R. M. BICKLEY.

PICKING TABLE.

APPLICATION FILED NOV. 24, 1919.

1,425,441.

Patented Aug. 8, 1922.

2 SHEETS—SHEET 1.

FIG. 1

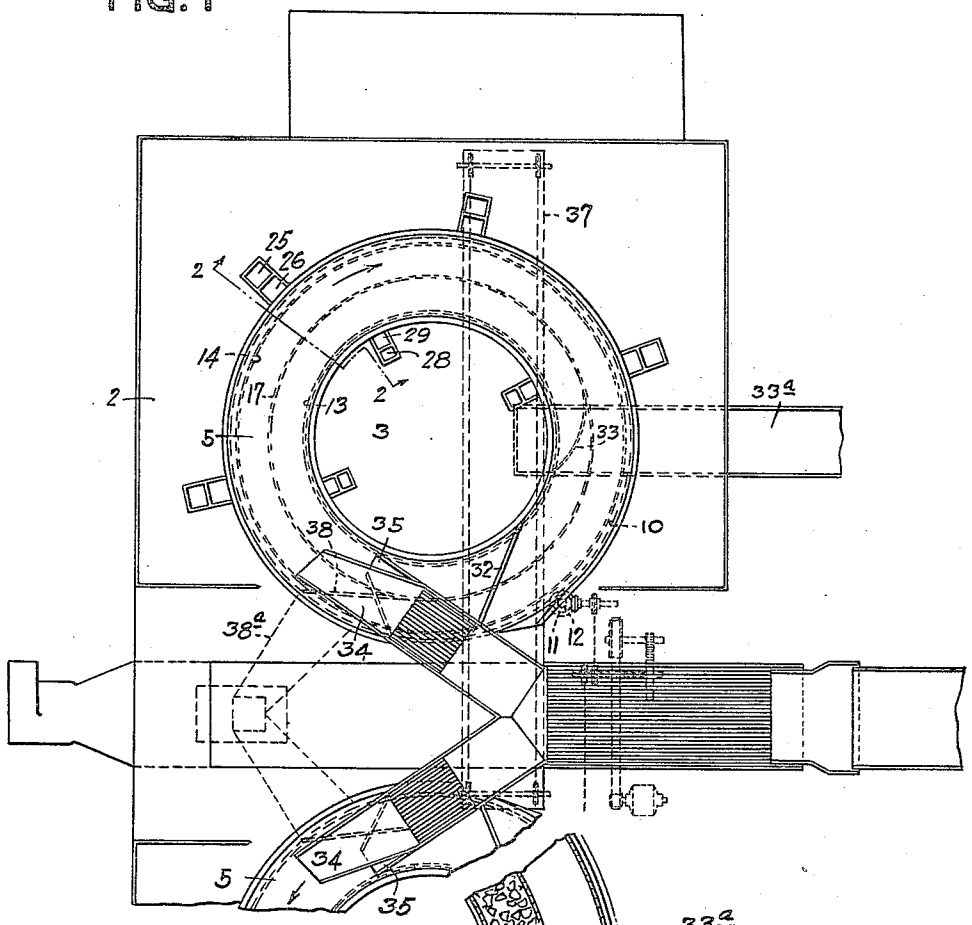
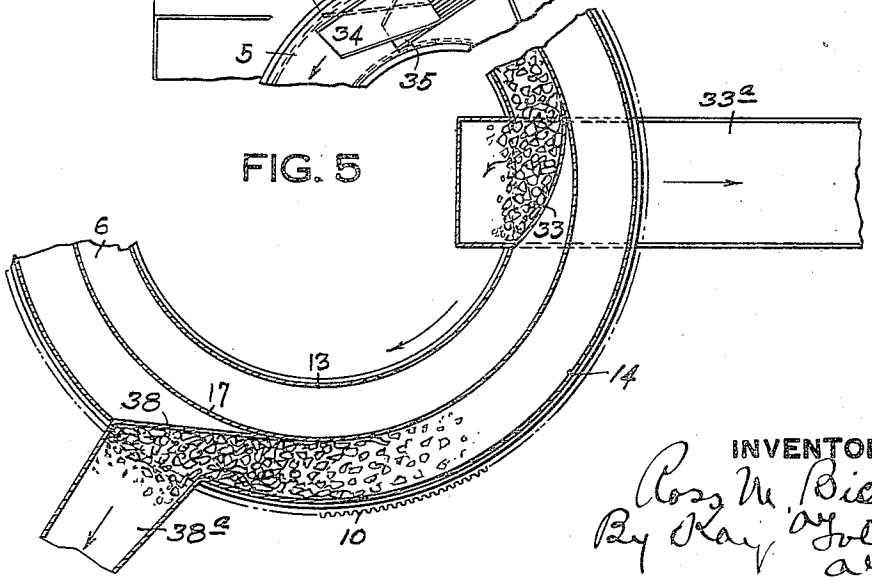


FIG. 5



INVENTOR

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2 SHEETS—SHEET 2.

FIG. 2

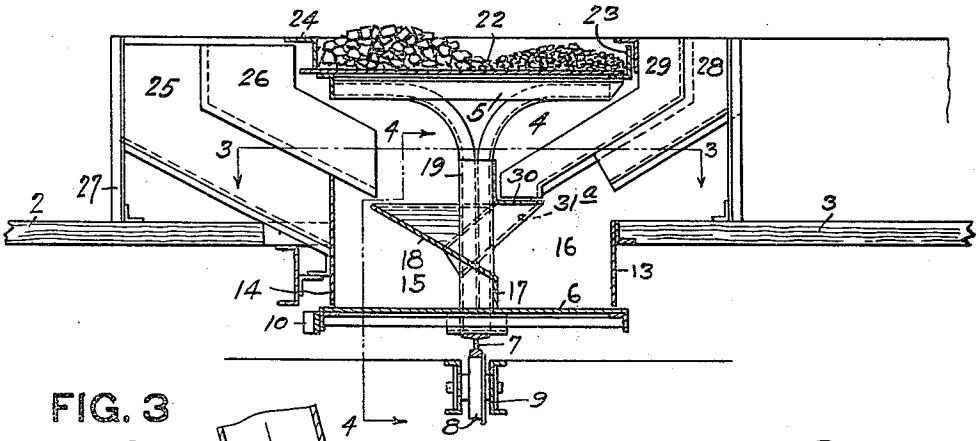


FIG. 3

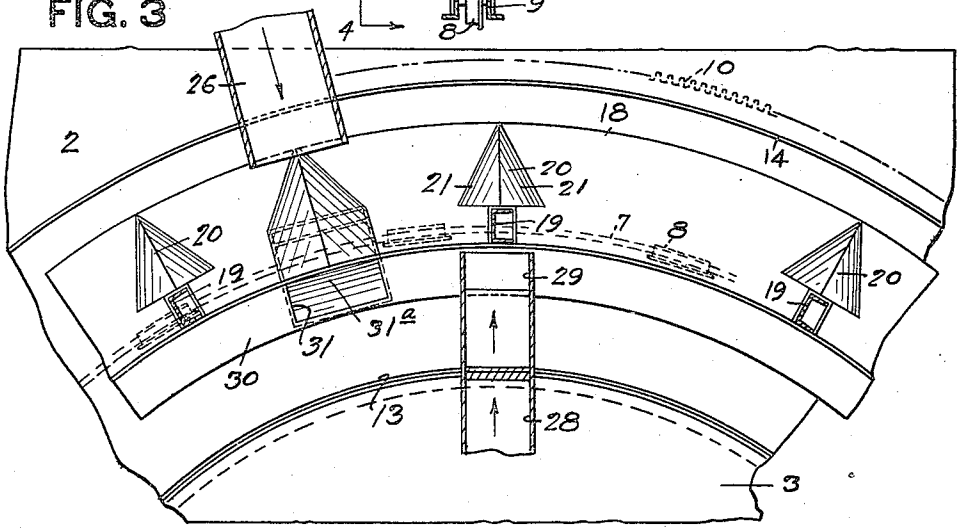
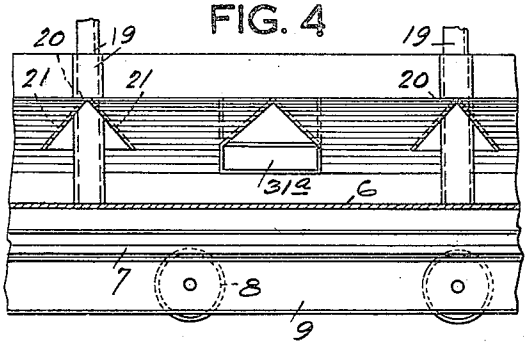


FIG. 4



INVENTOR

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UNITED STATES PATENT OFFICE.

ROSS M. BICKLEY, OF PITTSBURGH, PENNSYLVANIA, ASSIGNOR TO HEYL & PATTERSON, INC., OF PITTSBURGH, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

PICKING TABLE.

1,425,441. Specification of Letters Patent. Patented Aug. 8, 1922.

Application filed November 24, 1919. Serial No. 340,340.

To all whom it may concern:

Be it known that I, Ross M. BICKLEY, a citizen of the United States, and resident of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Picking Tables; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to picking-tables for use in connection with mining operations where the coal or other product has certain impurities which have to be removed before the coal is delivered into cars for shipment.

The object of my invention is to provide a picking-table in which coal of different grades may be deposited on the same annular table in different zones side by side, and the refuse such as rock and bone picked therefrom from different zones and delivered by chutes to separate compartments to be disposed of as may be desired.

To these ends my invention comprises the novel features hereinafter set forth and claimed.

In the drawings Fig. 1 is a plan view partly broken away; Fig. 2 is an enlarged cross-section on the line 2—2 Fig. 1; Fig. 3 is a section on line 3—3 Fig. 2; Fig. 4 is a section on line 4—4 Fig. 2; and Fig. 5 is an enlarged sectional view of a portion of the lower deck.

The numeral 2 designates the outside platform on which the pickers stand. The inner platform is designated by the numeral 3. Between the platforms 2 and 3 is the annular space 4 within which the picking-table rotates. The picking table 5 is of the double-deck type. The lower deck 6 for carrying the rock and bone is below the platforms 2 and 3, and connected to said deck is the inverted rail 7 supported on the traction wheels 8 located at intervals and journaled in the channel beams 9 on which the entire picking table rotates.

The table is driven by a suitable motor. A rack 10 on the bottom of the table is engaged by a driving pinion 11 on the shaft 12 connected up to the motor, so that said table moves at about 50 ft. per minute on center line.

Secured to the platforms 2 and 3 and extending down therefrom are the inner and outer rings 13 and 14, respectively, which form the outer walls of the compartments 15 and 16, one for rock and the other for bone. A partition wall 17 separates the compartments 15 and 16, said wall having the inclined portion 18 which directs the bone picked from the outer portion of the table into the compartment 16.

A series of posts or uprights 19 are carried at intervals by the lower deck 6 extending through the inclined portion 18 of the wall 17. In order to prevent the bone passing down the inclined portion 18 from lodging against the posts 19 the rigid portions 20 are provided at points in line with said posts to form sloping sides 21, so that the bone is directed away from said posts and there is no liability of its lodging against the same.

The upper deck 22 is carried by the posts 19 and said deck has the inner side 23 formed of an angle-bar secured to said deck, and at the outer edge there is the stationary guard-angle 24 secured to the platform 2.

On the outer platform 2 are the chutes 25 and 26 supported by the frame 27. These chutes are in line with each other, the chutes 25 delivering the rock to the compartment 15 through openings formed in the wall 14, and the chutes 26 delivering the bone to the inclined portion 18 whence it passes into the compartment 16.

Located at intervals on the inside platform 3 are the chutes 28 and 29, the outer chutes 28 delivering the bone to the compartment 16 and the inner chutes 29 delivering the rock to the shelf 30 on the posts 19. The shelf 30 has openings 31 at intervals and connected to said shelf in line with said openings are the chutes 31^a which pass through the inclined portion 18 of the partition wall and deliver the rock to the compartment 15.

Suitable plows 32 are provided for directing the picked coal from the upper deck to a loading boom 37. Plows 33 and 38 are also provided for directing the rock and bone to the chutes 33^a and 38^a to be delivered to the points desired.

The coal to be picked is delivered to the upper deck of the picking-table by the chutes 34 and 35, the coal being delivered to the screen-chute 34, the coarser coal sliding down said chute onto one zone of said deck, and the finer coal to the other zone by the chutes 34 and 35 respectively.

The pickers on the platforms 2 and 3 pick the rock and bone or other impurities from the coal, the rock being thrown into

chutes 25 and 29 to be delivered to the compartment 15, and the bone thrown into the chutes 26 and 28 to be delivered into the compartment 16.

What I claim is:

1. An annular picking-table comprising an upper and lower deck, a partition dividing the lower deck into a plurality of annular compartments, and means for directing different kinds of refuse picked from the same zone of said table into their respective compartments in said lower deck.

2. An annular picking-table comprising upper and lower decks, a partition dividing the lower deck into a plurality of annular compartments, pairs of chutes at the inside and outside of said table for receiving different kinds of refuse picked from said table, one chute of each pair of said chutes communicating with one of said compartments, and the other chute with the other compartment.

3. An annular picking-table comprising an upper deck and a lower deck, a partition wall dividing said lower deck into two annular compartments, an inclined portion on said partition, a chute at one side of said table for delivering one kind of refuse on to said inclined portion, for delivery into one compartment, a second chute on the same side delivering into the other compartment, a chute on the opposite side of said table, means forming communication between said last named compartment and said chutes, and a chute on the same side as said last mentioned chute communicating with the first named compartment.

4. An annular picking table comprising an upper deck and a lower deck, posts on said lower deck supporting said upper deck, a partition wall dividing said lower deck into two annular compartments, an inclined portion on said partition, said inclined portion being formed with ridge portions opposite said posts whereby the material moving down said inclined portion is directed away from said posts, means for directing one kind of refuse on to said inclined portion to deliver same into one of said compartments, means for delivering another kind of refuse from the same side of said table to the other compartment, and means on the opposite side of said table for delivering the first named refuse to the first named compartment, and means for delivering the second named refuse to the second named compartment.

5. An annular picking-table comprising an upper and lower deck, stationary plates forming side walls for the lower deck, a partition dividing said lower deck into two annular compartments, an inclined portion on said partition, means for directing refuse picked from one side of said table on to said inclined portion to direct it into one of said compartments, means for delivering another kind of refuse from the same side of said table to the opposite compartment, a shelf, means for delivering the first-named refuse from the opposite side of said table to said shelf, said shelf having openings formed therein, a chute communicating with said openings and with openings formed in said inclined portion, and means for delivering the first named refuse to the first named compartment.

In testimony whereof I, the said Ross M. Bickley, have hereunto set my hand.

ROSS M. BICKLEY.

Witnesses:

William J. Bruner,

C. T. McCrea.