

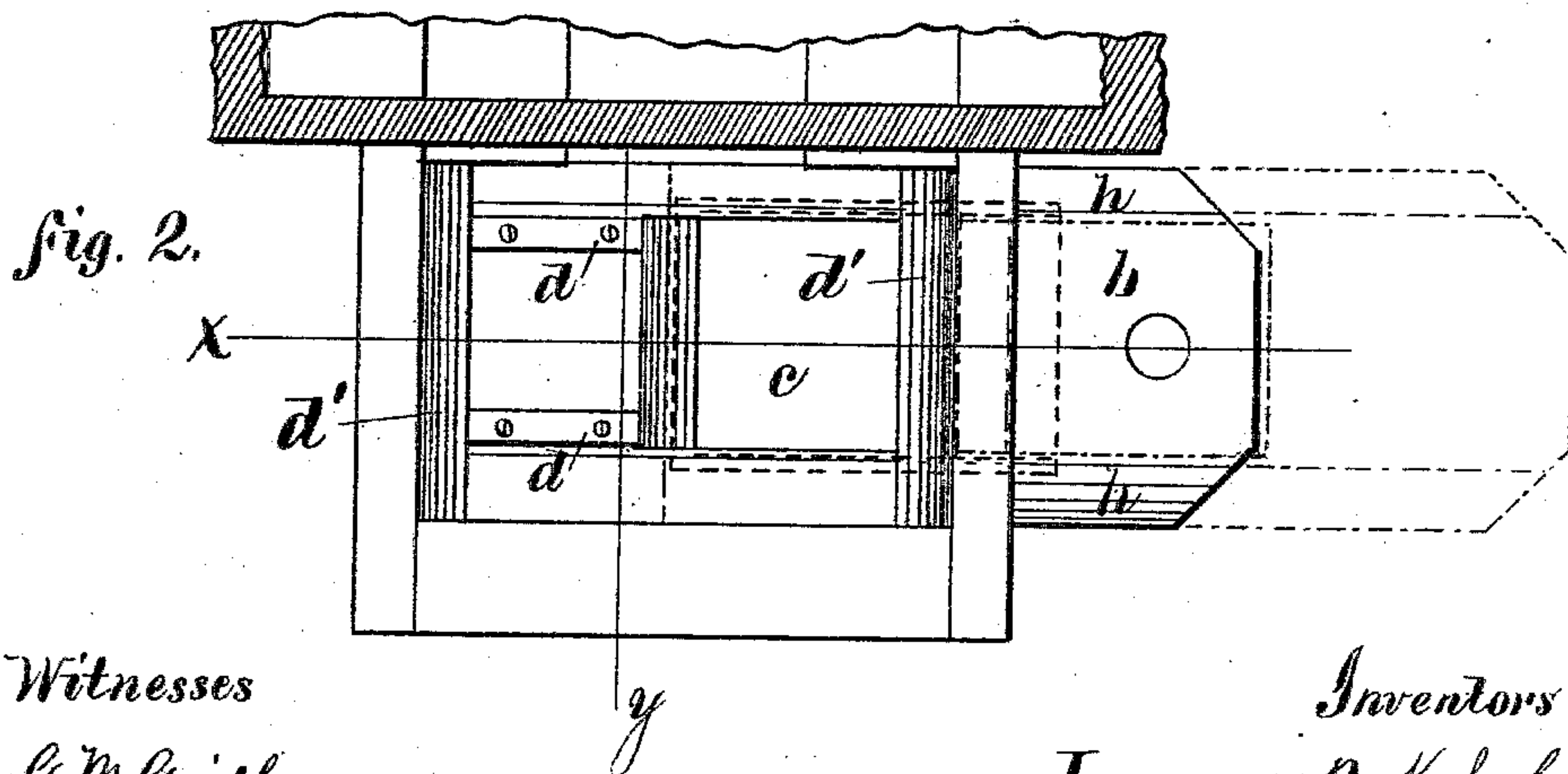
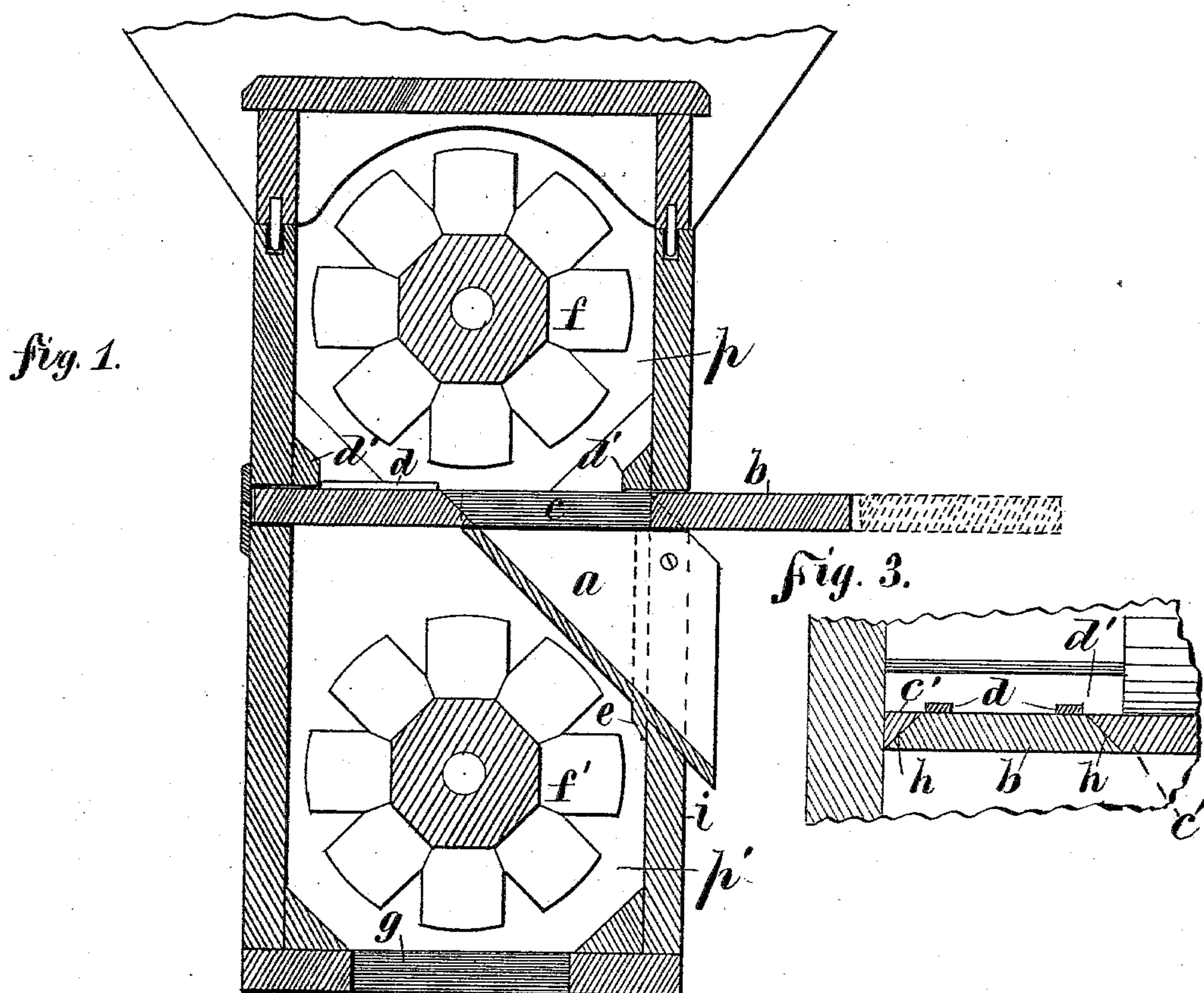
(No Model.)

L. B. KOHNLE & W. B. HAMILTON.

CUT-OFF FOR BOLTING CHEST CONVEYERS.

No. 283,715.

Patented Aug. 21, 1883.



Witnesses

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UNITED STATES PATENT OFFICE.

LAWRENCE B. KOHNLE AND WILLIAM B. HAMILTON, OF LIMA, OHIO, ASSIGNORS TO JAMES IRVINE, OF SAME PLACE.

CUT-OFF FOR BOLTING-CHEST CONVEYERS.

SPECIFICATION forming part of Letters Patent No. 283,715, dated August 21, 1883.

Application filed April 10, 1883. (No model.)

To all whom it may concern:

Be it known that we, LAWRENCE B. KOHNLE and WILLIAM B. HAMILTON, both citizens of the United States, residing at Lima, in the county of Allen and State of Ohio, have jointly invented certain new and useful Improvements in Cut-Offs for Bolting-Chest Conveyers; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in cut-offs for bolting-chest conveyers.

Our invention relates to that class of bolting-chests having double conveyers, those in which one conveyer is placed over the other being the kind to which our improvements are applied.

In the present mode of dressing flour through a series of reels and their accompanying conveyers, in order to obtain the grade products, the stock which is discharged through the reel-cloth into the first or upper conveyer must be returned and carried through the entire system of reels, which process consumes much time and labor and requires constant care and attention to get the proper separation of the flour products.

The object of our invention is to obviate the necessity of this and to enable the miller to make two distinct separations of the flour product that is discharged through the cloth into the conveyers. To accomplish this a cut-off and spout is applied to the upper conveyer-box, for the purpose of changing the discharge of the stock product from being carried into the lower conveyer-box and delivering it directly to the rolls, and at the same time allowing that part discharged into the lower conveyer to be carried into the purifiers, thus saving the expense, trouble, and time required in the repeated manipulation of the product by carrying it throughout the entire bolting system, as before stated.

Figure 1 is a vertical section through the conveyer-box at the tail end of the reel on line *x*, Fig. 2. Fig. 2 is a top view of that portion of the tail end of a conveyer-box which extends

beyond the tail end of the bolting-chest, the top and upper conveyer being removed. Fig. 3 is a sectional view on line *y*, Fig. 2.

In the view Fig. 1, two conveyers, *p* and *p'*, are shown (one over the other) in vertical line. Their two chambers are separated by the slide cut-off *b*. This slide is constructed of uniform thickness, with the partition-board *c'* between them, and has a square hole, *c*, in it, which, when the slide is pushed in, opens into the iron spout *a*, seen attached to the upper and inner angle of the lower conveyer-chamber, *p'*, in the front side of the same. The slide *b* rests upon the top of spout *a*, which latter acts partially as a guide for the same. The two edges of the slide *b* are beveled outward on the top, as seen at *h* in Fig. 3, to allow it to engage with the inner reverse beveled edges of the opening in the partition-board *c'*, into which they slide closely. Strips *d* are fastened upon the top of the slide, near either edge, in rear of the hole *c*. These strips act as stops to arrest the movement of the slide, their ends striking the corner strips *d'* at either side of the chamber *p* as the slide is operated.

The spout *a* is of iron, and is cast with a flange, *e*, extending from its sides and bottom on a line with the inside of the front board of the conveyer-box, against which it is in contact, thus supporting the spout *a*, which is further secured by screws extending through it into the front board. The flange, however, effectually prevents the spout from slipping out through the front board. It is inserted from the inside of the latter.

The dotted lines in Figs. 1 and 2 represent the position of the slide *b* when drawn out. When the slide is closed, as seen in Fig. 1, the tailings entering the conveyer-chamber *p* are discharged through hole *c* therein and through spout *a*, and fed directly to the rolls, as stated. The stock from the upper conveyer is free to discharge into the chamber *p'* of lower conveyer through the opening made in rear of the spout when the slide *b* is drawn out.

We are aware that slide cut-offs with openings therein are not new, and we do not claim such form of cut-off as our invention.

We claim as our joint invention—

1. In a bolting-chest having one conveyer over the other, the combination, with the two

conveyers and the two conveyer-chambers, of a slide cut-off, the partition between the two chambers having the opening for the slide, with the downwardly and outwardly inclined sides 5 and the inclined spout leading from the upper conveyer-chamber down through the upper front corner of the lower conveyer-chamber and out through the front wall of the same, and having flanges projecting from the sides and bottom of said spout inside said front wall, substantially as and for the purpose set forth. 10

2. In a bolting-chest, in combination with two conveyers and two conveyer-chambers, one over the other, an inclined iron spout leading from the upper conveyer-chamber down 15 through the lower conveyer-chamber and outside of the same, said spout having a flange extending around the sides and bottom of its discharge end just back of the latter and inside 20 the wall of the lower conveyer-chamber, substantially as set forth.

3. The combination, in a bolting-chest, of the two conveyers, the two conveyer-chambers placed one above the other, and the partition which separates them, the horizontal slide 25 having an opening therein to discharge the stock in the upper conveyer and stops to arrest its movements, and having its edges beveled, as shown, and the fixed open spout extending from said slide down through the front 30 board of the lower conveyer-chamber, and having its sides and bottom provided with flanges to retain it in place and to adapt it to support and guide said slide when operated, substantially as set forth.

LAWRENCE B. KOHNLE.
WILLIAM B. HAMILTON.

Attest:

WM. OWEN, Jr.,
J. J. FERRALL.