

J. BEAN.
Screen for Grain Winnowers.

No. 8,504.

Patented Nov. 11, 1851.

Fig. 1.

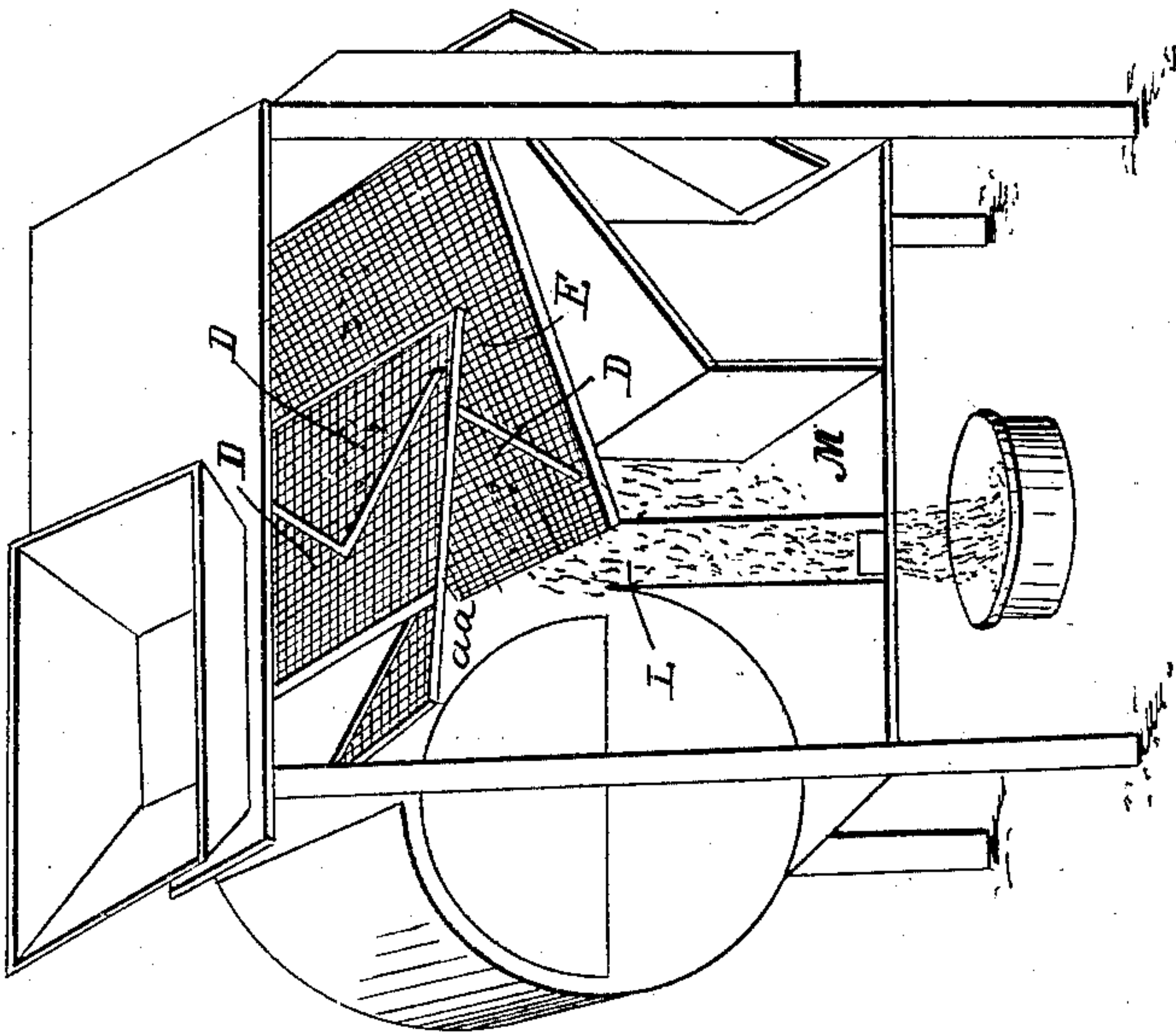


Fig. 2.

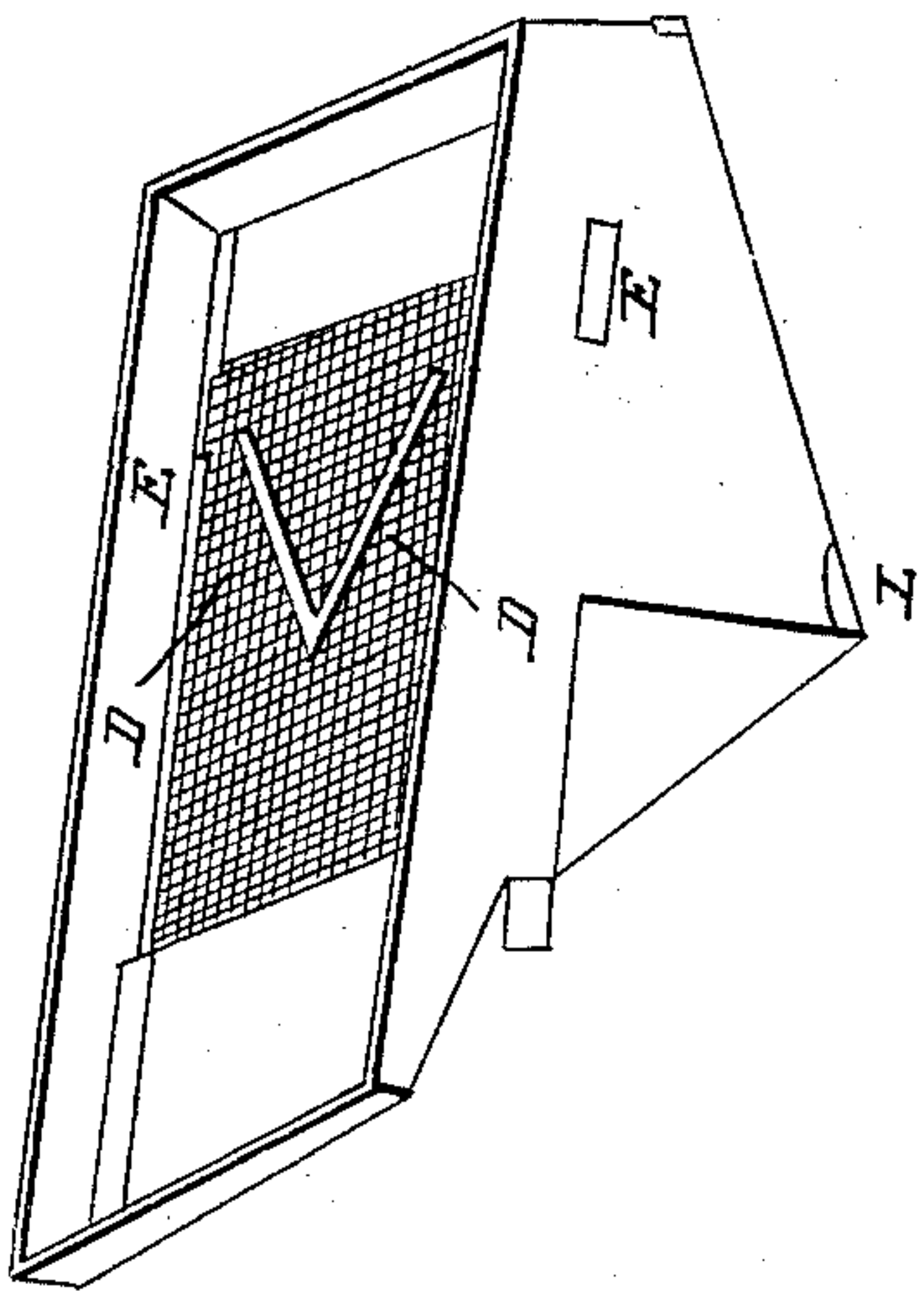


Fig. 4.

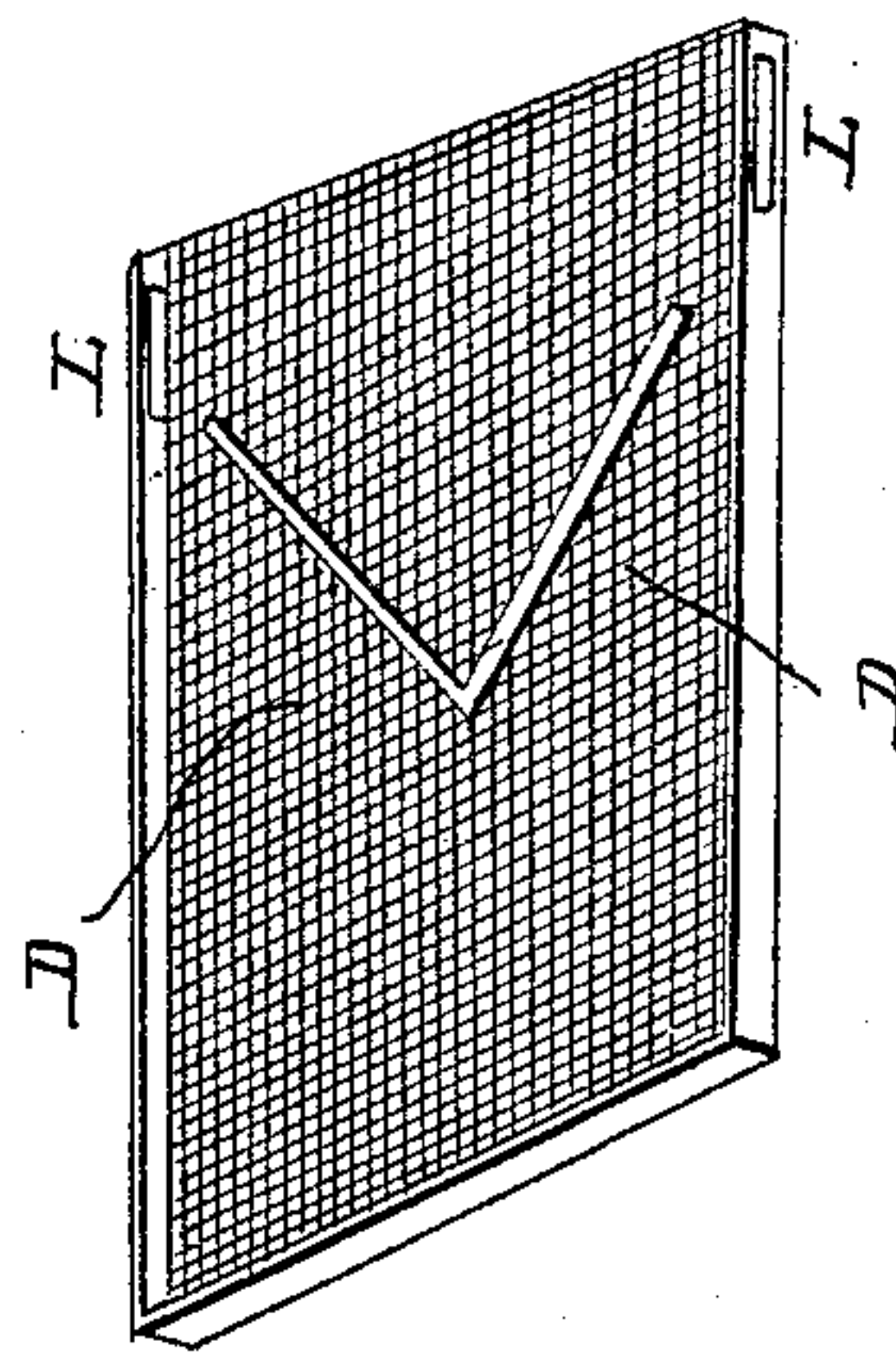
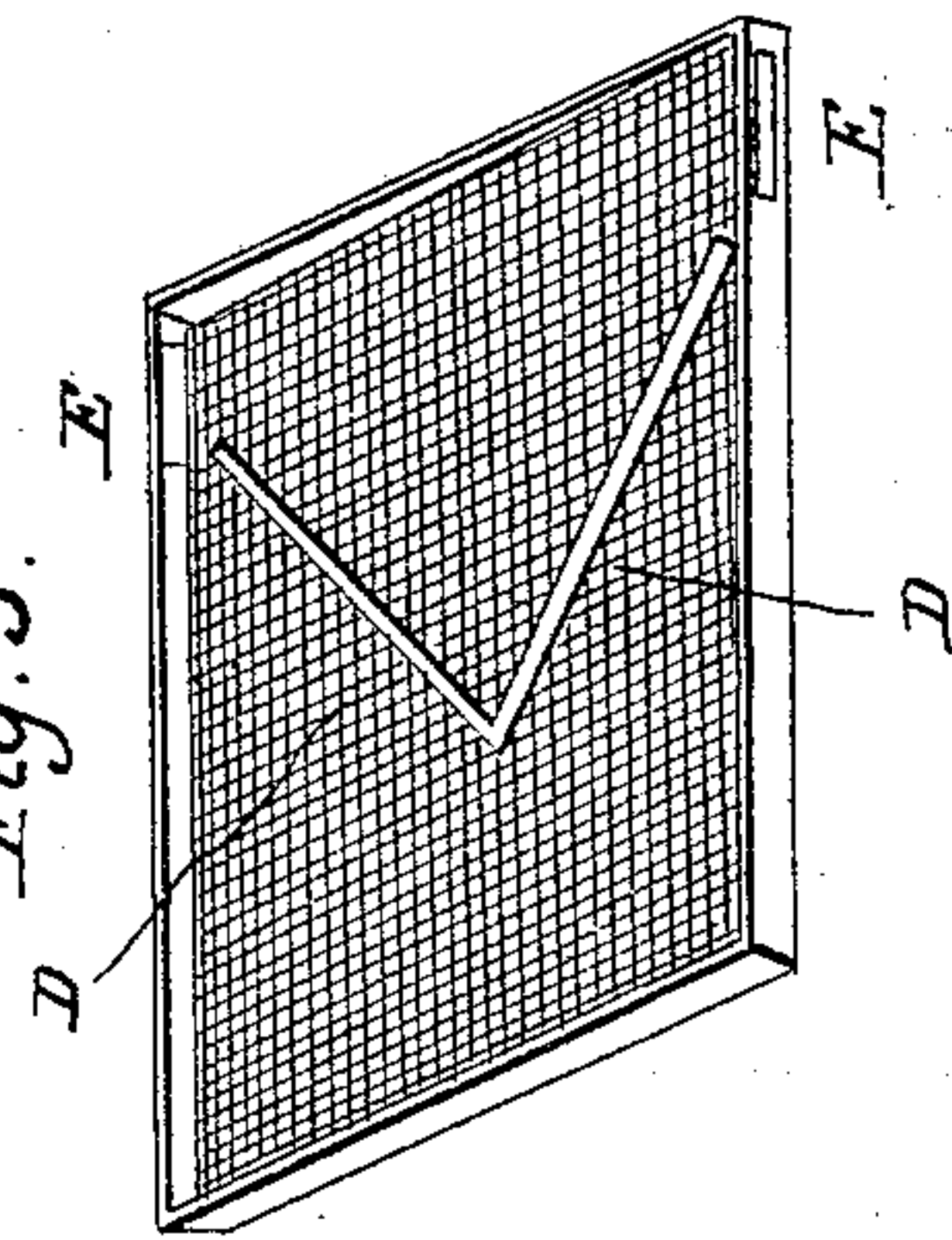


Fig. 3.



UNITED STATES PATENT OFFICE.

JONATHAN BEAN, OF MONTVILLE, MAINE.

SCREEN OF WINNOWING-MACHINES.

Specification of Letters Patent No. 8,504, dated November 11, 1851.

To all whom it may concern:

Be it known that I, JONATHAN BEAN, of Montville, in the county of Waldo and State of Maine, have invented a new and useful
5 Improvement in a Winnowing-Machine; 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 the annexed drawings,
10 making a part of this specification, in which—

Figure 1, is an open side view exhibiting the interior of the machine with the screens attached, and the manner in which they are
15 used. Fig. 2, is a top and side view of the shoe, in which the screens are adjusted with their apertures for the escape of foul seed coincident with the apertures in the shoe, as when in operation. Fig. 3, is a top and side
20 view of the upper or movable screen the rim of which is about $\frac{3}{8}$ of an inch thick and about one inch in width, with apertures L, L, in the rim, one on each side at the lower end of the screen; the bottom of the screen
25 is made of board and upon it are fixed two pieces of wood D, D, as guides, joining at a convenient angle near the center of the screen, with the legs or points extending
30 down near to the apertures in each side of the rim, to direct the foul seed through them, and through like apertures in the shoe into the box below. Upon the upper edge of the rim and covering the bottom and guides is the wire web of a texture of nine or ten to
35 an inch. Fig. 4 is the lower screen, similar to Fig. 3, but three or four inches longer. Three or four inches of the upper or outer end of it the web which covers it is of a texture nine or ten to an inch crosswise, and
40 two to an inch lengthwise. This screen is

placed at the bottom of the shoe, the grain passes from the upper screen falling through a strong current of wind on to the lower screen. The smut is thrown out, the cheat or chess is thrown by the wind on to the
45 coarser parts of the lower screen and falls through the web and is guided out through the apertures in the sides of the screen at the apertures in the sides of the shoe and falls
50 into the box below. In chaffing grain the upper screen is turned board side up and drawn back and forms parts of the bottom of the shoe.

M is the box for foul seed as shown in Fig. 1. 55

D D are the guides to direct the foul seed through the apertures in the screens and shoe, as shown in Figs. 1, 2, 3, and 4.

E E are the apertures in the rim of the upper screen, and in the sides of the shoe, as
60 shown in Figs. 1, 2 and 3.

L L are the apertures in the lower screen and shoe as shown in Figs. 2 and 4.

I do not claim any part or portion of the gear, fans or forms of the hopper or shoe
65 as an original invention, as I am aware that all these have been in common use; but

What I do claim as new and desire to secure by Letters Patent is,—

The arrangement of guides D, D, and side
70 apertures in the upper movable screen as seen in Fig. 3, and the lower screen as seen in Fig. 4, attached to the shoe, and which screen may be attached to any common win-
75 nowing machine in the manner, and for the purposes before described.

JONATHAN BEAN.

Witnesses:

A. T. PALMER,
CHAS. GILES.