

Calvin W. Parsons (1852-1898) learned his skill as a mechanical engineer as an apprentice at Wyoming Valley Manufacturing Co. He worked as a draughtsman and mechanical engineer in New York; Providence, RI; and New Jersey for Edison; and returned to Wilkes Barre to work for Vulcan Iron Works. Parsons moved to Scranton in 1882 to work with the Dickson Manufacturing and with the Lackawanna Iron and Coal. In 1894 he opened his own business, specializing in inventions.

CALVIN W. PARSONS, Mechanical Engineer.

Improved Machinery for Coal Mining.
Mills Designed and Equipped.
Tests Made of Power, Light, Etc.

NEW INVENTIONS A SPECIALTY.

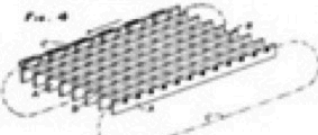
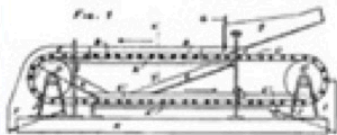
24 BURR BUILDING, WASHINGTON AVE., SCRANTON, PA.



THE COLLIERY ENGINEER
—AND—
METAL MINER.
SCRANTON, PA.:
THE COLLIERY ENGINEER CO.
1907.
COAL SCREEN.

No. 948,764. George W. Parsons, Scranton, Pa. Patented September 10, 1910. Fig. 1 is a side view of one of the simpler forms of the machine, and Fig. 2 is a diagram showing the essential part of the construction. The screening surface consists of bars *a* which are fixed to suitable supporting beams, and cross bars *b* having the same space between them as the bars *a*. The cross bars are attached to a frame *c*, and are pivoted at one end to the frame, while at the other end they are pivoted to a frame *d*. The bars *a* and *b* are arranged in two rectangular frames of any size desired. The coal to be sized is introduced into the machine through the chute *e*, and is directed toward the screen, with little or no vibration or agitation. The loss by splashing, etc., of smaller coal is thereby

avoided. All material which is too large to pass through the screen is carried over the head shaft *f* and is delivered to the chute *g*. The stuff which passes through is partially by the chute *h* and *i*, into a lower set of bars *j* which are at a right angle to the upper bars *a*. Another grade is taken out here, which falls between the cross bars *b* and over the chute *k*. In practice two or more of these screens and sets of bars are employed, one over another, the mesh being changed in the operation of sizing or grading from "medium" to "fine" or "coarse" as desired in one machine. The screen can be changed by "cutting" of coal because the amount of coal that passes under the head gate *l* depends upon the action given to the screen. The screening capacity is heavy when greater than, shaking or rotary motion of equal force, and the machine is free from vibration.

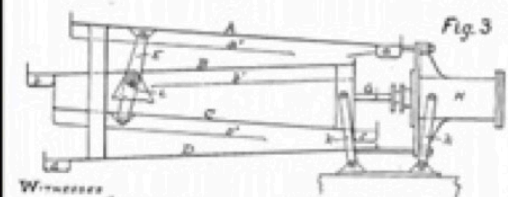
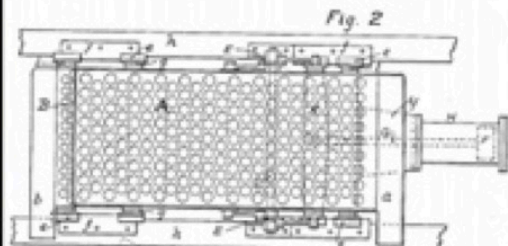
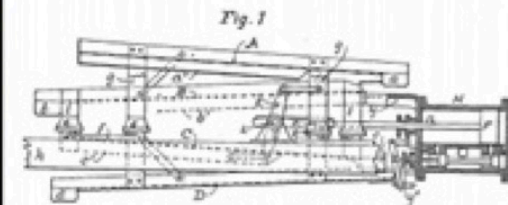


He was the inventor of several important coal processing machines: a coal grader, an automatic screen, and his shaker screen improvements

The objects of that invention were: to balance the moving parts having a so that no vibration is communicated to the attached floors or building; to improve the movement making the reversal of the motion more abrupt; and to provide easy speed adjustments

Anthracite plants still use machines based on this patent.

No. 626,099. C. W. PARSONS, Scr't. Patented May 30, 1899.
A. L. PARSONS, Administrator.
SHAKING SCREEN AND SEPARATOR.
(Application filed Nov. 15, 1897.)
(No Model.) 2 Sheets—Sheet 1.



Witnesses
J. B. Rypley
A. R. Dimmell

Inventor.
Calvin W. Parsons

