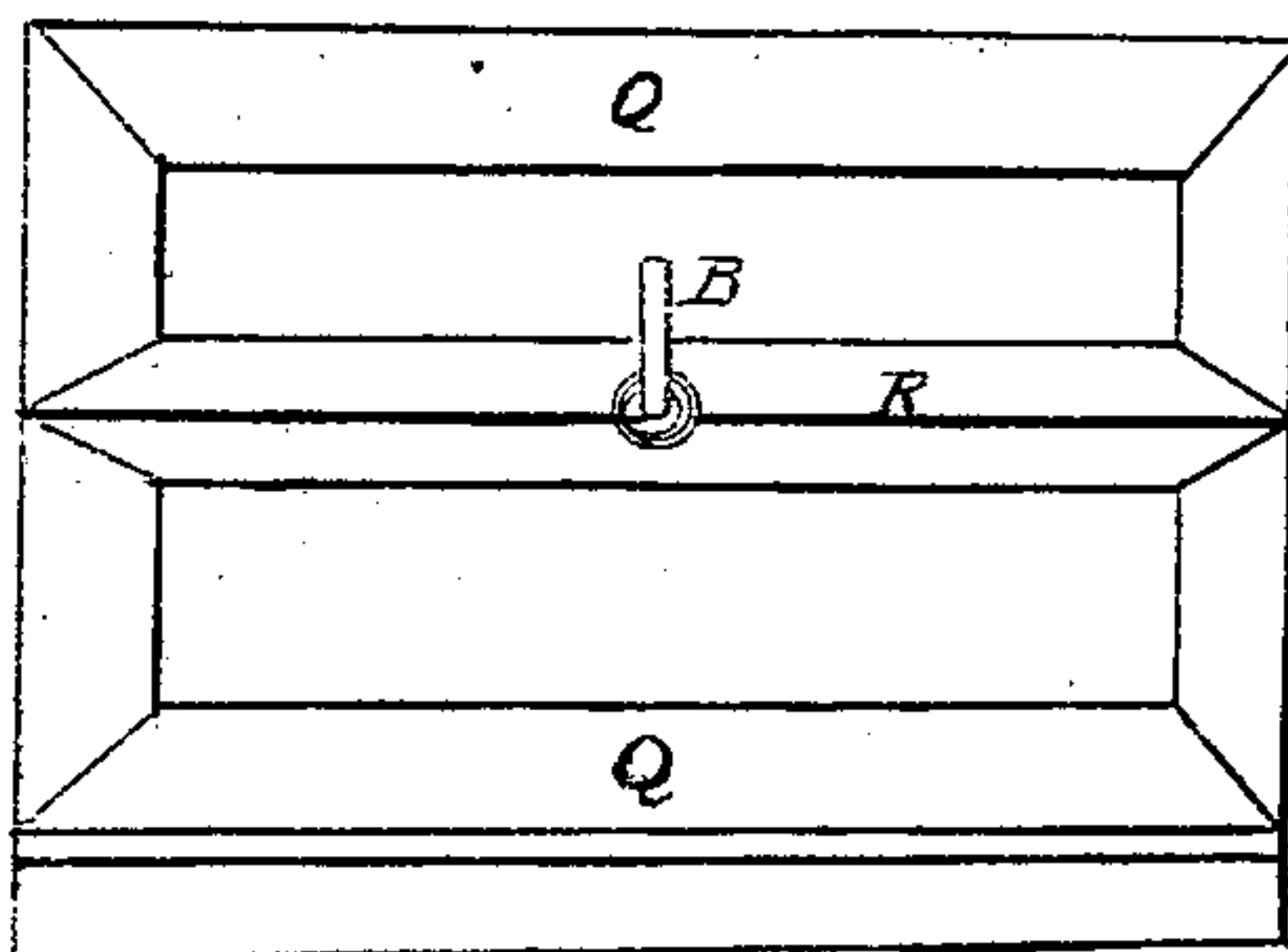
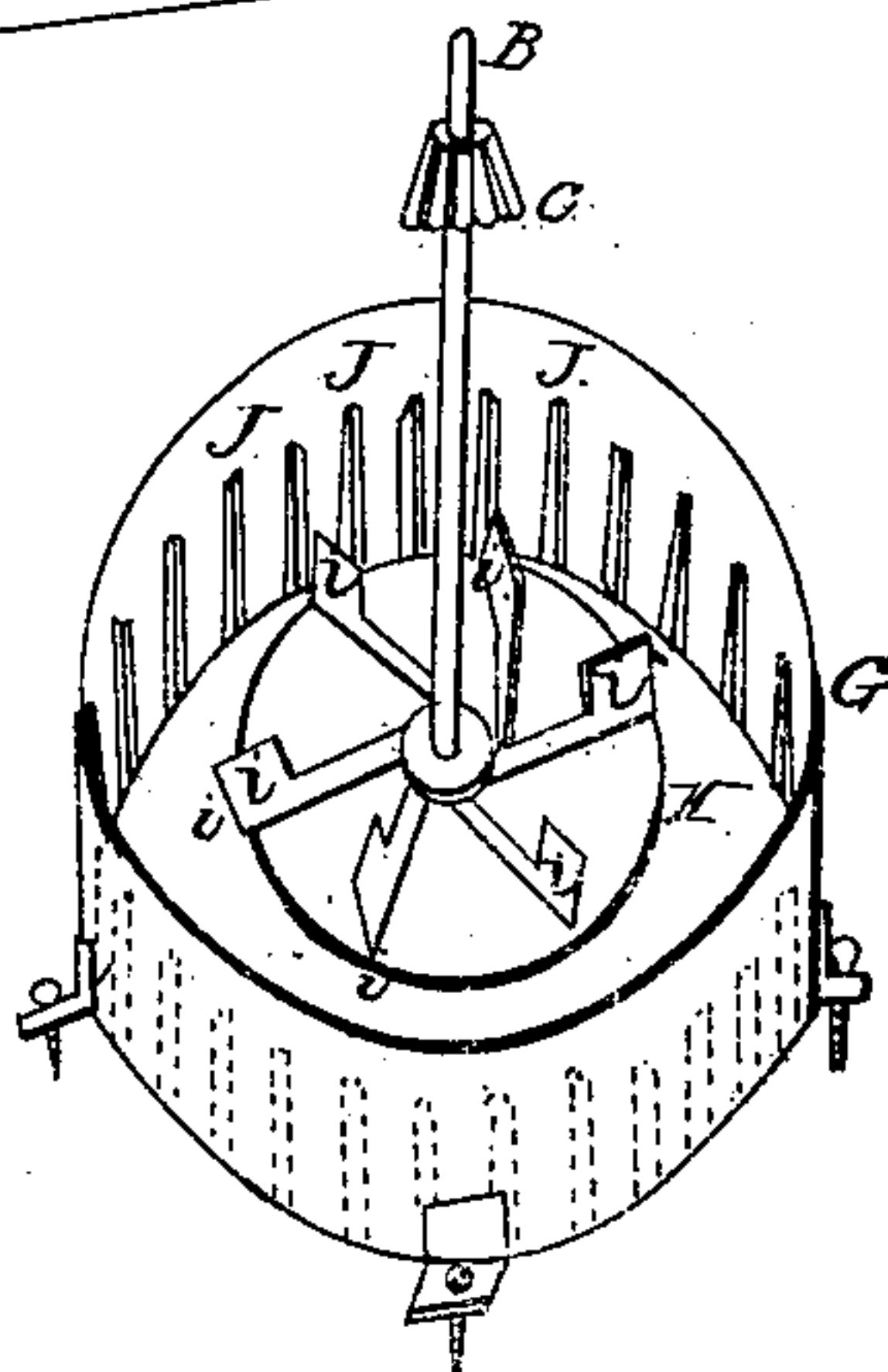
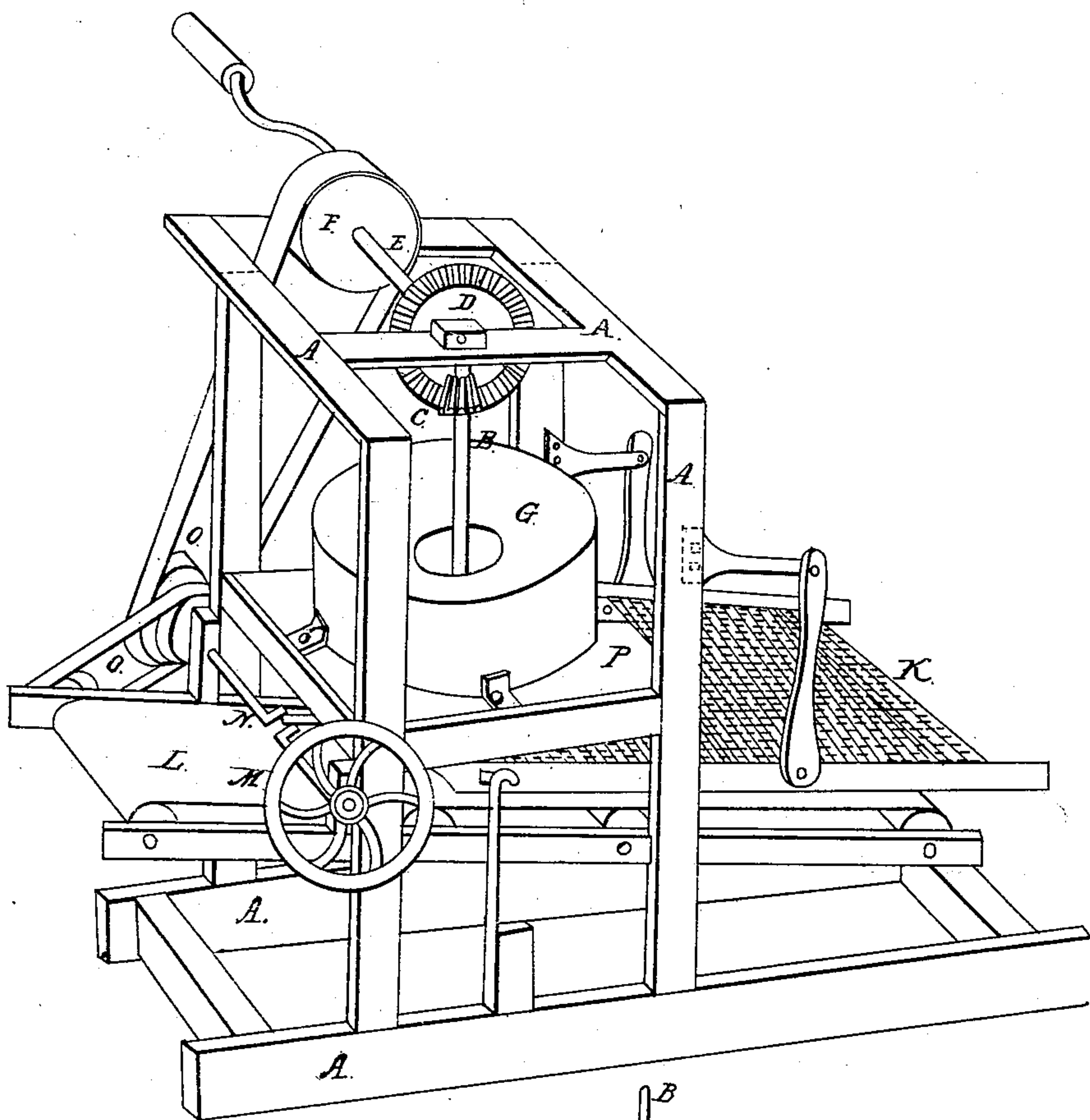


B. O'BRYAN.  
ORE SEPARATOR.

No. 13,136.

Patented June 26, 1855.



# UNITED STATES PATENT OFFICE.

BEARNARD O'BRYAN, OF MARIETTA, PENNSYLVANIA.

## MACHINE FOR CLEANING ORE.

Specification of Letters Patent No. 13,136, dated June 26, 1855.

*To all whom it may concern:*

Be it known that I, BEARNARD O'BRYAN, of Marietta, county of Lancaster and State of Pennsylvania, have invented new and useful Improvements for Cleaning Ore; 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, making a part of this specification,

The nature of my invention is a horizontal circular plate operating, with arms, inside of a ribbed cylinder—and an angular framework underneath the cylinder.

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

A is the frame of machine; B, the upright shaft; C, the pinion attached at top of shaft B and gearing into bevel wheel D, which operates on the horizontal shaft E and is driven by the band wheel F; G, the hopper or cast iron cylinder into which the ore is thrown, and falls upon the cast iron horizontal circular plate H which is attached to and revolves with the shaft B in the inside of hopper G. This plate H has raised spokes or arms on its upper side (cast solid with it) having broad upright ends I, which catch the ore as it falls on the plate H, and the rapid revolution of the plate H effectually shakes the ore, and throws it against the upright ribs J on to the interior or inner side of the hopper or cylinder G, thus loosen-

ing and shaking off all the dirt that was sticking to the ore, and the ore falling down upon the screen or sieve K is cleaned and sifted; the ore passing off over the one end of sieve K, and the dirt falling through the sieve K is carried by an endless apron L on the opposite side of the machine.

The sieve K, apron L and fly wheel M are operated by a horizontal shaft N and band pulleys O, in the usual manner.

The hopper G rests upon a platform P having an opening in its center, and underneath the platform P is fastened a strong horizontal frame work Q which has an angular shaped center piece R, sharp edge at top, which center piece R supports the shaft B and forms an aperture on each side through which the ore falls upon the sieve K underneath for the purpose of scattering and breaking the force of the falling ore upon the sieve K.

What I claim as my invention and desire to secure by Letters Patent is—

The arrangement of the solid cast iron horizontal circular plate H having solid raised arms, with upright ends, operating in a ribbed cylinder, with the frame Q with center piece R for the purpose of scattering the ore on to the sieve underneath, operating as and for the purposes herein described.

BEARNARD O'BRYAN.

Witnesses present:

L. H. TYSON,  
J. C. VAN CAMP.