No. 646,382. Patented Mar. 27, 1900.

W. G. COLLINS.

PROSPECTING DISH.

(Application filed Mar. 31, 1898.)

(No Model.)

Fig. 1.

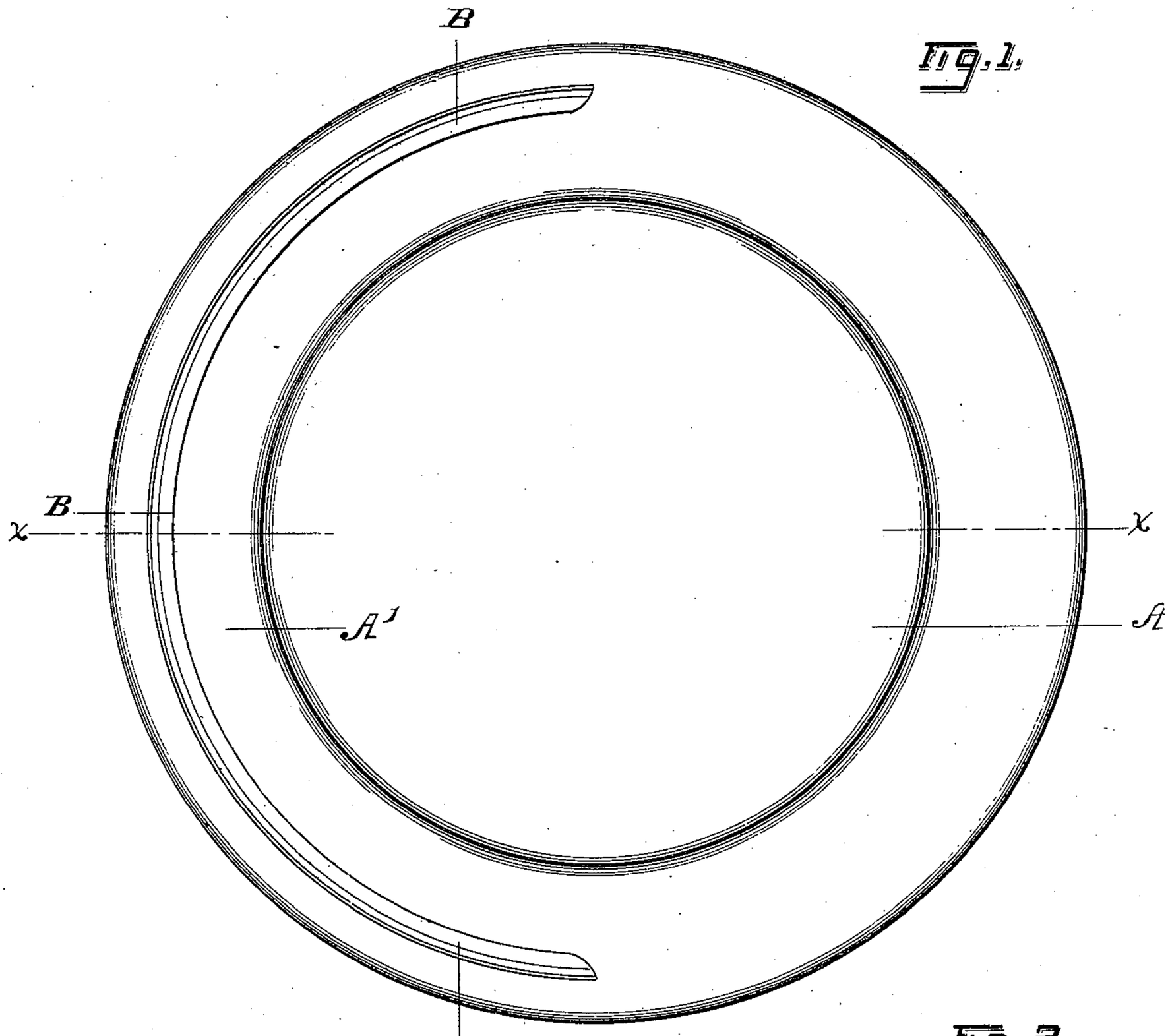
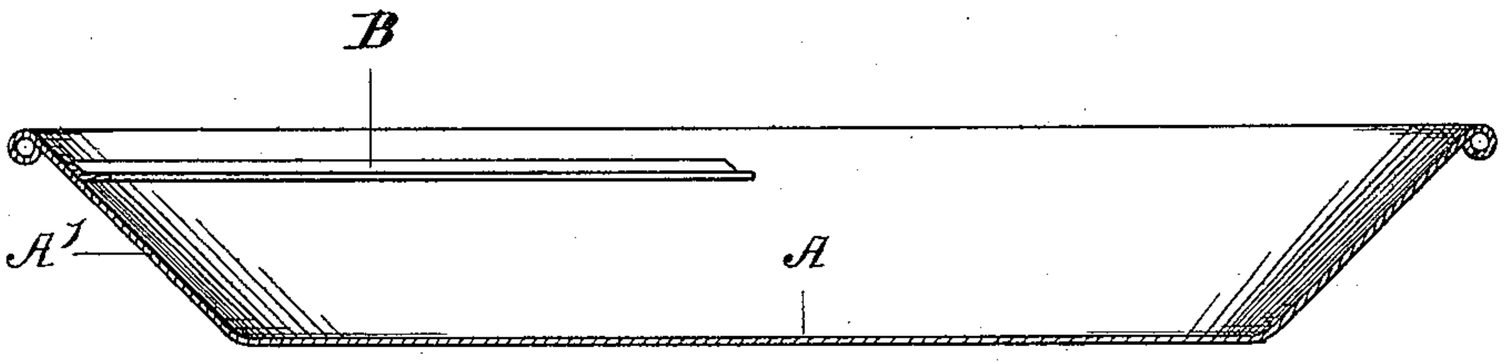


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

WALTER GEORGE COLLINS, OF CORAMBA, NEW SOUTH WALES.

PROSPECTING-DISH.

SPECIFICATION forming part of Letters Patent No. 646,382, dated March 27, 1900.

Application filed March 31, 1898. Serial No. 675,991. (No model.)

To all whom it may concern:

Be it known that I, WALTER GEORGE COLLINS, miner, a subject of the Queen of Great Britain and Ireland, residing at Coramba, in the Colony of New South Wales, have invented certain new and useful Improvements in Prospecting-Dishes; 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 prospecting-dishes, and has for its object to provide such a dish in which the dirt can be washed rapidly, while at the same time the precious metal, such as gold, will be effectually retained.

To this end the invention consists in the various matters hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a top plan view of a dish constructed in accordance with the present invention, and Fig. 2 is a sectional elevation on the line *x x* of Fig. 1.

Referring now more particularly to the drawings, A represents the bottom of the dish, and A′ the upwardly-projecting side wall, these parts being of usual construction. At a suitable line on the inner face of the side wall is provided an inwardly-projecting horizontal ledge or riffle B, which can be stamped as a part of the dish, formed of a separate piece and then applied, as here shown, or can be produced in any convenient manner. In practice the riffle is about three-eighths of an inch in width and is placed about an inch from the top of the dish. As is well known, in the operation of washing the heavier metal-bearing dirt, &c., is caught below this ledge, while the worthless particles are floated off. It will be noticed, however, that my riffle extends only a portion of the distance around the wall of the dish, (here shown as about halfway,) and herein my invention particularly resides. By this construction there is provided a dish which has a portion of its wall with the usual unobstructed surface, while another portion has the ledge or riffle. In such a dish the dirt can be first rapidly washed and the waste matter flowed off from the side having the riffle, the heavier and valuable particles being thus caught and retained by said riffle. After this preliminary and substantially-rapid operation the dish is turned and the washing continued, the waste matter being flowed off from the side of the dish having the unobstructed surface. Thus in a dish of simple structure the dirt is first washed rapidly and the valuable dirt saved, and then more careful washing permits the waste matter to be flowed off and only the fine particles of precious metal retained.

It will be further noticed that the riffle is produced by the inwardly-extending straight ledge or plate of an angle-plate, this construction being both cheap and efficient, and that this inwardly-extending ledge or plate projects against the direction of the throw of the material from the pan, the angle between the inner faces of the said extending plate and the wall being not greater than ninety degrees. Thus when the pan is tilted during the operation of washing the projecting ledge forms a pocket with the wall, in which the gold-bearing dirt must catch. Were the plate at an angle of greater than ninety degrees it would present, when the pan is tilted as above mentioned, a surface inclined in the direction of the throw of the material, and the result would be that unless the operator washed very carefully all dirt would simply slip along the outwardly-inclined surface and be lost.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A prospecting-dish or the like having an angle-plate secured to its side wall and extending only a portion of the way around said wall, the angle between the inner faces of the wall and the projecting straight ledge of the angle-plate being not greater than ninety degrees, whereby when the dish is tilted during the operation of washing a pocket is formed between the plate and the wall; substantially as described.

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

WALTER GEORGE COLLINS.

Witnesses:
THOMAS CON ALLEN,
WALTER SIGMONT.