

(No Model.)

D. H. LORD.

MILL STUFF RECOVERING MACHINE.

No. 277,301.

Patented May 8, 1883.

Fig. 2

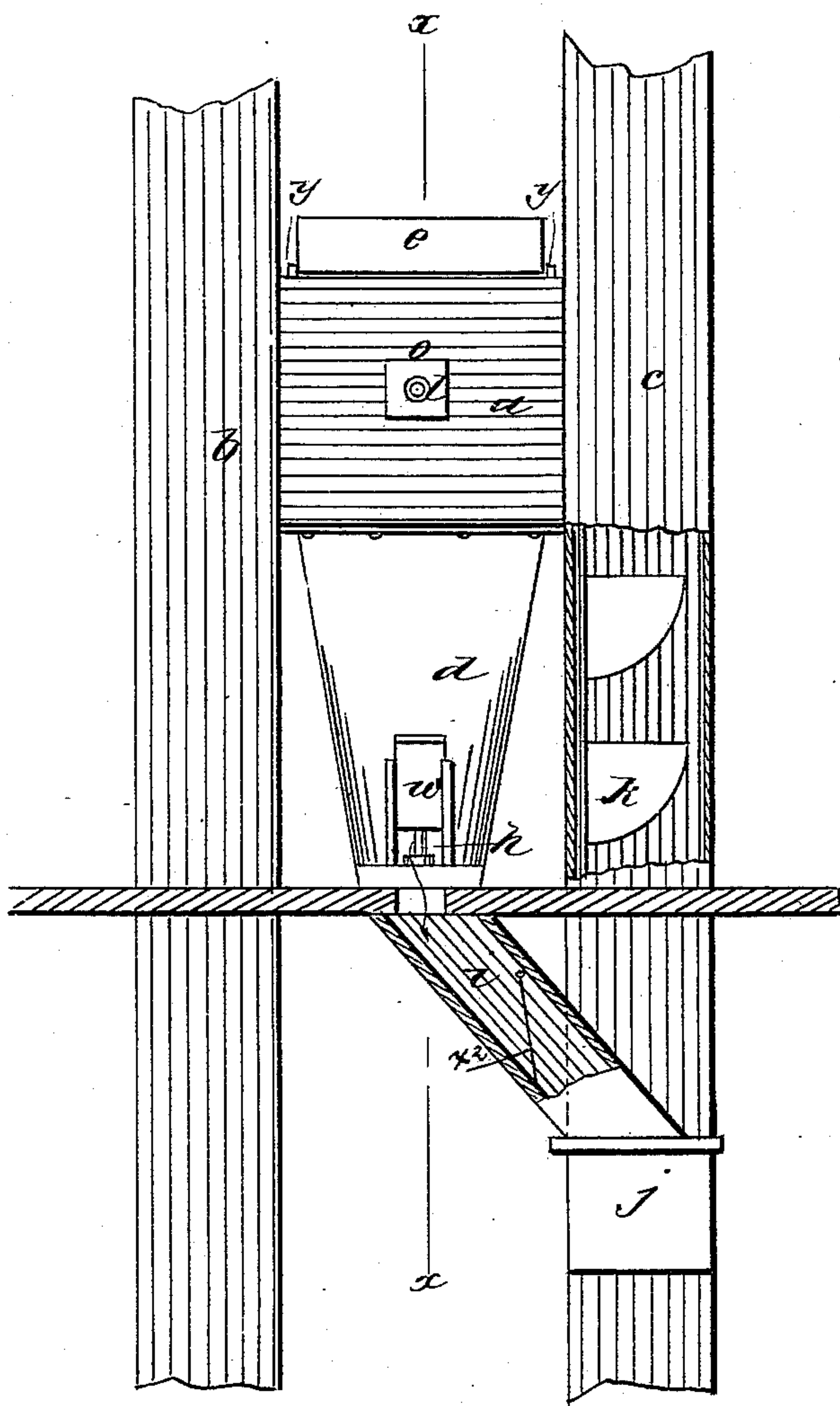
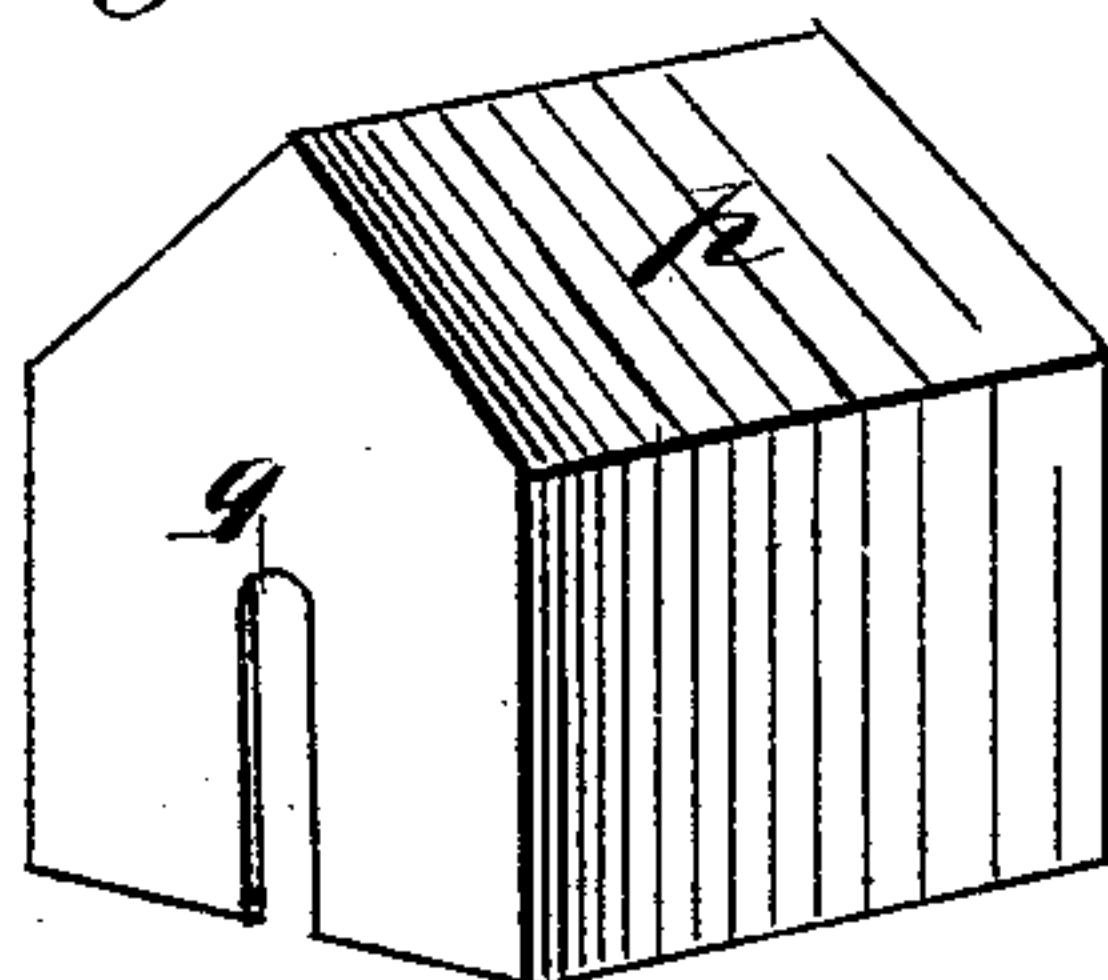


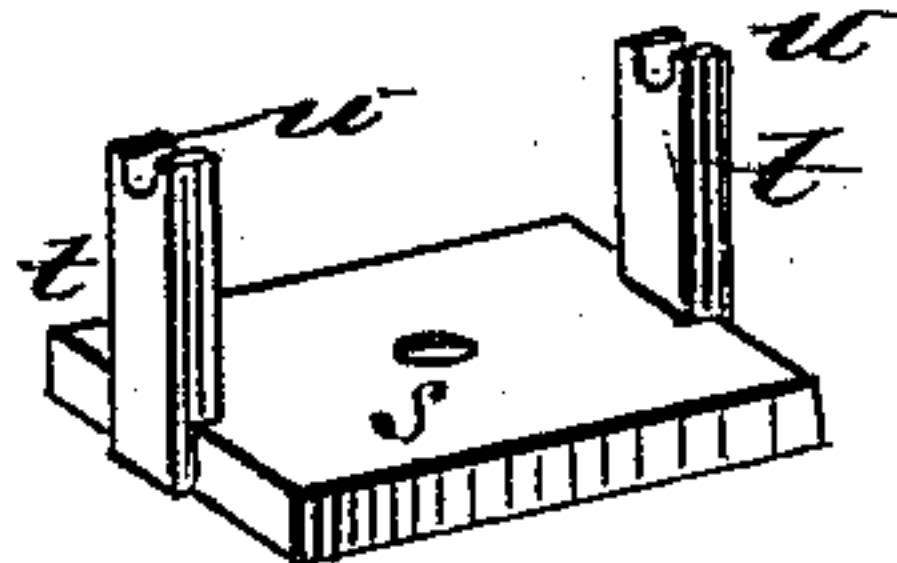
Fig. 3.



WITNESSES:

Wm. M. Charles
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Fig. 4.



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UNITED STATES PATENT OFFICE.

DREW H. LORD, OF NORTHFIELD, MINNESOTA.

MILL-STUFF-RECOVERING MACHINE.

SPECIFICATION forming part of Letters Patent No. 277,301, dated May 8, 1883.

Application filed February 6, 1883. (No model.)

To all whom it may concern:

Be it known that I, DREW H. LORD, of Northfield, in the county of Rice and State of Minnesota, have invented a new and Improved

5 Mill-Stuff-Recovering Machine, of which the following is a full, clear, and exact description.

My invention consists of a simple and efficient contrivance of a sifting box or hopper for sifting the mill-stuff accumulating in different parts of the mill into said hopper, which is connected by a spout with the elevator to the flour-bolt, and provided with a rotating stirring device adapted for feeding the stuff slowly into the elevator, whereby all dust, meal, or

15 flour scattered about the mill by various causes, and containing good flour, may be gathered into the hopper from time to time, and be gradually fed into the bolt along with the stream from the stones or rolls, in sufficiently regular and limited amount so as not to oversupply or clog the bolt, to be bolted along with the rest, and thus be recovered from waste, all as hereinafter fully described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is partly a side elevation and partly a sectional elevation of my improved dust-re-

30 covering machine. Fig. 2 is a sectional elevation of the said machine on line $x x$, Fig. 1; and Figs. 3 and 4 are details of parts employed in the machine.

I propose to arrange a box, a , between the legs b and c of the flour-elevator which conducts the meal from the stones or rolls to the flour-bolt, making said box with a hopper-bottom, d , and fitting a hand-sieve, e , on the top, suitably for sifting the mill-stuff into it from

40 time to time. Inside of the hopper I arrange a feeder, consisting of the vertical shaft f and arms g , of any approved contrivance, adapted for gradually feeding the stuff out of the bottom of the hopper through the passage h , and

45 into a spout, i , which conducts the stuff into a pocket, j , on the side of the elevator-leg c , in which the buckets k ascend to the bolt, from which pocket the meal falls into the buckets to be carried up by them. The shaft f is geared

50 with a shaft, l , traversing the box a , by bevel-

wheels m , to which power is applied by a belt on the pulley n for revolving the feeder. The shaft l has bearings o attached to the outsides of the box, and fitted so as to prevent the stuff from escaping through them, and the bevel-wheels m are protected from the stuff by the cover p , having slotted ends q to drop down over the shaft l , and the bottom piece s having grooved upright pieces t in which the edges of the slotted ends of the cover fit and slide down when the cover is put in position. The upper ends of the uprights t are notched at u , to fit the shaft closely, and the upper ends of the slots are made to close similarly on the upper side of the shaft. The bottom s is located under wheel m and rests on the bar v , forming the bearing for the upper end of the shaft, said shaft passing through the bottom. A slide, w , is arranged with the opening h at the bottom of the hopper, to regulate the delivery of the stuff, and a cloth valve, x^2 , is located in the spout i , to prevent the air from blowing up the spout from the elevator, in which the air is made to flow upward by the effect of the upward motion of the buckets. The sieve e is fixed between guides y on the top of the box a , to facilitate the working of it by hand.

With such machine any surplus meal or dust accumulating in different parts of the mill may be returned to the proper channels for passing to the dressing machinery much more satisfactorily than by the common method of feeding it directly to the elevator by hand, which mode is irregular and uncertain and occupies too much time of the miller, besides frequently clogging the elevator and making much trouble and delay.

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

1. The combination, with an elevator of a flour-bolt, of a sifting-box having hopper-shaped bottom, and feeding device in said hopper-shaped bottom, substantially as and for the purpose set forth.

2. The combination, with the elevator $b c$, provided with the pocket j , of the sieve e , the box a , provided with sieve-guides y , the hopper d , the rotating feeder $f g$, and spout i , substantially as herein shown and described.

3. The combination, with the box *a*, provided with the cross-bar *v* and the shaft *l*, of the cover *p*, having slotted ends, and the bottom *s*, provided with the uprights *t*, having notched
5 ends *u*, substantially as and for the purpose set forth.

4. The combination, with the sifting-box *a d* and the elevator *b c*, provided with the pocket

j, of the spout *i* and the cloth valve *x*², arranged in said spout, substantially as herein shown and described.

DREW H. LORD.

Witnesses:

A. O. WHIPPER,
R. J. DRAKE.