

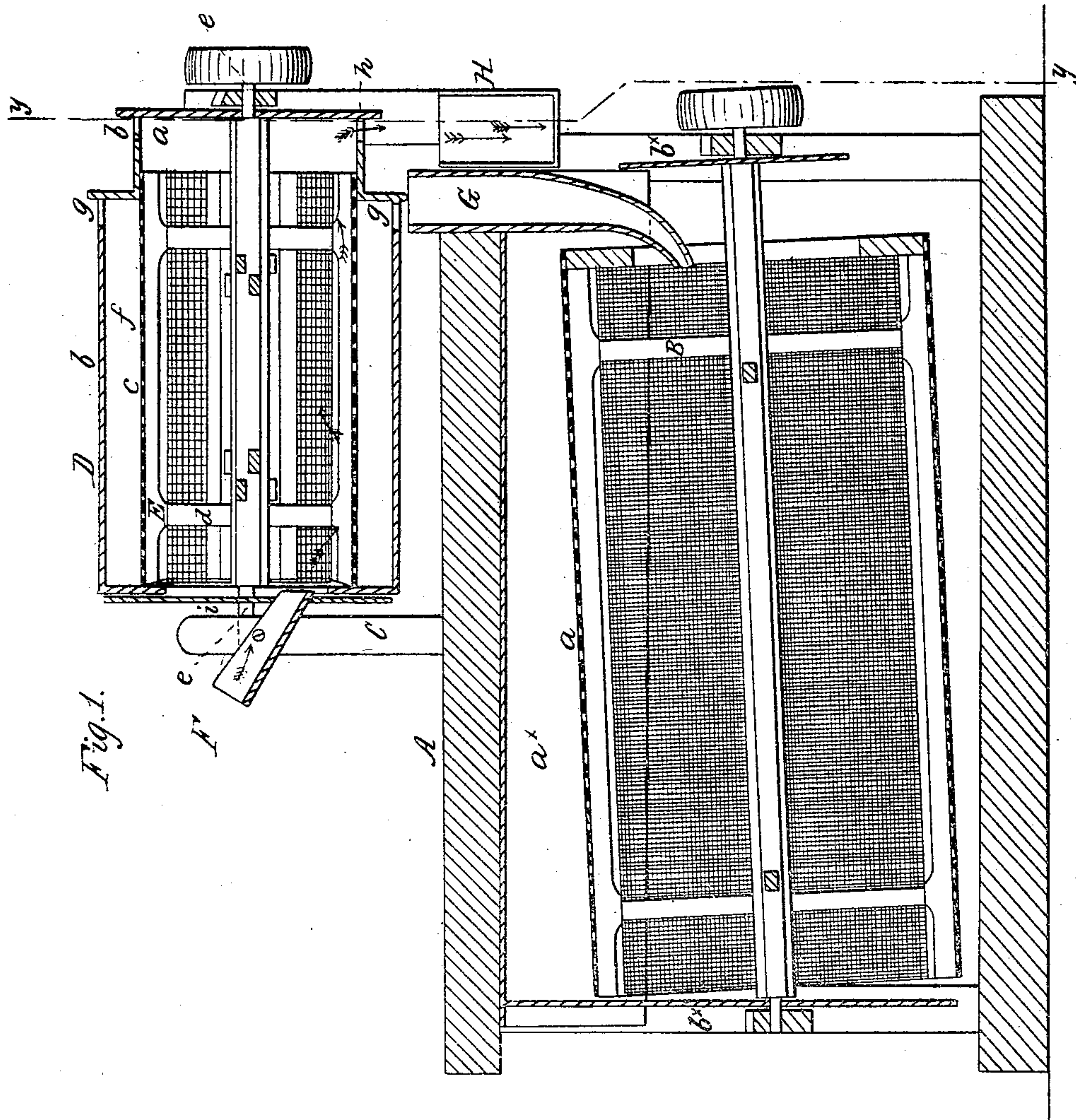
D. LANDIS.

2 Sheets—Sheet 1.

Mill Bolt.

No. 30,483.

Patented Oct. 23, 1860.



Witnesses:

*J. W. Coggeshall*  
*L. W. Dechard*

Inventor:

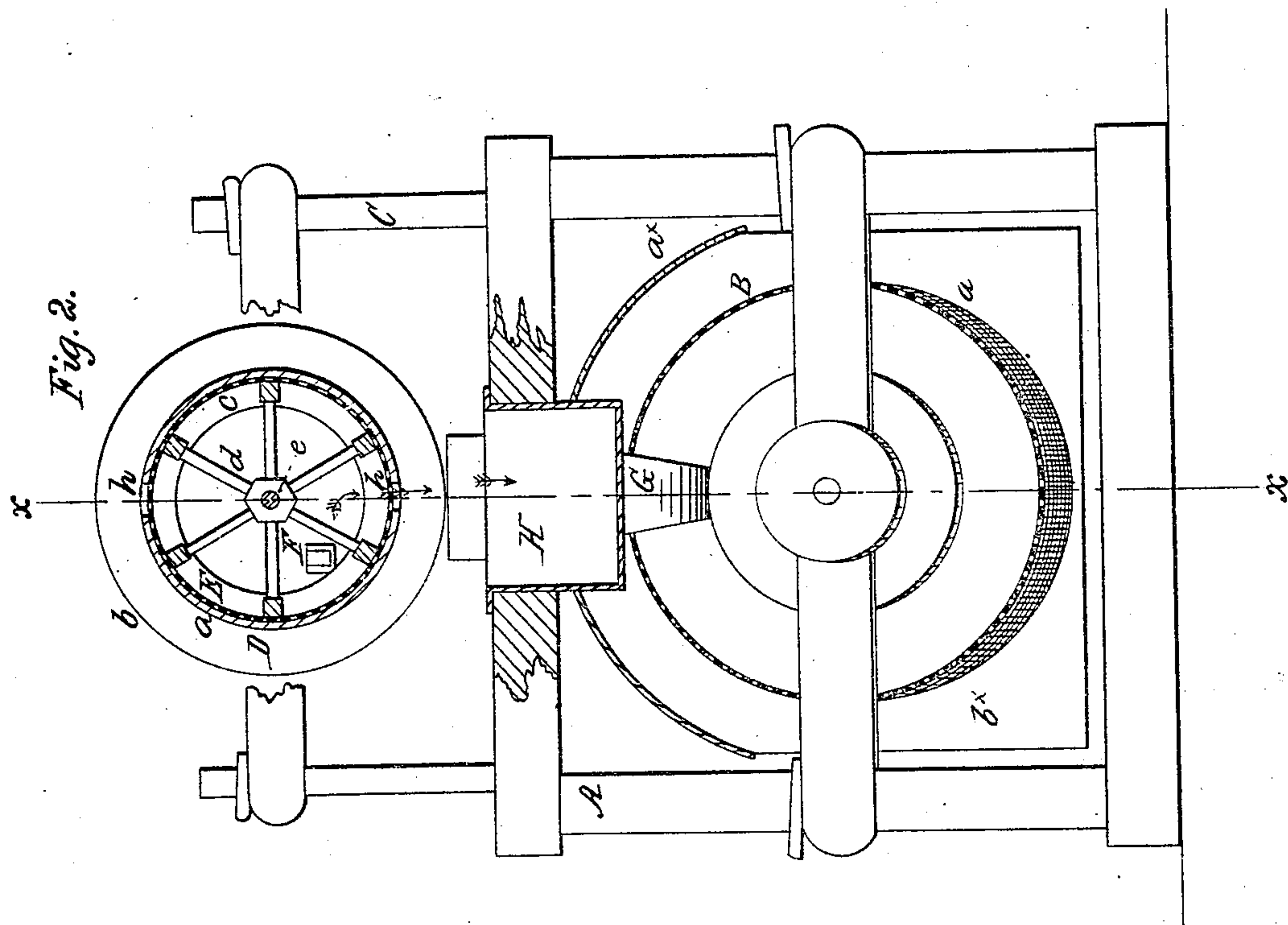
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Witnesses:

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# UNITED STATES PATENT OFFICE.

DAVID LANDIS, OF LANCASTER, PENNSYLVANIA.

## SCREEN FOR FLOUR-BOLTS.

Specification forming part of Letters Patent No. 30,483, dated October 23, 1860; Reissued August 19, 1862, No. 1,328.

*To all whom it may concern:*

Be it known that I, DAVID LANDIS, of Lancaster, in the county of Lancaster and State of Pennsylvania, have invented a new and  
5 Improved Screen Attachment to be Applied to Flour-Bolts for the Purpose of Preventing the Entrance of Bugs Therein; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in  
10 which—

Figure 1, is a longitudinal vertical section of my invention taken in the line  $x, x$ ,  
15 Fig. 2. Fig. 2, a transverse vertical section of the same, taken in the line  $y, y$ , Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

The object of this invention is to separate  
20 bugs from meal before the latter enters the bolt and thereby prevent the destruction of the bolting cloth, the bugs soon destroying the cloth after entering the bolt.

The invention consists in the employment  
25 or use of a rotating screen and box placed above the bolt chest and so arranged as to effect the desired end as hereinafter fully shown and described.

To enable those skilled in the art to fully  
30 understand and construct my invention I will proceed to describe it.

A, represents a bolt chest and B, the bolt fitted therein. This bolt is covered with bolting cloth  $a$ , and is placed in an inclined  
35 position within the chest the same as usual. These parts being constructed and arranged as usual do not require a minute description.

On the bolt chest A, there is placed a framing C, in which a cylinder D, is fitted  
40 and placed. This cylinder is allowed to rotate freely in the framing C, and the outer part of the framing as shown at  $a$ , is rather smaller in diameter than the other portion  $b$ , as shown clearly in Fig. 1.

45 Within the cylinder D, there is placed a cylindrical wire screen E. This screen is formed of wire cloth  $c$ , stretched over a proper reel or frame  $d$ . The screen E, extends the whole length of the part  $b$ , of the cylinder D, and the outer end of the screen just fits within the smaller part  $a$ , of the cylinder D, and the journals  $e$ , of the screen E, form the journals of the cylinder D, the screen being stationary within the cylinder.

Between the wire cloth  $c$ , of the screen E, 55 and the part  $b$ , of the cylinder D, there is a space  $f$ , and the part B, of the cylinder at its outer end or junction with part  $a$ , has holes  $g$ , made in it. The outer part of  $a$ , is also perforated by two or more holes  $h$ . 60

F, is a spout which leads into the cylinder D, the lower end of said spout passing through a circular disk  $i$ , which forms a head or cover to the cylinder D. The cylinder D, and screen E, are slightly inclined, 65 the depressed ends being over the spout G. The spout G, passes through the upper part of the chest A, and leads into the bolt B, said spout being directly under the holes  $g$ , in the part  $b$ , of the cylinder H is a box 70 which is attached to the chest A, and is directly under the holes  $h$ , in the part  $a$ , of the cylinder.

The operation is as follows. The meal, that is to say the flour and bran as it comes 75 from the stones passes into the spout F, which conducts it into the screen E. The cylinder D, and bolt B, are rotated by any convenient power. The meal passes through the screen E, into the space  $f$ , and down 80 through the holes  $g$ , into the spout G, which conducts it into the bolt B, while the bugs which cannot pass through the screen E, are discharged into the smaller part  $a$ , of the cylinder D, and pass out through the holes 85  $h$ , into the box H.

Thus by this simple arrangement the bolt is preserved, the bugs being entirely excluded from it.

I would remark that the bolt chest may be 90 lined with metal  $a^x$  and metal end pieces  $b^x$  may also be employed to prevent the bolt being acted upon externally by the bugs.

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

The rotating cylinder D, and screen E, the latter being placed within the former and both arranged essentially as shown and in such relation with the bolt to operate as 100 and for the purpose set forth.

DAVID LANDIS.

Witnesses:

J. B. MEGARTNEY,  
WM. B. WILEY.