G. E. SIBBETT.

GOLD DREDGE TUMBLER.

APPLICATION FILED MAR. 14, 1918.

1,289,561.

Patented Dec. 31, 1918.

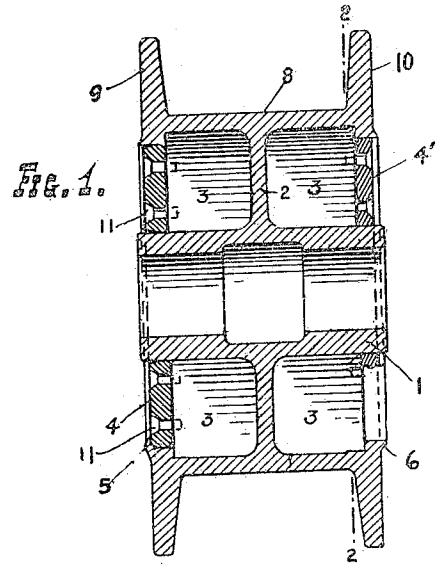


Fig. 1.

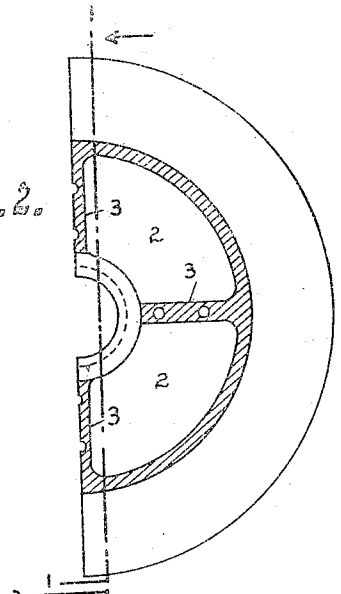


Fig. 2.

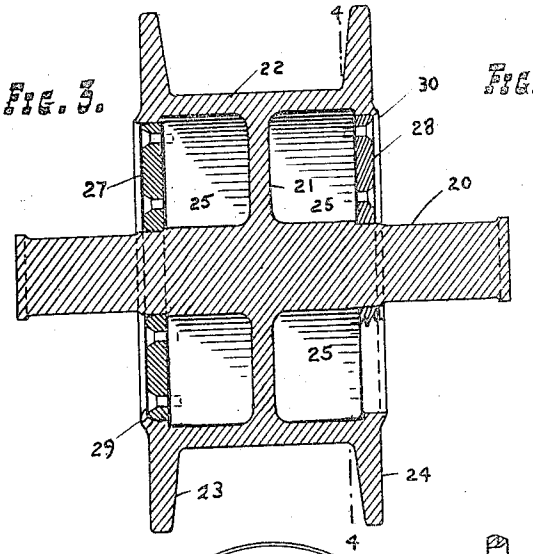


Fig. 3.

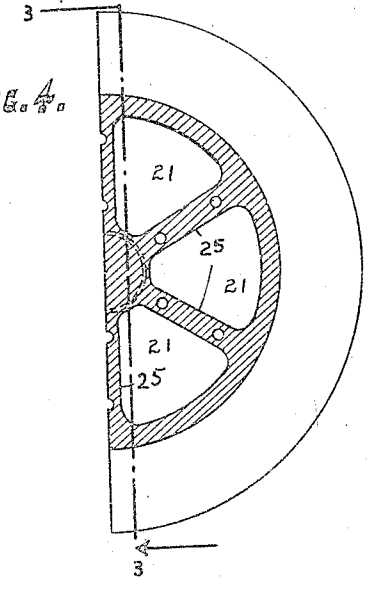


Fig. 4.

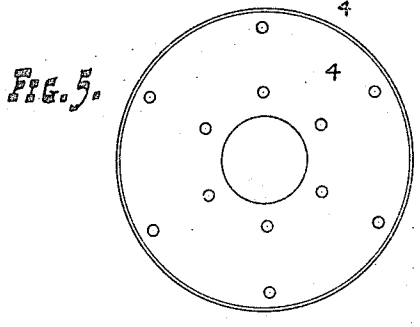


Fig. 5.



Fig. 6.

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GOLD-DREDGE TUMBLER.

1,289,561. Specification of Letters Patent. Patented Dec. 31, 1918.

Application filed March 14, 1918. Serial No. 222,519.

To all whom it may concern:

Be it known that I, GEORGE E. SIBBETT, citizen of the United States, residing at Berkeley, in the county of Alameda, State of California, have invented a new and useful Gold-Dredge Tumbler, of which the following is a specification in such full and clear terms as will enable those skilled in the art to construct and use the same.

This invention relates to a gold dredge tumbler, and its object is to produce a tumbler which shall be of such form as to be easily cored and molded to produce a perfect casting.

Another object of the invention is to provide means whereby the tumbler will be protected from the boulders catching therein and tearing out or otherwise breaking the dredge ladder.

It will be understood by those skilled in the art that where a small casting is made there are easily surmountable difficulties, but where a casting is made which contains from ten to twenty tons of metal for such a tumbler as is herein described, it has been found almost impossible to produce a perfect casting where the webs produce the entire side faces of the tumbler, and in addition it is very difficult to remove the core from such a casting.

In the present instance, the tumbler is cast with a single central web so that the cores may be taken out easily and the spaces thus produced are filled with suitable plates as closures.

Other objects of the invention will appear as the description proceeds.

An embodiment of the invention is shown in the drawings in which the same reference numeral is applied to the same portion throughout, but I am aware that there may be modifications thereof.

Figure 1 is a sectional view of one form of the tumbler, the plane of section being the line 1—1 Fig. 2 and showing portions of the side cover plates,

Fig. 2 is a transverse sectional view of one half of the tumbler, on line 2—2 Fig. 1,

Fig. 3 is a sectional view of the tumbler, the plane of the section being on line 3—3 Fig. 4, the shaft being cast integral,

Fig. 4 is a transverse sectional view of one half of the tumbler, on line 4—4 Fig. 3,

Fig. 5 is a view of one of the plates for closing the sides of the tumbler, and

Fig. 6 is a sectional view of one of said plates.

The numeral 1 indicates a hub cast to receive a suitable shaft, said hub having a central web 2 and suitable radial webs 3 to which the cover plates 4, 4′ may be bolted. In order to further secure the said cover plates in place, the tumbler is cast with projecting circumferential ribs as shown at 5 and 6 which ribs are hammered down over the edges of the cover plates to assist in holding them in place. The chain runs over the cylindrical shell 8 between the two flanges 9 and 10. The entire tumbler is about seven feet in diameter, and the several rib webs and so forth about three inches thick, so that the necessity for a sound casting at each pour will be apparent from the great expense involved. The cover is also secured to the tumbler by suitable bolts 11 which extend into the webs 3.

In Figs. 3 to 6 there is shown a casting which has the shaft cast with the tumbler. In these figures the numeral 20 indicates the hub, which is cast to form the shaft, and which is about 14 to 16 inches in diameter, and 21 indicates the central supporting web which carries the cylindrical shell 22. The shell has side flanges 23, 24 which are connected to the hub by a series of radial webs 25, and the openings are filled with side cover plates 27, 28 which are secured in place by means of bolts and by the hammering down over of the ribs 29 and 30, as in the previous figures. This cover is also secured in place by bolts 11 passing into the webs 25.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States is as follows, express reservation being made of permissible modifications.

1. A dredge tumbler comprising a wheel cast with a hub having a central web and a series of radial webs at right angles to the central web all supporting a cylindrical flanged shell, two cover plates filling the

space between the hub and shell, and bolts extending through the cover plates for holding the cover plates in place.

2. A dredge tumbler comprising a cast hub having side extensions forming journals for the tumbler, a central web cast with the hub and supporting a cylindrical flanged shell, and two side plates secured thereto to close the space between the shell and hub.

3. A dredge tumbler comprising a shell cast with a hub and having webs extending from the hub to the shell and two cover plates filling the space between the hub and shell, said cover plates being secured in place by having the material of the shell hammered down over said plates at their peripheries.

4. A dredge tumbler comprising a shell cast with a hub and having integral webs extending from the hub to the shell and two cover plates secured in place at the ends of the tumbler for filling the spaces between the webs and the hub and shell to prevent obstructions from being caught in said spaces.

In testimony whereof I have hereunto set my hand this 4th day of March A. D. 1918.

GEORGE E. SIBBETT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."