

No. 865,185.

S. J. KERRIGAN.

PATENTED SEPT. 3, 1907.

SLATE JIG.

APPLICATION FILED NOV. 24, 1906.

Fig. 1.

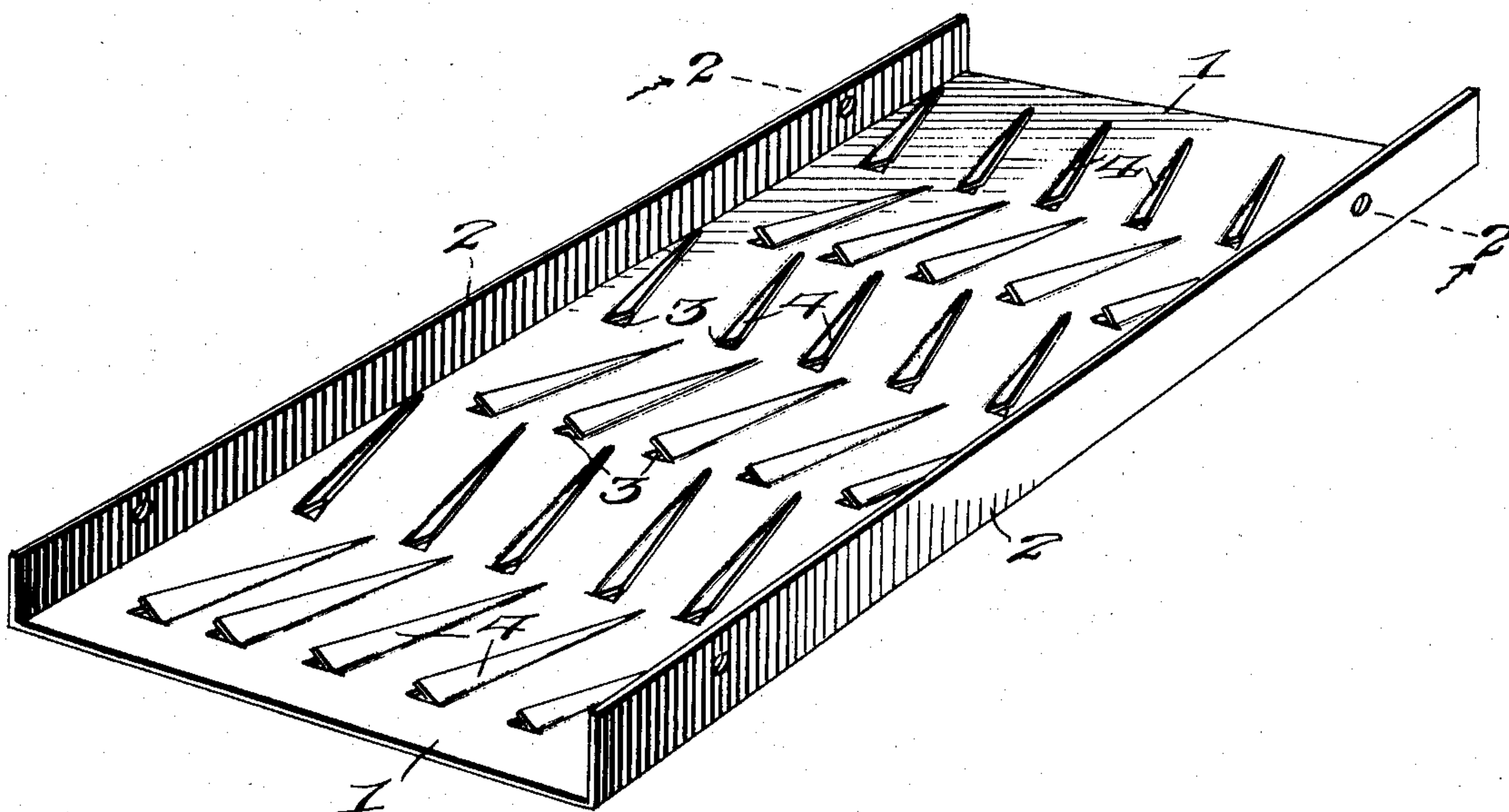
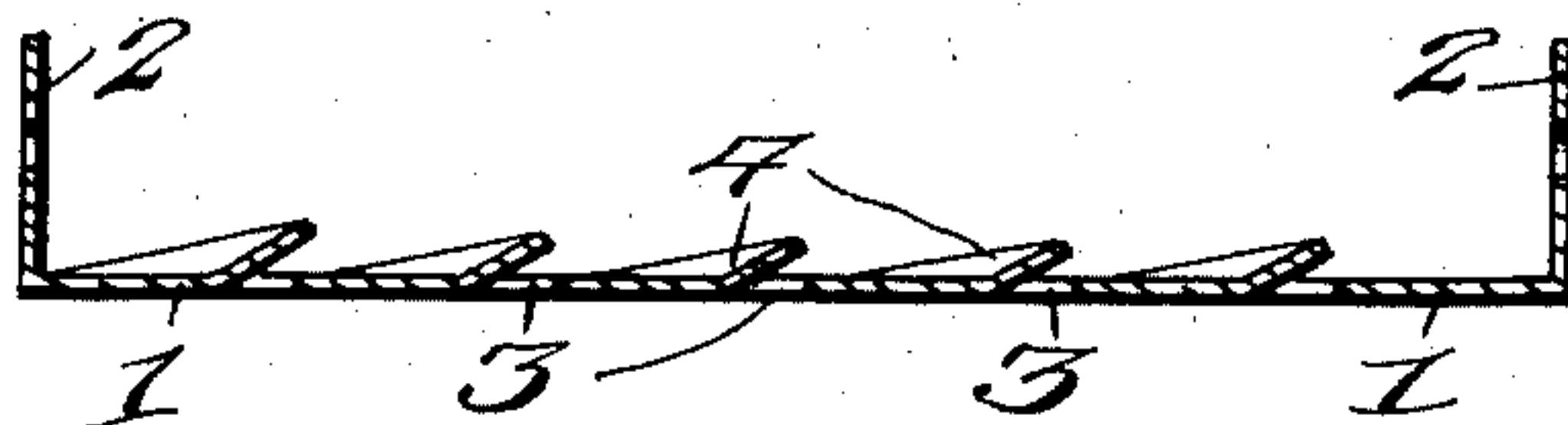


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

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SLATE-JIG.

No. 865,185.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, STEPHEN J. KERRIGAN, a citizen of the United States, residing at Gilberton, in the county of Schuylkill and State of Pennsylvania, have
5 invented new and useful Improvements in Slate-Jigs, of which the following is a specification.

The invention relates to an improvement in slate-jigs, and particularly to a screen adapted for use therewith.

10 The main object of the present invention is the production of a jig and screen of the type described constructed and arranged for the effective separation of the slate from the coal.

The invention in its preferred form will be described
15 in the following specification, reference being had particularly to the accompanying drawings, in which:—

Figure 1 is a perspective view of a jig screen constructed in accordance with my invention, Fig. 2 is sectional view of the same on line 2—2 of Fig. 1.

20 Referring to the drawings it will be noted that my improved screen comprises a metallic plate 1 having upwardly turned marginal side edges 2 to provide flanges whereby the screen may be connected to any preferred form of jig operating mechanism. The horizontal portion or plate proper of the screen is formed
25 with a plurality of openings 3, arranged at an angle to a line longitudinally and centrally of the plate. By preference these openings are arranged in transverse rows, extending alternately at opposite angular relation to said central line, so that the openings in one
30 row, being respectively parallel to each other in themselves, extend at an angle reverse to the direction of the openings in the next row. It will also be observed that the ends of the openings in one row are
35 arranged between the ends of the openings in the approximate row. By this construction the plate is provided with a series of openings inclining reversely in rows, and arranged in alternate or staggered order

longitudinally of the plate. The openings which are approximately triangular in shape are formed by
40 stamping from the material to leave the cut portions integral with the plate, said cut portions being bent upwardly from their connection with the plate and at an incline to its surface to provide sheds 4 covering
45 the openings. The sheds are arranged to project the greatest distance from the plate at their widest or base ends, thereby affording the maximum access to the openings 3 at these points.

In use the coal and slate will be caused to travel longitudinally of the jig, the slate owing to its comparatively thin or plate like structure finding its way
50 readily through the openings 3, while the coal owing to its round or lumpy structure will pass over the sheds of said openings and be delivered from the passage end of the screen comparatively free from slack. 55
Owing to the inclination of the sheds 4 with relation to the plate it will be observed that the slate particles are directed through the openings, while passing longitudinally of the screen.

Having thus described the invention what is claimed
60 as new, is:—

A jig screen comprising a flat plate with vertical upturned opposite sides, the body of the plate between the sides having transverse parallel rows of oppositely inclined triangular shaped openings struck therefrom, said
65 openings being so constructed as to decrease in size from one of their ends to the other, the ends of one row being arranged to point between the ends of the openings in the succeeding row, the cut-away portions from the openings being bent upwardly from their connection with the
70 plate at an angle thereto to its surface to provide inclined sheds serving to cover said openings.

In testimony whereof, I affix my signature in presence of two witnesses.

STEPHEN J. KERRIGAN.

Witnesses:

M. J. REYNOLDS,
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