

(No Model.)

E. A. BARTL & J. C. BOWMAN.
SLATE PICKER.

No. 454,393.

Patented June 16, 1891.

Fig 1--

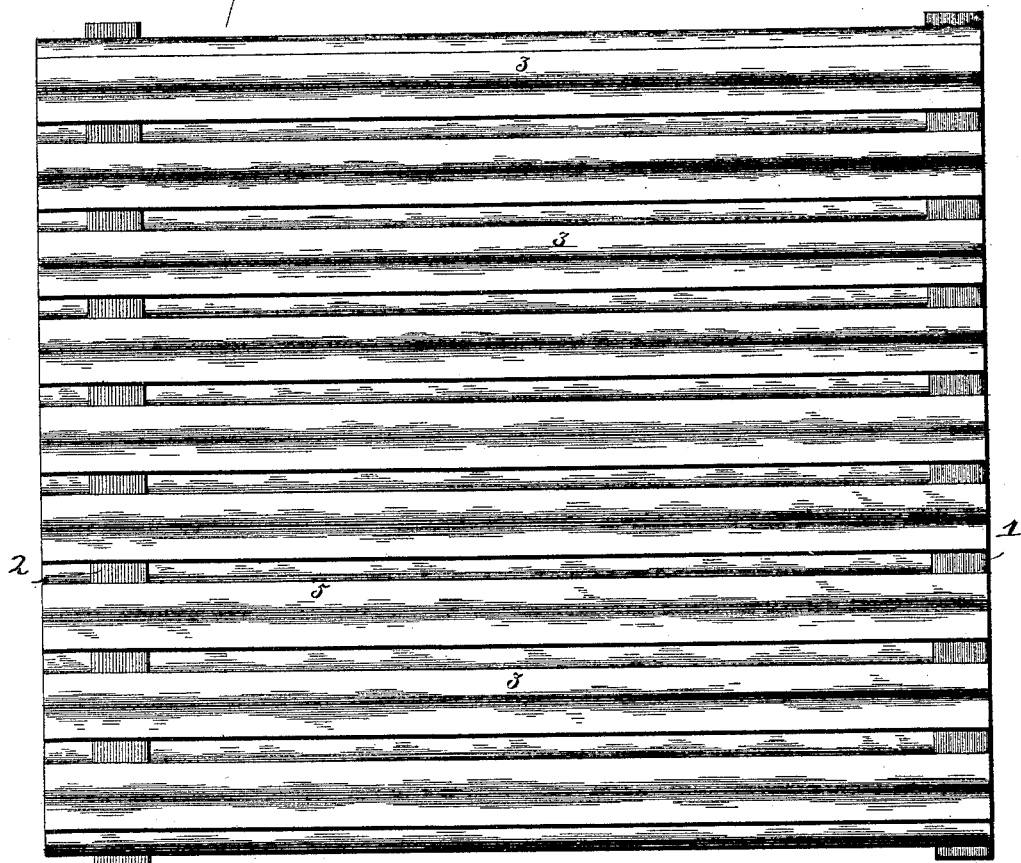
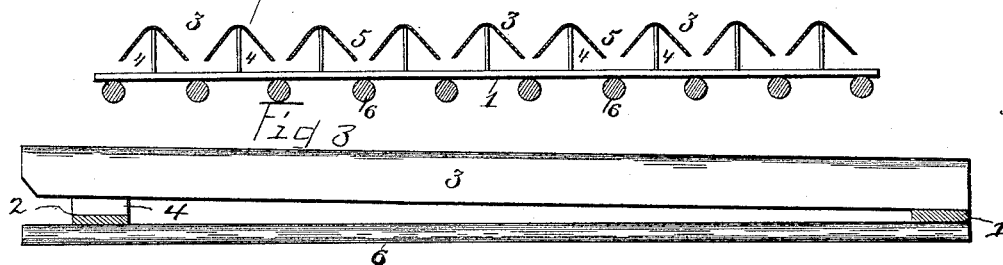


Fig 2--



WITNESSES:

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UNITED STATES PATENT OFFICE.

EDMUND A. BARTL AND JACOB C. BOWMAN, OF SCRANTON, PENNSYLVANIA.

SLATE-PICKER.

SPECIFICATION forming part of Letters Patent No. 454,393, dated June 16, 1891.

Application filed February 16, 1891. Serial No. 381,603. (No model.)

To all whom it may concern:

Be it known that we, EDMUND A. BARTL and JACOB C. BOWMAN, both residents of Scranton, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Slate-Pickers; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Our invention relates to improvements in slate-pickers for freeing coal from slate.

As is well understood, coal as it comes from the mines is subjected to the action of breakers, which crush and break the same into lumps of approximately the same size. The coal is then fed over inclined ways, along the sides of which are stationed operators who pick out the slate which is generally found intermingled with the coal. This is a very inefficient manner or method of freeing the coal of slate, a small percentage of the latter only being removed.

Our invention is designed to provide an improved construction of picker whereby the slate can be readily removed automatically or with but little outside assistance.

The invention consists in the novel construction and combination of parts hereinafter fully described, and specifically defined in the claim.

In the accompanying drawings, Figure 1 is a plan view of a slate-picker constructed in accordance with our invention. Fig. 2 is a sectional view of the same; Fig. 3, a longitudinal section.

In the said drawings, the reference-numerals 1 and 2 designate top and bottom transverse bars, respectively, to the upper of which are secured angle-bars 3. At their bottoms these bars 3 are secured to studs 4, attached to the transverse bar 2, so that at these ends they are somewhat farther from the bar 2 than at the other or upper ends. These bars may be made of cast or wrought iron or any other material found convenient. As seen, the bars are separated from each other, forming spaces 5 therebetween.

Secured to the under side of the bars 1 and 2 are a series of bars 6, preferably round or cylindrical, which are located under and in line with the spaces between the angular bars.

The operation is as follows: The coal as it comes from the breaker is in irregularly-shaped lumps, which are approximately of the same size. The slate which is intermingled therewith, however, generally consists of flat slabs or pieces. The spaces between the angle-bars are somewhat smaller than the lumps of coal which are to be screened, so that while the slate will pass through the same edgewise the coal will pass over and be delivered at the bottom thereof. The device is set in an inclined position, so that the coal will pass down by gravity, and the slate falling through the spaces will strike the bars underneath and be diverted to the right or left toward the sides thereof, and thus preventing the same from accumulating in the center and clogging the device. They also serve to strengthen and brace the picker.

It will be understood that the width of the spaces between the angle-bars will correspond with the size of the coal fed to the device.

The upper ends of the angle-bars are nearer to the transverse bars than the opposite ends in order to free the slate from between the bars and sides of the angle-bars.

Having thus described our invention, what we claim is—

The combination of the transverse bars, the angle-bars secured thereto with spaces between the same, said angle-bars at their upper ends being nearer to the transverse bars than at their lower ends, and the bars secured to the said transverse bars and located under and in line with said spaces, substantially as described.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

EDMUND A. BARTL.
JACOB C. BOWMAN.

Witnesses:

SNOGOLD OLSZEWSKIT,
FRANK NICTER.