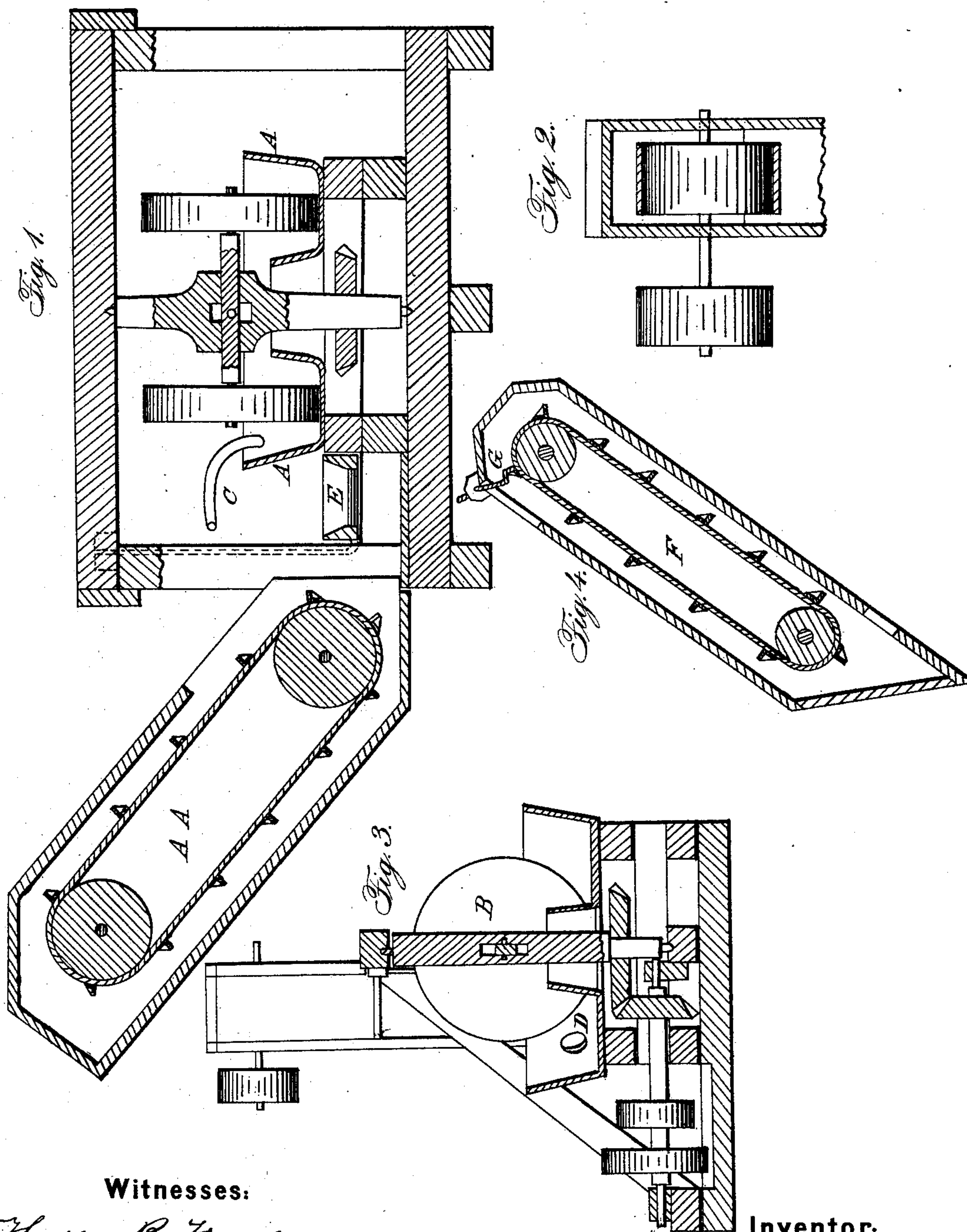


D. L. FURNIER.

Sand Washer.

No. 69,650.

Patented Oct. 8, 1867.



Witnesses:

Harry B. Fryer
John C. Cunningham

Inventor:

David L. Furnier

United States Patent Office.

DAVID L. FURNIER, OF ROSTRAVER, PENNSYLVANIA.

Letters Patent No. 69,650, dated October 8, 1867.

IMPROVED MACHINE FOR WASHING SAND, &c.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, DAVID L. FURNIER, of Rostraver, in the county of Westmoreland, and State of Pennsylvania, obtained Letters Patent of the United States bearing date of the 12th of March, 1867, for an improved machine for washing sand and other materials, and that I am the original inventor of the following-described improvements in my process, which I now desire to have patented in connection with my patent bearing date March 12, 1867; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct a cast-iron pan, A, Figure 1, in which two upright cast-iron wheels, B, Figure 3, revolve, worked by a cross and upright shaft, or horizontal and driving-shafts, underneath the pan. C in fig. 1 represents the hose, through which the water is forced from the pump into the pan, D the round hole in the pan, through which the sand and water pass into the riddle E. The riddle E is worked by an eccentric from the horizontal shaft. From the riddle E the sand and water are passed into the elevator A A, thence carried by same into the riddle of main wash, as described in my former patent of March 12, 1867. After passing through my main wash the sand is carried to a platform by means of an elevator, F, Figure 4, which elevator is attached to the front of my main wash at the point where the square opening is found in the bottom of the lower pan, as described in my patent of March 12, 1867. G, in fig. 4, on the top of elevator F, is the scraper, by which the sand, when compacted in the boxes, can be cleaned out. The elevator F is driven by the same main horizontal shaft as in my main washer.

It will be seen that my improved process consists in crushing and mixing the sand and water by means of two or more revolving rollers in the pan preparatory to its being carried to the main wash; a riddle to separate coarse gravel, worked by an eccentric; a set of cast-iron elevators or boxes that receive the sand and water, mixed as they come from the riddle, and are thence thrown into my main wash; and the scraper that enters each and every elevator or box, and removes the sand and water therefrom.

Having thus described my invention and improvements on my former patent, I desire to claim and secure by Letters Patent—

1. The method, as herein described, of crushing and washing sand or rock by means of revolving wheels, operated by cross or horizontal shaft beneath the pan.
2. The construction of iron boxes or elevators, that receive the sand and water mixed, in the manner as and for the purpose described.
3. The scraper, that enters each and every box, in the manner and for the purpose described.

DAVID L. FURNIER.

Witnesses:

HARVEY B. FRYE,

JOHN C. CUNNINGHAM.