

H. P. ALTMAN.

JIG.

APPLICATION FILED FEB. 6, 1913.

1,061,581.

Patented May 13, 1913.

Fig. 2.

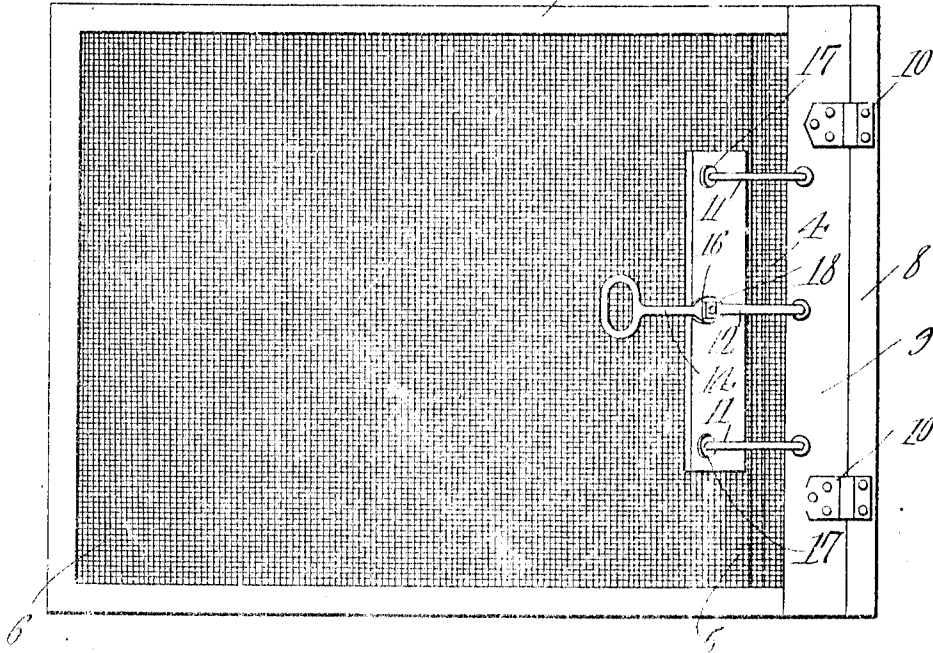
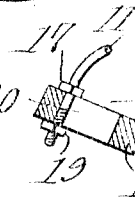
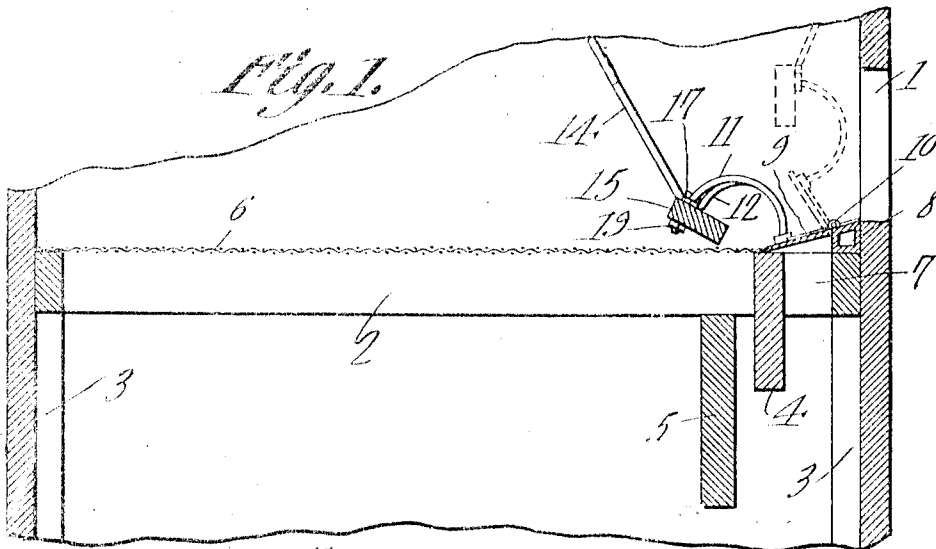


Fig. 1.



Witnesses

J. P. Tinsley
S. Willard

Fig. 3.

by

H. P. Altman

Inventor

C. A. Snow & Co.
Attorneys

UNITED STATES PATENT OFFICE.

HARRY PRESTON ALTMAN, OF COLLINSVILLE, ILLINOIS.

JIG.

1,061,581.

Specification of Letters Patent.

Patented May 13, 1913.

Application filed February 6, 1913. Serial No. 746,640.

To all whom it may concern:

Be it known that I, HARRY P. ALTMAN, a citizen of the United States, residing at Collinsville, in the county of Madison and State of Illinois, have invented a new and useful Jig, of which the following is a specification.

The device herein disclosed is a structure adapted to be employed for controlling the passage of coal and other minerals, and for controlling the passage of refuse from coal and minerals, through a jig.

One object of the invention is to provide novel means for controlling the gate of the jig.

Another object of the invention is to provide novel means for adjusting the float.

It is within the scope of the invention to improve generally and to enhance the utility of, devices of that type to which the present invention appertains.

In the drawings:—Figure 1 shows, in vertical longitudinal section, a portion of a jig equipped with the regulating device constituting the subject matter of this application; Fig. 2 is a top plan of the structure hereinafter described, the box of the jig, being omitted; and Fig. 3 is a transverse section of the float.

In the drawings, the numeral 1 indicates the box of a jig, comprising a frame 2 upheld by supports 3. Vertically stepped baffle plates 4 and 5 are mounted on the frame 2 and superposed upon the frame 2 is a deck which may be a screen 6, the screen 6 at one end terminating upon the baffle plate 4, to define an opening 7 at one end of the jig.

Superposed upon one end of the frame 2 is a support 8 which, as shown, is a hollow casting. A gate 9 extends across the opening 7 and is united by hinges 10 to the support 8. Curved connections 11 and 12 are secured at one end to the gate 9, the connections 11 passing through a float 15 which preferably is fashioned from wood. The connection 12 is provided with an enlargement 16 which bears against the upper face of the float 15, and projecting rearwardly from the enlargement 16 is a handle 14 whereby the float 15 may be moved manually. The connections 11 are provided with abutments 17 engaging the forward or upper face of the float 15. A bolt and nut connection 18 passes through the enlargement 16 and through the float 15 and serves to unite the float with the connection 12. Nuts 19 are applied to the free ends of the connections

11 and bear against the under face of the float 15 to hold the float against the abutments 17. Referring to Fig. 3 it will be observed that the float 15 is slotted transversely to receive the ends of the connections 11 and to receive the bolt 18 which passes through the connection 12, the slots being indicated at 20.

In practical operation, presupposing that the structure is to be employed for washing and cleaning coal, the box 1 is filled with water and the coal is directed upon the screen 6. The refuse in the coal, being heavier than the coal, will move along the screen 6, beneath the coal and will raise the float 15, the float serving to raise the gate 9, whereupon the refuse will pass downwardly through the opening 7, the float 15, returning the gate 9 gravitationally to the proper position. When ore and other heavy minerals are passed upon the screen 6, the minerals, being heavier than the refuse, will pass along the screen 6 and operate the float 15 and the gate 9, the ore passing downwardly through the opening 7 and the relatively light refuse passing across the gate 9 and out of the end of the structure. The baffle plates 4 and 5 serve to control the movement of the water with respect to the float 15 and serve to prevent a rush of water against the float. The connections 11 and 12 which lie in the slots 20 afford an adjustable mounting for the float 15 so that the float may move transversely. This transverse movement of the float 15 serves to regulate the distance between the float and the opening 7, and because the supports 11 and 12 are curved, the gate when moved transversely, is adjusted vertically with respect to the screen 6, as well.

Having thus described the invention what is claimed is:—

1. In a jig, a frame having an opening; a deck terminating adjacent the opening; a hinged gate extended across the opening; a float rigidly connected with the gate and located above the deck and at an acute angle to the deck.

2. In a jig, a frame having an opening; a deck terminating adjacent the opening; a hinged gate extended across the opening; a float connected with the gate and located above the deck; and a baffle located below the deck and below the float and adapted to protect the float from currents.

3. In a jig, a frame having an opening;

a deck terminating adjacent the opening;
a hinged gate extended across the opening;
a curved support secured to the gate; a
float located above the deck and mounted
5 upon the support for adjustment trans-
versely of the support, the curved form of
the support serving to adjust both the dis-
tance of the float from the deck and the dis-
tance of the float from the opening when
10 the float is moved along the support; and

means for holding the float in adjusted po-
sitions upon the support.

In testimony that I claim the foregoing
as my own, I have hereto affixed my signa-
ture in the presence of two witnesses.

HARRY PRESTON ALTMAN.

Witnesses:

WALTER BITZER,
JOE ALTMAN.