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1,516,116

C. A. PERRY

EXTRACTOR

Filed Dec. 9, 1922

FIG. 1

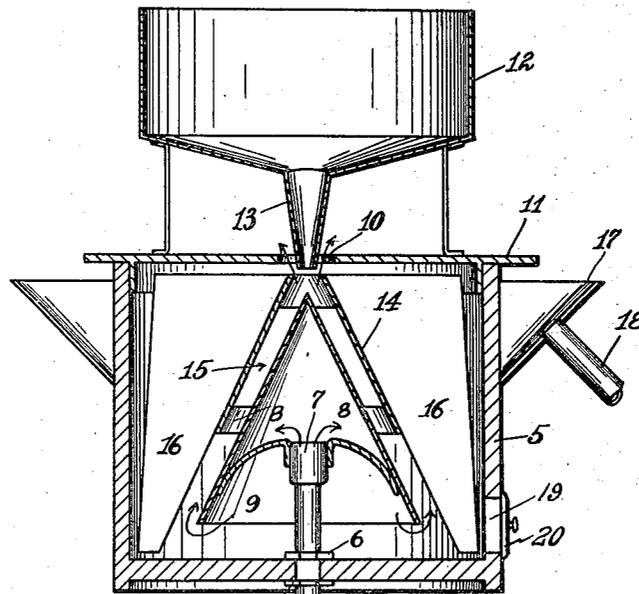
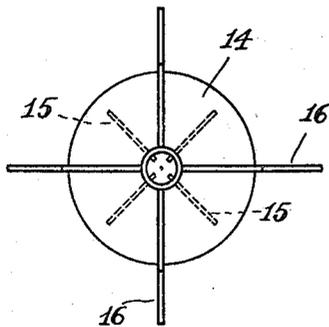


FIG. 2



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CHARLES A. PERRY, OF HEALDSBURG, CALIFORNIA.

EXTRACTOR.

Application filed December 9, 1922. Serial No. 605,945.

To all whom it may concern:

Be it known that I, CHARLES A. PERRY, a citizen of the United States, residing at Healdsburg, in the county of Sonoma and State of California, have invented certain new and useful Improvements in Extractors, of which the following is a specification.

My invention is an improved extractor, particularly useful in the separation of fine gold from sand, and crushed ore.

The present invention is an improvement on my Patent No. 1,361,489.

The object of my invention is to prevent rotation of the sand or crushed ore in the extractor, while the gold is being separated. Any rotation is very detrimental, since the gold is held in suspension and prevented from settling.

A further object of my invention is to provide an extractor which may be operated with air under pressure as well as water if desired.

In the drawing forming part of this specification, and in which my invention is illustrated,

Figure 1 is a transverse sectional view of my improved extractor.

Figure 2 is a top plan view of the baffle plates.

Referring to the drawings, 1 indicates a water pipe of usual construction, connected with any available source of water pressure. The pipe 1 is threaded into one end of an elbow 2 into the opposite end of which is projected an externally threaded discharge nipple 3. On the lower end of said nipple 3 is a locknut 4 to form a support for the bottom of a bucket 5, through a hole in which extends the nipple 3. A locknut 6 working on the nipple 3 is then screwed downwardly until it rests against the inside of the bottom of the bucket. Thus the bucket is rigidly supported in position. On the upper end of the nipple 3 is attached a threaded supporting sleeve 7, to which are soldered or otherwise secured the end of a suitable number of brace arms 8 the opposite ends of which are bent outwardly and downwardly and secured to the internal walls of a sheet metal separator cone 9, closed at its apex and open at its base. The apex of the cone is in the center of the bucket 5 and below an opening 10 in a bucket cover 11.

A hopper 12 has a spout 13 which extends into the opening 10 and above the cone 9. A frusto conical sleeve 14 rests on the cone 9 and is spaced therefrom by fins 15. The top of the sleeve 14 being open allows the material to fall therethrough onto the cone 9.

Radial baffle plates 16 are secured to the sleeve 14 to prevent the rotation of the sand in the bucket 5. A trough 17 is mounted on the outside of the bucket 5 and a drain 18 leads therefrom to carry the sand away falling into the trough 17. The bucket 5 may be provided with a drain opening 19 and a closure member 20 whereby it may be cleaned without moving it from its support.

Having described my invention, I claim:

1. An extractor comprising a supply pipe ending in a discharge orifice, a receptacle into which said pipe projects, a separator cone supported by said pipe within said receptacle, said cone enclosing the discharge end of said pipe and being mounted concentric therewith, and baffle plates mounted in said receptacle around said cone to prevent the rotation of material within the receptacle.

2. An extractor comprising a supply pipe ending in a discharge orifice, a receptacle into which said pipe projects, a supporting sleeve detachably mounted on the discharge end of said pipe and a separator cone supported by said sleeve and having its base enclosing said orifice, and radial baffle plates extending from adjacent said cone.

3. An extractor comprising a supply pipe ending in a discharge orifice, a receptacle into which said pipe projects, and a separator cone within said receptacle enclosing the discharge end of said pipe and concentric therewith, a cover engaging the top of the receptacle and having an opening concentric with said cone, a hopper above said opening, a sleeve positioned on said cone, and baffle plates secured to said sleeve extending so as to enclose said cone.

4. An extractor comprising a supply pipe ending in a discharge orifice, a receptacle into which said pipe projects, a separator cone supported by said pipe within said receptacle, said cone enclosing the discharge end of said pipe and being mounted concentrically therewith, a frusto conical sleeve positioned around and spaced from said

separator cone, a plurality of plates on said sleeve extending inwardly to engage said cone and a plurality of baffle plates on said sleeve extending outwardly therefrom to the 5 sides of the receptacle.

5. An extractor comprising a supply pipe ending in a discharge orifice, a receptacle into which said pipe projects, a sleeve mem-

ber therein mounted concentric with said supply pipe discharge orifice, and sets of 10 radial baffle plates on said sleeve extending inwardly therefrom and outwardly thereof for preventing rotation of material within the receptacle.

In testimony whereof I affix my signature.
CHARLES A. PERRY.