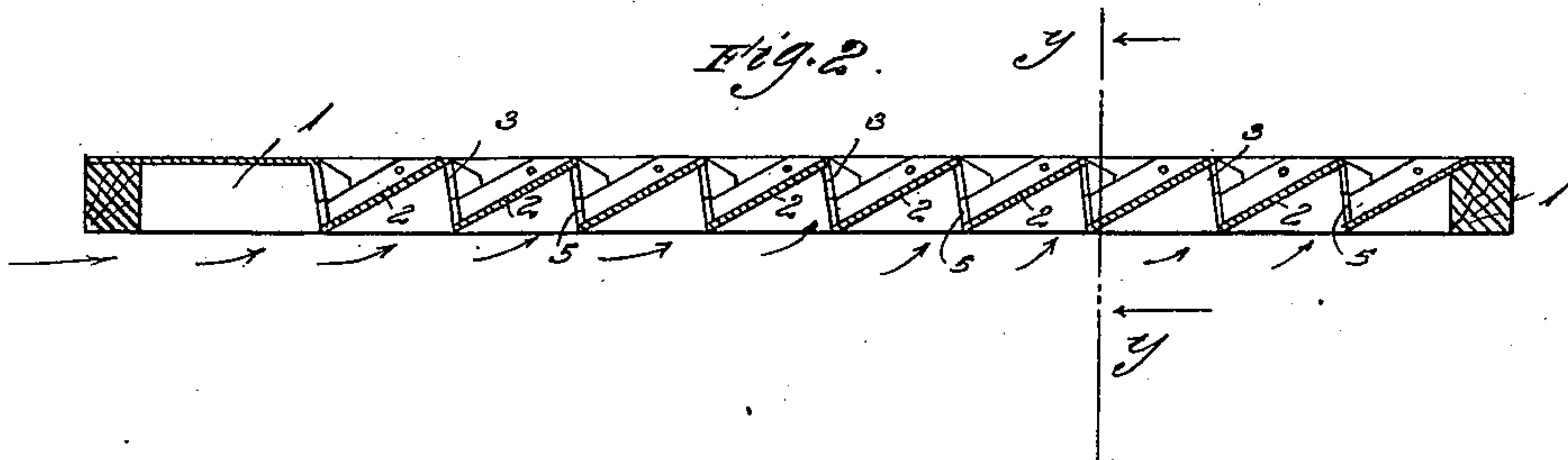
(Application filed Dec. 30, 1901.)

(No Model.)

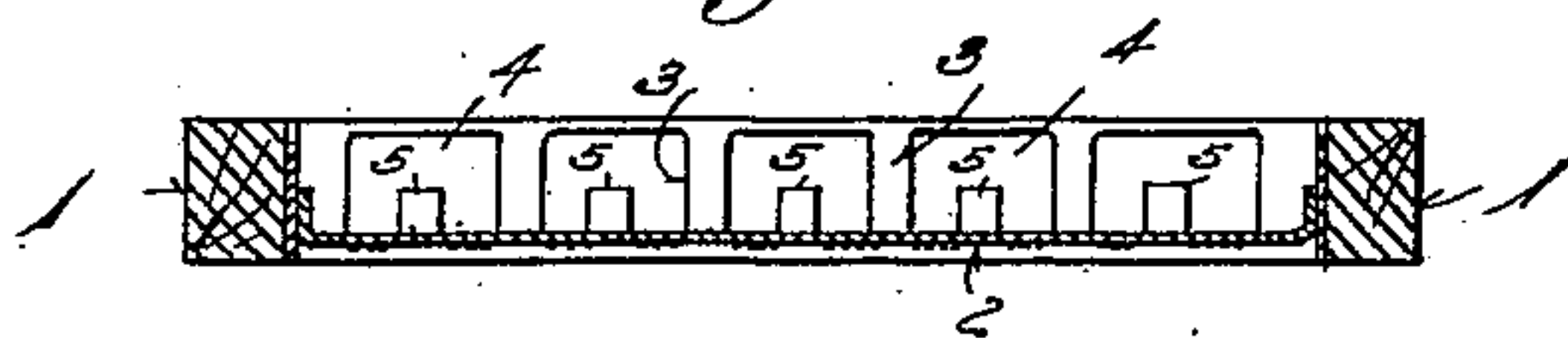
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

EDWARD HUBER, OF MARION, OHIO.

## RIDDLE.

SPECIFICATION forming part of Letters Patent No. 706,061, dated August 5, 1902.

Application filed December 30, 1901. Serial No. 87,669. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD HUBER, a citizen of the United States, residing at Marion, in the county of Marion and State of Ohio, have  
5 invented certain new and useful Improvements in Riddles, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to riddles, and has  
10 for its object to produce a riddle for cleaning grain which is adapted for successful operation in cleaning different kinds and sizes of grain, both in small or large bulk.

To these ends my invention consists in certain novel features, which I will now proceed  
15 to describe and will then particularly point out in the claims.

In the accompanying drawings, Figure 1 is a plan view of a riddle embodying my invention  
20 in one form. Fig. 2 is a longitudinal sectional view of the same, taken on the line  $x x$  of Fig. 1 and looking in the direction of the arrows; and Fig. 3 is a transverse sectional view of the same, taken on the line  $y y$   
25 of Fig. 2 and looking in the direction of the arrows.

In the said drawings, 1 indicates the supporting-frame of the riddle, which may be of any suitable construction.

30 The body or working portion of the riddle is preferably constructed of a single sheet of metal and comprises a plurality of inclined slats 2, preferably imperforate, their inclination being upward and rearward away from  
35 the receiving end of the riddle and the lower edge of each slat lying under or practically under the upper edge of the preceding slat. The lower edge of each slat is connected with the upper edge of the preceding slat by a plu-  
40 rality of upright bars 3, separated by suitable intervals, so as to form spaces or openings 4 of a height equal to the distance between the adjacent edges of the slats and of a width about three times that of the bars, these pro-  
45 portions being those which I prefer. From the lower edge of each slat there extends upward within each space 4 at the center thereof a projection 5 to about mid-height of said opening, these projections forming a comb  
50 along the lower edge of the slat and there being spaces between the projections and bars about equal to the width of said projections

and bars, which are themselves preferably of about equal width. It will thus be seen that the upright or vertical portions of the riddle  
55 are provided with a plurality of comparatively narrow openings along their lower portions and with a plurality of larger openings along their upper portions. In operating upon small grain and in small bulk the grain  
60 will pass only through the narrower openings between the projections and bars along the lower edges of the slats, and rubbish or particles larger than these narrow lower open-  
65 ings will be thrown backward by the blast and agitation of the riddle, which will be vibrated in the usual manner, so that said rubbish and particles will be worked out over the riddle and out of the mill, being thus  
70 kept out of the grain. When cleaning large grain and in large bulk, the grain will pass through the larger openings above the comb; but the blast coming through these openings will blow back the lighter parts of the rub-  
75 bish and the lighter particles, while the heavier and larger particles will work down to the lower edges of the slats under the grain and will be arrested by the comb, or, in other words, by the lower portions of the bars and  
80 by the projections and will be ultimately thrown out by the combined action of the blast and the agitation of the riddle. It will thus be seen that by reason of the construction which I have devised both large and  
85 small grain in large and small bulk can be conveniently separated from and cleaned of foreign matter.

I do not wish to be understood as limiting myself to the precise details of construction hereinbefore described, and shown in the ac-  
90 companying drawings, as it is obvious that these details may be modified without departing from the principle of my invention.

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

1. A riddle for cleaning grain, comprising inclined slats, bars extending from the lower edge of each slat to the upper edge of the preceding slat, and projections between the bars,  
100 extending upward from the lower edge of each slat into the opening formed between the adjacent bars, substantially as described.

2. A riddle for cleaning grain, comprising



inclined slats, a plurality of substantially up-  
right bars extending from the lower edge of  
each slat to the upper edge of the preceding  
slat, thereby forming openings or spaces, and  
5 projections extending up centrally from the  
lower edges of the slats into said openings or  
spaces, whereby there are formed a plurality  
of relatively narrow openings above the edges  
of the slats to the height of the projections,

and a plurality of relatively wider openings to  
above the same and above the projections,  
substantially as described.

In testimony whereof I affix my signature  
in presence of two witnesses.

EDWARD HUBER.

Witnesses:

JOHN J. CRAWLEY,  
J. R. CURTIS.