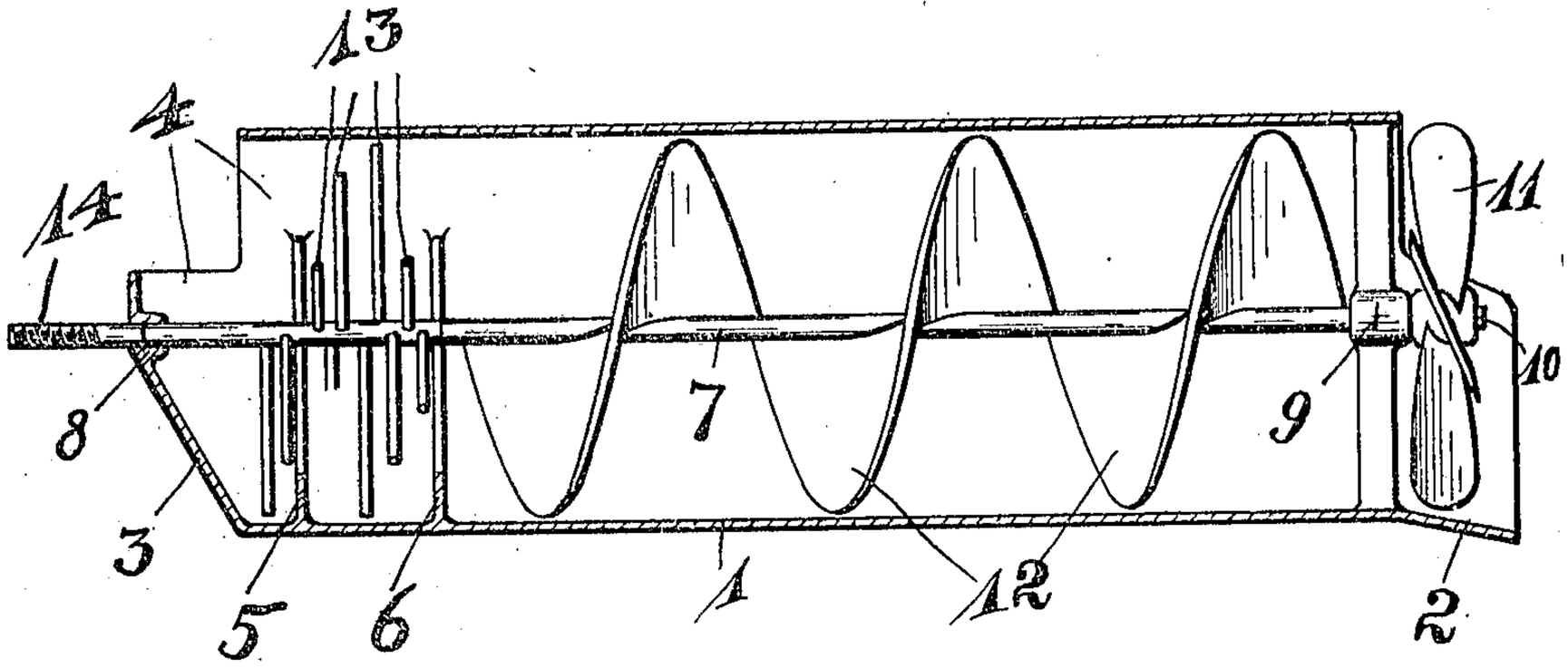
R. C. SAWYER & J. W. WEST.

GOLD WASHING AND ACCUMULATING DEVICE.

APPLICATION FILED NOV. 15, 1917.

1,298,577. Patented Mar. 25, 1919.



Roj C. Sawyer.
John W. West.
INVENTORS

WITNESSES:
Herbert R. Hamm
M. B. Forbes

UNITED STATES PATENT OFFICE.

ROY C. SAWYER AND JOHN W. WEST, OF PASADENA, CALIFORNIA.

GOLD WASHING AND ACCUMULATING DEVICE.

1,298,577. Specification of Letters Patent. Patented Mar. 25, 1919.

Application filed November 15, 1917. Serial No. 202,138.

To all whom it may concern:

Be it known that we, ROY C. SAWYER and JOHN W. WEST, citizens of the United States, residing at Pasadena, in the county of Los Angeles and State of California, have invented a new and useful Gold Washing and Accumulating Device, of which the following is a specification.

Our invention relates to devices for collecting gold out of the beach sand or collecting gold out of sand under the washing process.

The main object of this invention is to agitate the sand while separating the gold from the sand when directing sand and water through the device.

Another object is to provide means within the device for accumulating the gold while the lighter sand is passing through the device.

Another object is to provide a propelling means which draws the gold holding sand through the device.

Another object is to provide a suitable conveyer which conveys the gold holding sand through the device while agitating the sand and separating the gold from the sand.

Another object is to provide agitating means for washing the accumulated gold.

Other objects will appear from the following description and appended claims as well as from the accompanying drawing, in which—

The figure is a longitudinal section through our device.

1 designates a casing having an intake shoe 2 expanding beyond the diameter of the device to draw the material into the device on one end while the other end of the device is partly closed by the overflow baffle 3, leaving an outlet opening 4 on that end of the device. Accumulating baffles 5 and 6 are provided within the device a suitable distance spaced from the outlet opening 4. The shaft 7 is disposed through the device being journaled in the bearings 8 and 9. On the end 10 of the shaft 7 a propeller 11 is mounted for drawing the gold-holding sand into the device. The screw conveyer 12 is provided on the shaft 7 within the device for transmitting and drawing the gold holding sand through the device. The agitating arms 13 are also provided on the shaft for the purpose of agitating and keeping the sediment and accumulated gold in that part of the device stirred up so as to procure a washing and a continuous cleaning of the sediment and accumulated gold. The overflow baffle 3 is made high enough to insure a retaining of the gold passing with the sand through the device, while the accumulating baffles 5 and 6 are provided to form recesses for the gold to settle allowing the lighter sand to pass over the retarded gold in such recesses.

This device is constructed with the idea to simplify the washing of gold holding sand and is especially designed to draw wet sand through the device agitating the sand and at the same time allowing the gold in the sand to settle while the lighter sand with the water is caused to pass through the device. The device can also be used below the surface of water as the gold can settle behind the baffles from where it may be taken when the device is raised above the water surface or by a suitable tool, as will easily be understood.

Having thus described our invention, we claim:

1. In a gold washing device of the class described a tubular body having one fully open end and a partly closed end, the fully open end forming the inlet for the device with an area equal to the area in the device, the partly closed end forming an ore-retaining baffle and an overflow opening above the baffle within the circular area of the tubular body, and accumulating baffles within the body spaced from the ore-retaining baffle.

2. In a gold washing device of the class described a tubular body open at one end and partly closed at the other end, the partly closed end forming an ore-retaining baffle and also an overflow opening above the baffle within the area of the tubular body, and a propeller turnably disposed at the open end of the tubular body for drawing the ore-holding sand into and through the tubular body.

3. In a gold washing device of the class described a tubular body open at one end and partly closed at the other end, the partly closed end forming an ore-retaining baffle and also an overflow opening above the baffle within the area of the tubular body, the open end having an extension end spreading out beyond the area of the tubular body, a shaft turnably disposed concentrically to the tubular body, a propeller mounted on one end of the shaft near the

open end of the tube for drawing ore-holding sand into and through the tubular body, conveying means mounted on the shaft within the tubular body, accumulating baffles provided near the ore-retaining baffle within the tubular body, and agitating means provided on the shaft between the several baffles for washing the retained gold.

4. In a gold washing device of the class described, a tubular body open at one end and partly closed at the other end, the partly closed end forming an ore-retaining baffle and also an overflow opening above the baffle within the area of the tubular body, the open end forming the intake end of the device, accumulating baffles provided within the body spaced from the ore-retaining baffle, and means for circulating ore-holding sand through and into the device and for automatically digging into the beach-sand when so disposed.

In testimony whereof we hereunto affix our signatures in the presence of two witnesses.

ROY C. SAWYER.
JOHN W. WEST.

Witnesses:
HERBERT H. HAMM,
M. B. FORBES.