

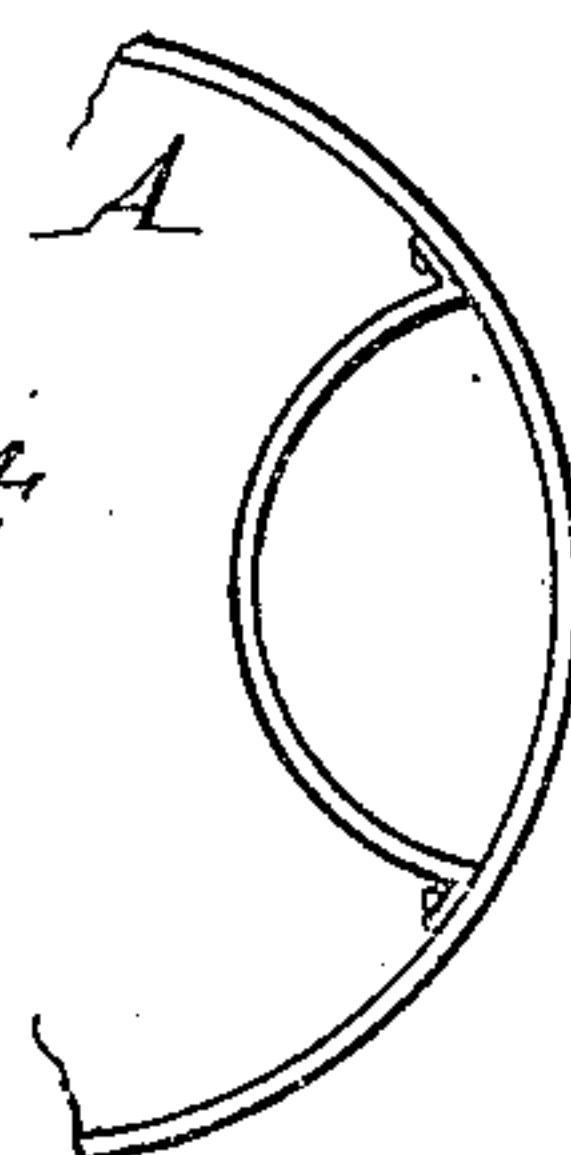
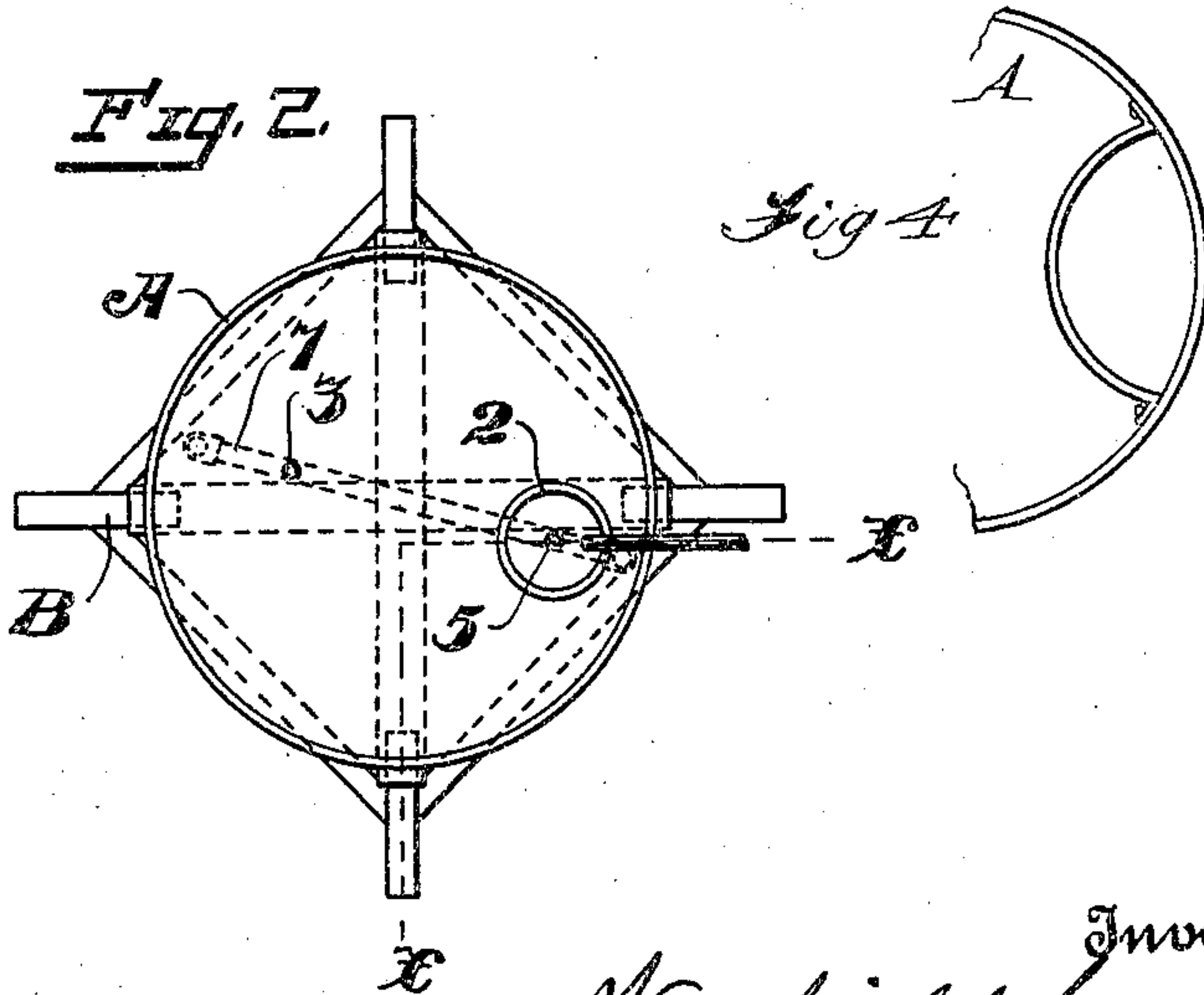
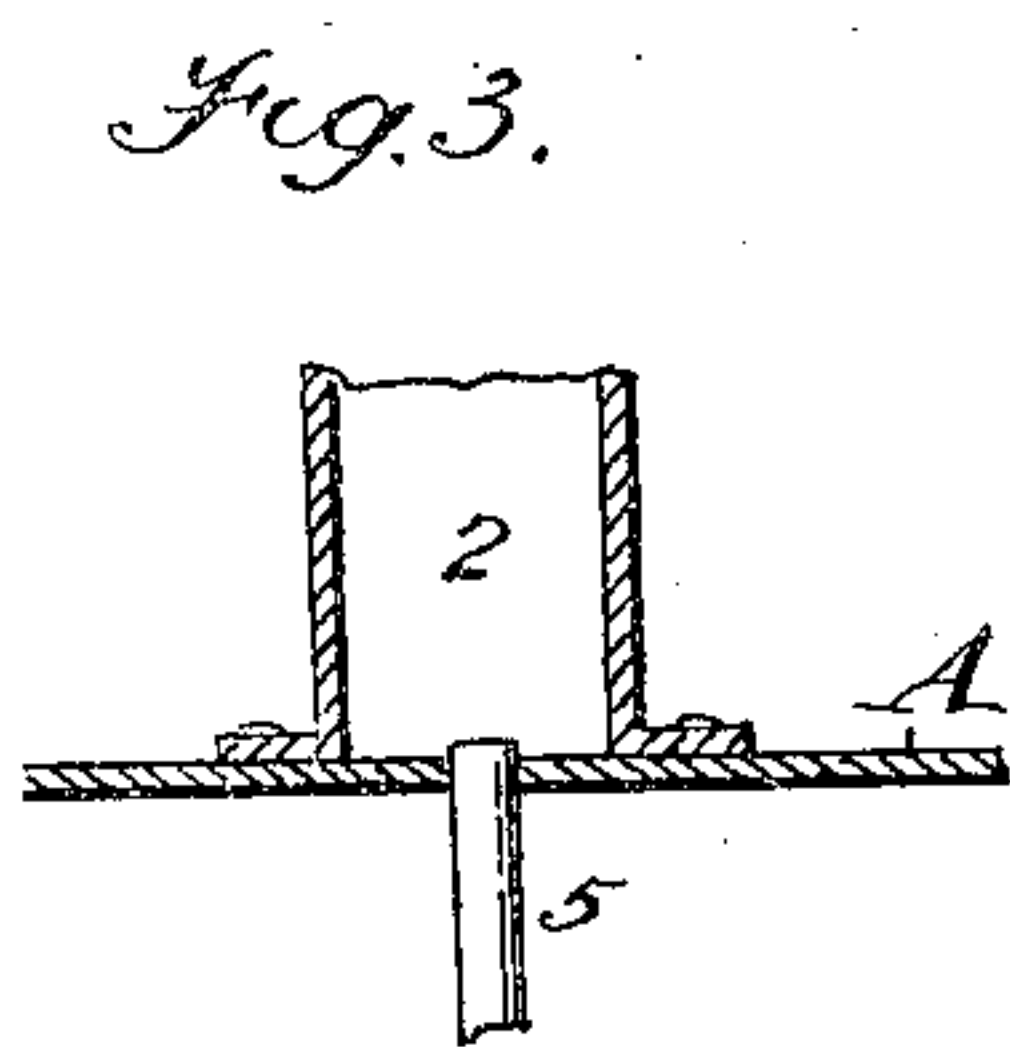
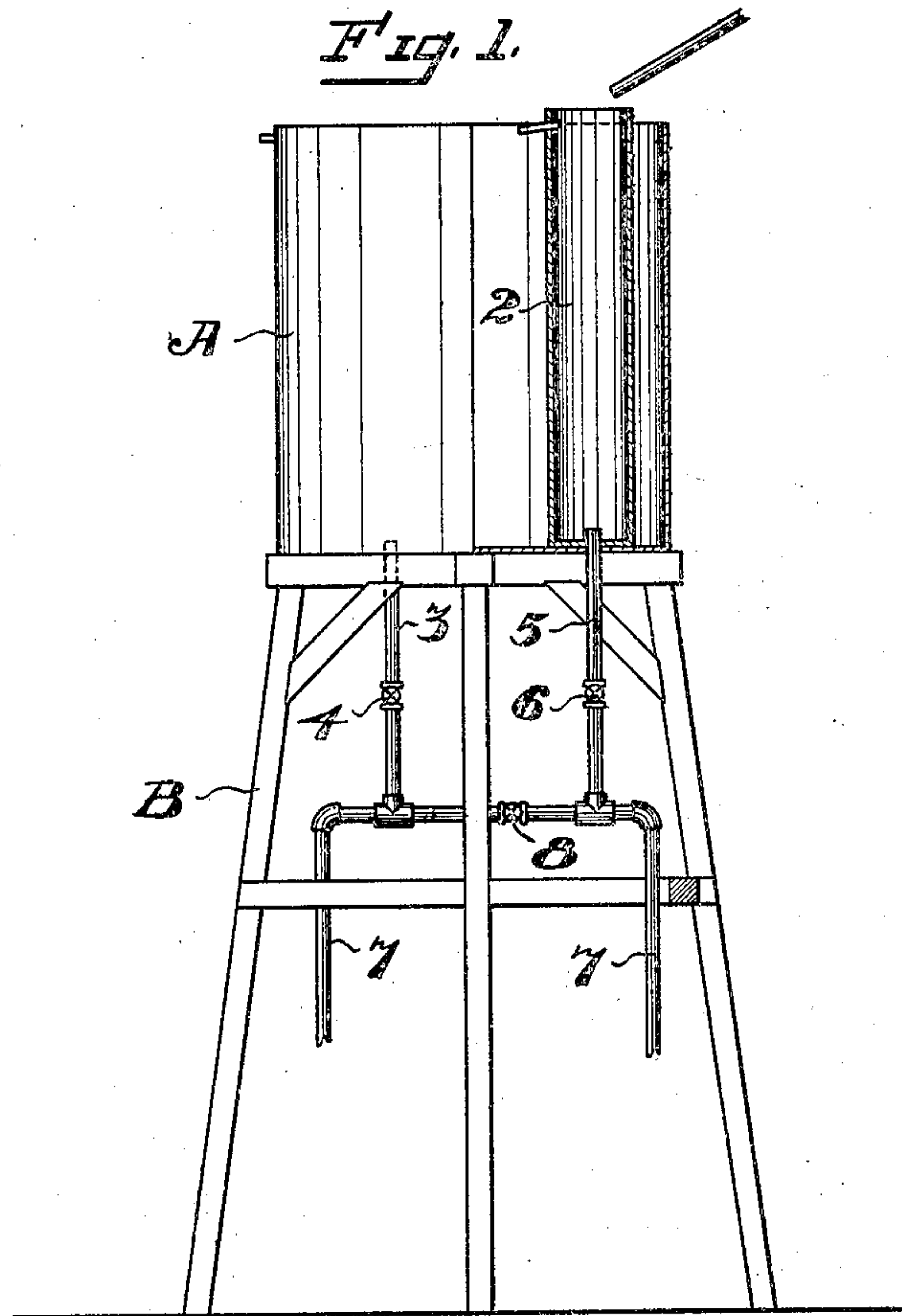
No. 769,856.

PATENTED SEPT. 13, 1904.

W. CURTIS.
WATER PURIFYING TANK ATTACHMENT.

APPLICATION FILED DEC. 18, 1903.

NO MODEL.



Witnesses,
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UNITED STATES PATENT OFFICE.

WINFIELD CURTIS, OF SACRAMENTO, CALIFORNIA, ASSIGNOR OF ONE-HALF TO E. F. MAY, OF SAN FRANCISCO, CALIFORNIA.

WATER-PURIFYING-TANK ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 769,856, dated September 13, 1904.

Application filed December 18, 1903. Serial No. 185,627. (No model.)

To all whom it may concern:

Be it known that I, WINFIELD CURTIS, a citizen of the United States, residing at Sacramento, in the county of Sacramento and State of California, have invented new and useful Improvements in Water-Purifying-Tank Attachments, of which the following is a specification.

My invention relates to improvements in water-tanks; and it consists of a preliminary receiver and aerater, preferably located within the tank, firmly secured to the bottom and sufficiently higher so that the water which is first delivered into this small receiver overflows from the top when it is full into the larger outer tank. In conjunction with the receiver and tank are separate draw-off pipes with controlling-cocks whereby water may be drawn from either one independent of the other or may be drawn from either or both the tanks to different points of delivery.

My invention also comprises details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is an elevation of my invention, in section, on lines *xx*, Fig. 2. Fig. 2 is a plan view of my invention. Figs. 3 and 4 represent modifications to be referred to.

When the supply of water for houses and buildings is pumped or otherwise delivered into tanks of large capacity, the body of water within these tanks is liable to become stagnant before it can be used. It is difficult, therefore, or almost impossible to maintain the water in these tanks in such condition that it is fit for household use, while at the same time it will serve for stock, for irrigation, and like purposes.

It is the object of my invention to provide a smaller body of water which is maintained in a pure condition especially for household uses. This I effect in the following manner:

A is a main tank, which may be of several hundred or thousand gallons capacity and is supported at a proper height, so that water will flow therefrom to the point of use by gravitation. B represents a tower or equivalent support for the tank. Within this tank is a

smaller tank or cylinder 2, which may be made of wood or iron and is of small capacity, such as one or two barrels, more or less. This tank is preferably bolted or otherwise firmly fixed to the bottom of the main tank, so that it cannot lift when the outer tank is full and this inner receptacle is empty. The receiver 2 is of greater depth than the tank, the upper end projecting a few inches above the highest level at which the water may stand in the outer tank, and from the side of this small receiver an opening or spout allows the water to overflow from it into the larger tank when the smaller one is full.

The supply of water may be derived from a well by means of a pump operated in any of the well-known ways, or it may arrive by gravitation through a pipe from a distant source or be supplied in any other equivalent manner. This water is delivered directly into the inner receiver 2 and may preferably fall a short distance from the supply-pipe, so that the water in the small receiver will be properly aerated and purified by the mixing of air with it in the usual manner of such purification. When this small receiver becomes full, water will continually overflow from it and eventually fill the main exterior tank.

From the lower part of the tank A is the draw-off or discharge pipe 3 with a suitable controlling-cock, as at 4, and from the bottom of the receiver 2 is a similar independent discharge-pipe 5, with a controlling-cock, as at 6. Both the pipes 3 and 5 may open into a common delivery-pipe, as at 7, and an intermediate cock 8 may be located between the two, so that when desired water may be drawn from the tank-pipe 3 through the pipe 7 for irrigating or other purposes. The pipe 5 serves to supply water directly from the small receiver 2, and when the cock 8 is closed, cock 6 being opened, the water from this small receiver will pass through that portion of the pipe 7 with which it directly connects, and may be carried to the house for drinking and household uses.

This construction enables me to supply pure water constantly for household use, since the small quantity at any one time within the re-

ceiver 2 will be constantly changed, and being purified and aerated at the last instant before its use will be received in the best possible condition, while the larger body of
5 water in the outer tank, which may remain without much change for a considerable time, will be more or less contaminated and stagnant, but will be sufficiently pure for the uses to which it may be put, before mentioned.

10 The inner receiver 2 is preferably flanged or otherwise formed, as in Fig. 3, so as to be secured to the bottom of the outer tank, but it might also be made in the form of a segment, as in Fig. 4, and secured against the
15 inner side of the main tank. I prefer the construction shown in Fig. 1, because this receiver is always surrounded by a body of water in the main tank, and is thus kept measurably cool.

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

1. The combination with a main tank, of a primary receiver located therein, means by
25 which the receiver is supplied directly with water and from which receiver the water overflows into the tank, and independent

draw-off pipes one leading from the receiver and the other from the tank.

2. The combination with a main water-tank 30 of a receiver and purifier of small diameter located within the outer tank, means for supplying water directly to the receiver, an overflow-passage by which the outer tank is subsequently supplied, independent draw-off 35 pipes and passages connected with the receiver and with the outer tank respectively.

3. The combination with a water-tank of a small receiver and purifier located within the tank, means for supplying said receiver di- 40 rectly, and an overflow from the receiver to the outer tank, independent pipes leading from the receiver and from the main tank, each having controlling-cocks, a pipe common to both and an intermediate cock whereby the 45 discharge from the tanks may be separated or drawn off altogether.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WINFIELD CURTIS.

Witnesses:

H. J. GOETHE,

H. FAUBER GOETHE.