

(No Model.)

T. CARKEEK.

SLIME TABLE.

No. 300,947.

Patented June 24, 1884.

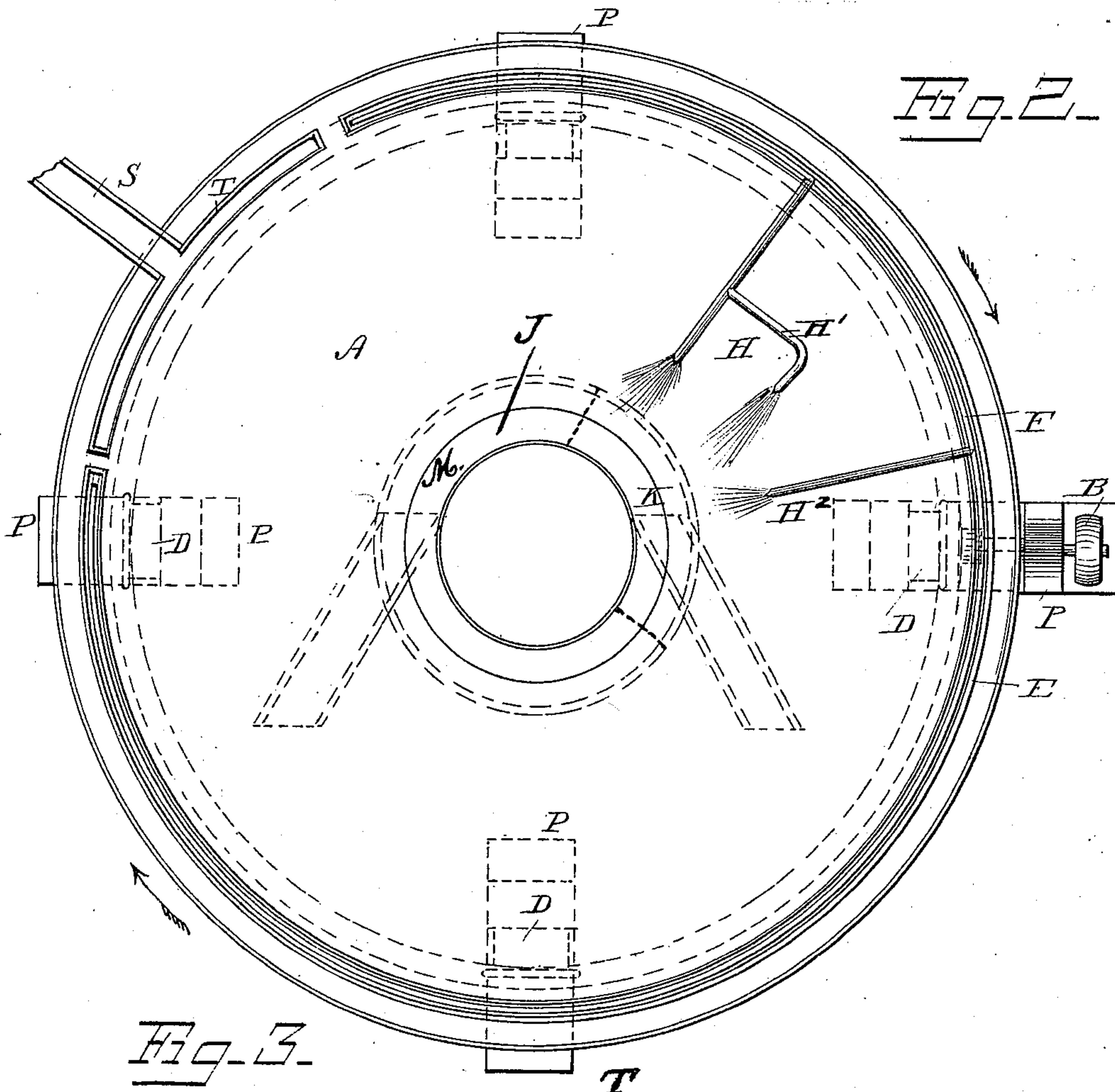
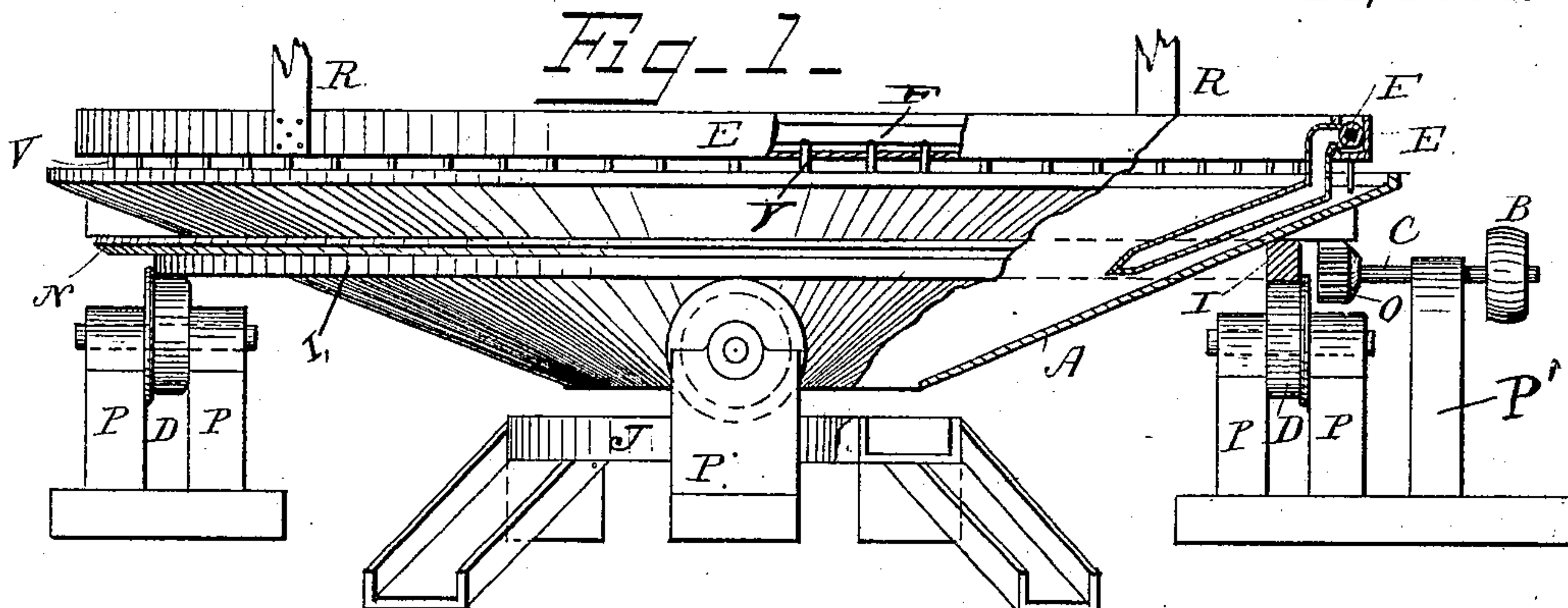
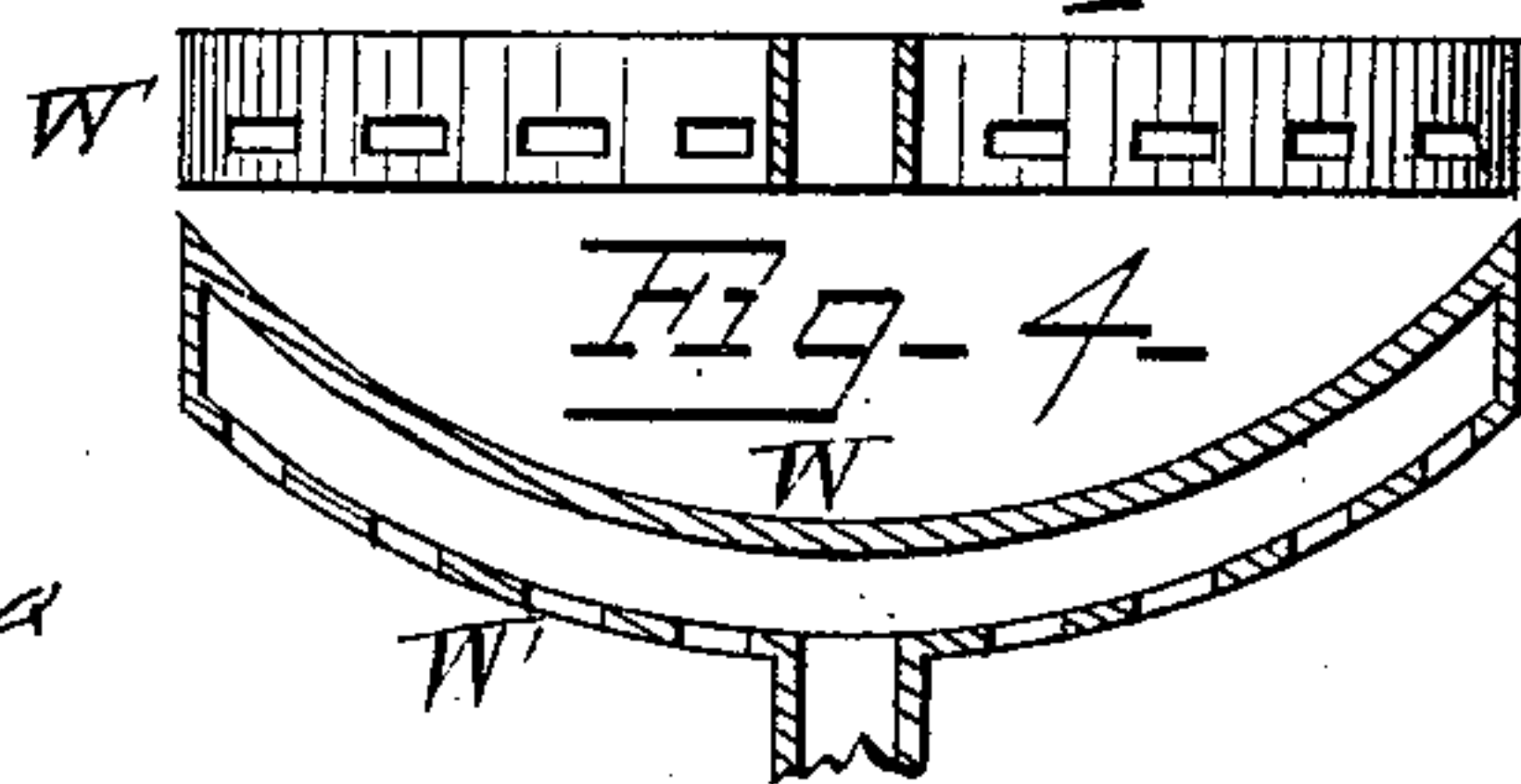


Fig. 3



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SLIME-TABLE.

SPECIFICATION forming part of Letters Patent No. 300,947, dated June 24, 1884.

Application filed October 13, 1883. (No model.)

To all whom it may concern:

Be it known that I, THOMAS CARKEEK, a citizen of the United States, residing at Silver Plume, in the county of Clear Creek and State of Colorado, have invented certain new and useful Improvements in Slime-Tables, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to a machine for washing and concentrating ores; and it consists in the construction and arrangement of parts, as will be hereinafter described, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a side elevation of my machine with a portion broken away. Fig. 2 is a top view of the table, showing the driving mechanism and discharge-troughs in dotted lines. Figs. 3 and 4 are detail views of the distributor.

The letters P indicate frames, placed at suitable intervals apart, which have journaled in their top portions rollers D, and one of said frames has an upright, P', provided with a shaft, C, having a pulley, B, at one end, its other end being provided with a gear-wheel, O.

The letter A represents the table or frame of my machine, which is made in conical form, and provided on its outer lower surface with a continuous track or way, I, which rests upon the rollers D aforesaid. Immediately above and outside of this track is a toothed rim, N, which also extends around the body of the table, and meshes with the gear-wheel O, whereby said table is rotated at any required rate of speed by any suitable power by means of a belt engaging the pulley B.

E denotes a trough, which extends nearly around the top portion of the table, and is suspended above the same by a frame, R, which is attached to the building in which the machine is located in any suitable manner. Arranged in this trough, and of about the same length, is a perforated pipe, F, having secured along its entire under surface jets V, whereby streams of water are allowed to flow down on the inner surface of the table.

Secured to the trough, and connected with the pipe F, are the pipes H and H', the for-

mer of which is provided with a branch pipe, H'. These pipes are inclined downward with the incline of the table, and are supplied with water direct from the pipe F.

S denotes a trough which carries the pulp onto the table, and has attached to it a distributor, T, made in circular form, and provided with a board, W, and a perforated board, W'. The trough S and distributor T are suspended and secured the same as the trough E. Under the opening in the bottom of the table is located a receptacle, J, having a central opening, and provided with compartments M and K, which are adapted to receive the tailings and concentrates.

The operation of my machine is as follows: The pulp is placed in the trough S, and from thence it flows against the inner portion of the board W of the distributor. It then passes through the perforated portion W' of said distributor, and is discharged onto the table. The material, as it comes onto the table, is mineral mixed with sand and rock or gangue, and as the table is driven around, as shown by the arrows, Fig. 2, the flow of water from the jets V of the pipe F causes the sand and rock or gangue to be carried into the compartment M, while the valuable mineral or material sought to be saved is washed into the compartment K by means of the pipes H, H', and H".

Having described my invention and the operation thereof, what I claim is—

The herein-described machine for washing and concentrating ores, comprising the conical frame A, having the rail I and the toothed rim N, the rollers D, the shaft C, having cog-wheel O and pulley B, the suspended trough E, the pipe F, provided with jets V, and pipes H, H', and H", the feeding-trough S, the perforated frame T, and the receptacle J, having compartments M K, the whole constructed and arranged to operate as shown and described.

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

THOMAS CARKEEK.

Witnesses:

J. F. MCCARTNEY,
F. B. HOUGHTON.