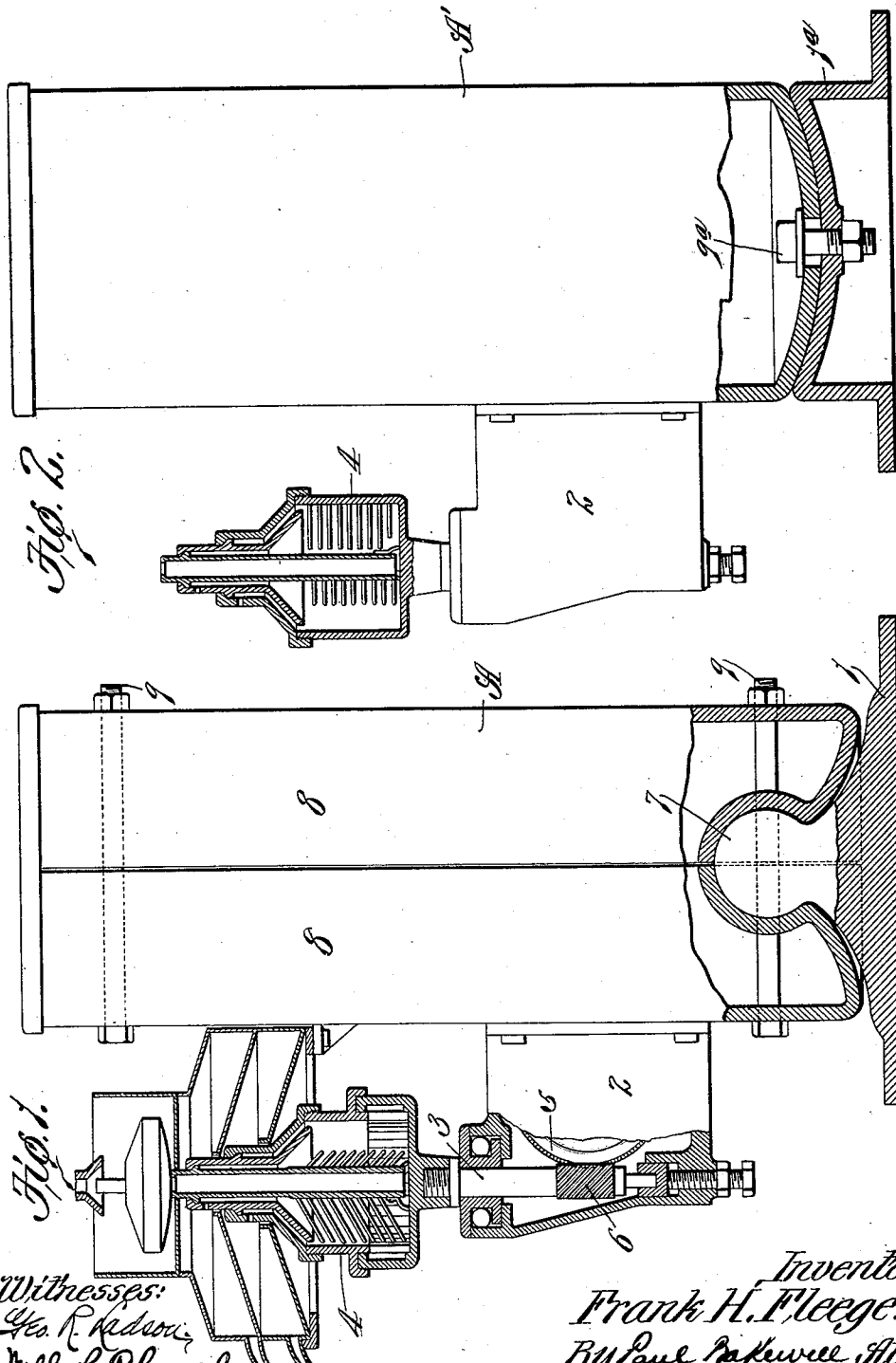


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CENTRIFUGAL SEPARATOR.
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988,084.

Patented Mar. 28, 1911.



Witnesses:
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CENTRIFUGAL SEPARATOR.

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To all whom it may concern:

Be it known that I, FRANK H. FLEEGE, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Centrifugal Separators, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to centrifugal separators, and is a divisional of my allowed application Serial No. 478,767, filed February 19, 1909, for centrifugal separators.

The object of my present invention is to provide a centrifugal separator that has a standard or support which can be adjusted so as to make the bowl of the separator perfectly level.

Figure 1 of the drawings is an elevational view, partly in vertical section, of a centrifugal separator constructed in accordance with my invention; and Fig. 2 is an elevational view, partly in vertical form of my invention.

Referring to Fig. 1 of the drawings which illustrates one form of my present invention, 1 designates a stationary base, and A designates an adjustable support or standard mounted on said base and provided with a laterally projecting arm 2 in which the shaft 3 of the separating bowl 4 is journaled. As the particular construction of the separating bowl is immaterial so far as my present invention is concerned I will not describe the details of construction of the bowl herein shown. Various means can be used for rotating the shaft 3 such, for example, as a driven worm gear 5 that meshes with a worm 6 on the shaft 3.

The standard or support A is so constructed that it can be rocked on the stationary base 1 as an axis or center and thus arrange the bowl 4 of the separator in a perfectly level position. In the form of my invention shown in Fig. 1, the base 1 is provided with an approximately ball-shaped projection 7 that fits in a socket formed in the lower end of the standard A which consists of a plurality of sections 8 that are held together by bolts 9 or other suitable devices. These bolts 9 cause the sections of the standard to

firmly clamp the ball-shaped projection 7 on the base 1 and thus hold the standard in adjusted position.

In the form of my invention illustrated in Fig. 2, the base 1^a is provided with a circular-shaped concaved seat and the standard A', which is mounted on said base, is provided with a circular-shaped convexed lower end that fits snugly in the seat on the base, said standard being securely clamped to the base and held in adjusted position by means of a bolt 9^a or other suitable device.

A centrifugal separator constructed in the manner above described can be lined up or adjusted easily by simply loosening the fastening devices which secure the standard to the base and setting the standard in such a position that the bowl is perfectly level. Consequently, such a construction overcomes the necessity of blocking up the entire machine and it also enables the bowl to be lined up more accurately than was possible with the old type of separators in which the bowl shaft is carried by a stationary standard or support.

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

1. A centrifugal separator comprising a stationary base, an adjustable standard that can be rocked laterally in any direction on said base as a fulcrum or axis, means for retaining the standard in adjusted position, a bearing on said standard, a rotatable vertically disposed shaft mounted in said bearing, and a separating bowl carried by said shaft.

2. A centrifugal separator comprising a base, a standard mounted on said base in such a manner that it can be rocked in any direction, a rotatable shaft journaled in a bearing on said standard, a separating bowl connected to said shaft, and means carried by said standard for imparting rotary movement to said bowl shaft.

3. In a centrifugal separator, a separating bowl, a standard that carries said bowl, a stationary base on which said standard is mounted, cooperating curved surfaces on said standard and base that enable the standard to be rocked on said base in any direction

and thus adjust the bowl in a perfectly level position, and means for retaining said standard in adjusted position.

4. In a separator, a centrifugal separating bowl connected to a rotatable shaft, a standard which carries said shaft, a base on which said standard is mounted, cooperating curved surfaces on said standard and base that enable the standard to be rocked laterally in any direction on the base so as to level up the separating bowl, and means for retaining said standard in adjusted position.

5. A centrifugal separator comprising a stationary base, a standard mounted on said base, a laterally projecting shaft support on said standard, a shaft journaled in said support, a separating bowl carried by said shaft, and means for enabling said standard to be rocked laterally on said base in any direction so as to level the bowl.

6. In a centrifugal separator, a base provided with an approximately ball-shaped projection, a standard having a socket into which said projection extends, means for

clamping said standard to said base, a vertically disposed rotatable shaft carried by said standard, and a separating bowl carried by said shaft.

7. In a centrifugal separator, a stationary base provided with an approximately ball-shaped projection, a standard mounted on said base and composed of a plurality of sections having curved portions which form a pocket into which said projection extends, thus forming a universal joint, means for causing the sections of the standard to snugly embrace the projection on the base so as to lock the standard in adjusted position, an arm on said standard, a rotatable shaft journaled in said arm, and a separating bowl connected to the upper end of said shaft.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this fifth day of May 1910.

FRANK H. FLEECE.

Witnesses:

WELLS L. CHURCH,
GEORGE BAKEWELL.