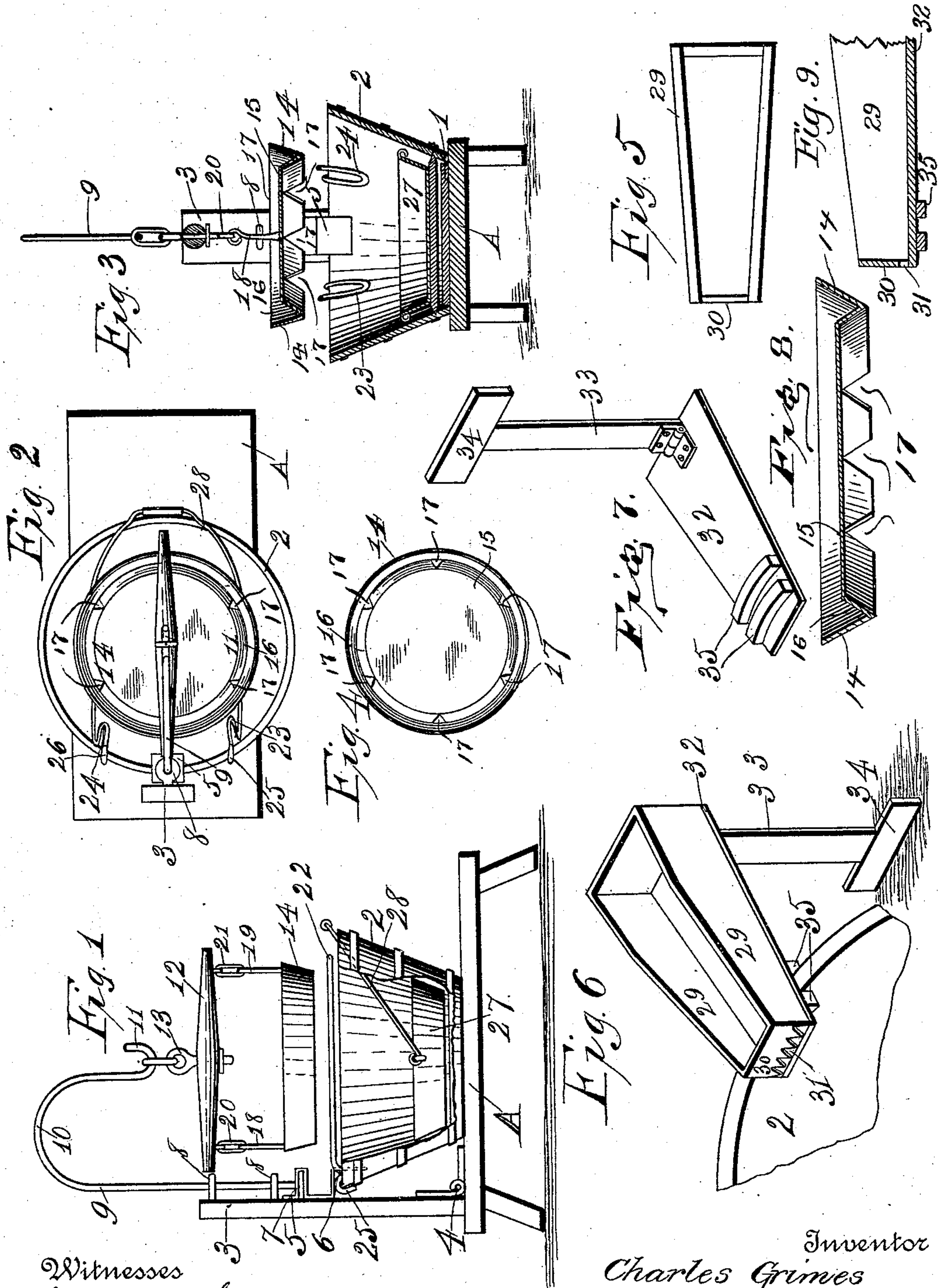


(No Model.)

C. GRIMES.  
GOLD WASHER.

No. 604,980.

Patented May 31, 1898.



Witnesses  
H. L. Ourand  
K. A. Nau.

Inventor  
Charles Grimes  
By John Wedderburn,  
his Attorney



# UNITED STATES PATENT OFFICE.

CHARLES GRIMES, OF RAPID CITY, SOUTH DAKOTA.

## GOLD-WASHER.

SPECIFICATION forming part of Letters Patent No. 604,980, dated May 31, 1898.

Application filed June 12, 1896. Serial No. 595,329. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES GRIMES, a citizen of the United States, residing at Rapid City, in the county of Pennington and State of South Dakota, have invented certain new and useful Improvements in Gold-Washers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to gold-washers.

My object is to provide an improved and simple gold-washer especially adapted for use in prospecting and working placer-ground where it is cheaper to utilize water than to transport the dirt and one which will require but a minimum amount of water in its operation.

Having this object in view, the invention consists of those peculiar features and combinations appearing more fully hereinafter.

In the accompanying drawings, Figure 1 is a side elevation showing the tub broken away to disclose the tailings-pan inside. Fig. 2 is a top view. Fig. 3 is a sectional elevation. Fig. 4 is a detail view showing the gold-pan and riffle-bottom; Fig. 5, a detail view of the drip-box; Fig. 6, a perspective view showing the draining-box on its rest when said box is being drained; Fig. 7, a detail view of the draining-box rest shown inverted; Fig. 8, a detail section of the gold-pan, and Fig. 9 a longitudinal section of the draining-box.

A designates an ordinary bench, and this bench is provided with a circular plate 1, over which the tub 2 is placed and which serves to hold the latter in position. I employ a crane-post 3, having its lower end hinged to the bench, as at 4, so that it can be folded down prior to transportation. On this crane-post is located a metal clip 5, which is bent downward at 6 and overlaps the edge of the tub, and this clip is also bent outward to form a rest 7, and thence back against and connected to the post. The post is also provided with a series of vertically-aligned eyes 8, and 9 designates the crane, whose vertical shank passes loosely through the eyes and is supported on the rest 7. The upper portion of the crane is bent over at 10 and into a hook

11, which lies directly above the center of the tub.

The numeral 12 designates a handle-bar which is provided with an eye 13 and a link adapted to be received on the hook 11. The gold-pan 14 which I employ is provided with a bottom 15. This bottom has an inclined flange 16, which is provided with a series of vertical slits 17, the lower edge of the flange being connected to the sides of the pan. Said bottom and flange act as a riffle. During the washing operation the dirt and sand are washed through the slits, while the ore remains in the pan.

The numerals 18 and 19 designate vertical rods which are fastened to the flange and have their upper ends connected to the handle by respective links 20 and 21.

My gold-pan rest is formed of a single piece of wire, which is bent into a loop 22, on which the gold-pan rests, and the ends of this loop are bent into downwardly-projecting open arms 23 and 24, that lie against the side of the tub, and then into hooks 25 and 26, which grasp its upper edge. In the bottom of the tub there is located a tailings-pan 27, which is provided with a bail 28, that extends up over the edge of the tub. The draining-box is shown in Fig. 5. The sides 29 of this box converge and become narrower in height until end 30 is reached. This end is provided with draining openings or slots 31 to allow the water to flow off freely.

The draining-box rest consists of a broad support 32, of the same size and shape as the bottom of the draining-box, and a leg 33, hinged to the support and provided with a foot 34 at its lower end. The under side of the front end of the support is provided with parallel curved pieces 35, between which the edge of the tub rests when the support is in use.

The operation is as follows: The dirt and ore are first placed in the gold-pan, which rests on the pan-rest. Water is then introduced in the pan, and this forces the dirt, sand, and other undesirable materials out through the slits in the flange of the bottom, while the heavier materials remain. The tailings after leaving the gold-pan fall into the tailings-pan, while the water drops into said pan and also into the tub. After the tailings have all



been washed out the crane and gold-pan are removed and the tailings-box and rest employed. The draining-box rest is placed in the position shown in Fig. 6 with the draining-box resting thereon. The tailings-pan is now removed and the contents thereof poured into the draining-box, from which the water immediately drains into the tub. The water in the tub may now be emptied into another receptacle, the gold-pan, tub, and tailings-pan replaced, and the tailings rewashed.

In the use of my invention only an exceedingly small amount of water is required for many washings, while the construction of the crane allows the gold-pan to be easily swung in any position.

Having thus described the invention, what is claimed as new is—

1. In a gold-washer, a gold-pan comprising an outer body or rim, a flat bottom of smaller diameter than the body and situated in a higher plane than the bottom edge of the latter, and an inclined flange located inside the rim or body and connecting the bottom with the lower edge of said body, said flange being provided with vertically-disposed slots.

2. In a gold-washer, the combination with a support, of a tub on the support, a foldable crane-post connected to the support and adapted to retain the tub on the latter, a crane connected to the post, and a gold-pan suspended from the crane, substantially as described.

3. In a gold-washer, the combination with a support, of a tub thereon, a crane-post

hinged to the support, a crane detachably connected to the crane-post, a gold-pan suspended from the crane, and a gold-pan support connected to the tub, substantially as described.

4. In a gold-washer, the combination with a tub and a removable tailings-pan therein, of a movable crane, and a gold-pan suspended from the crane over the tailings-pan, substantially as described.

5. In a gold-washer, the combination with a tub, of a draining-box rest comprising a support having curved pieces straddling the edge of the tub and a leg hinged to the support, of a draining-box resting on the support and adapted to drain into the tub.

6. In a gold-washer, the combination with a tub, of a draining-box rest comprising an inclined support having curved pieces straddling the edge of the tub, a leg hinged to the support and terminating in a foot, and a draining-box resting on the support and adapted to drain into the tub.

7. The herein-described draining-box having a bottom, and sides that converge, being also provided with an end at the converged portions of the sides, which end has its lower edge cut away into notches constituting draining-openings.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHARLES GRIMES.

Witnesses:

GEORGE S. MILES,  
W. W. YOUNG.