(No Model.) 2 Sheets—Sheet 1.

E. S. BENNETT.

FEEDER FOR REVOLVING CYLINDERS.

No. 266,080. Patented Oct. 17, 1882.

Fig. 2.

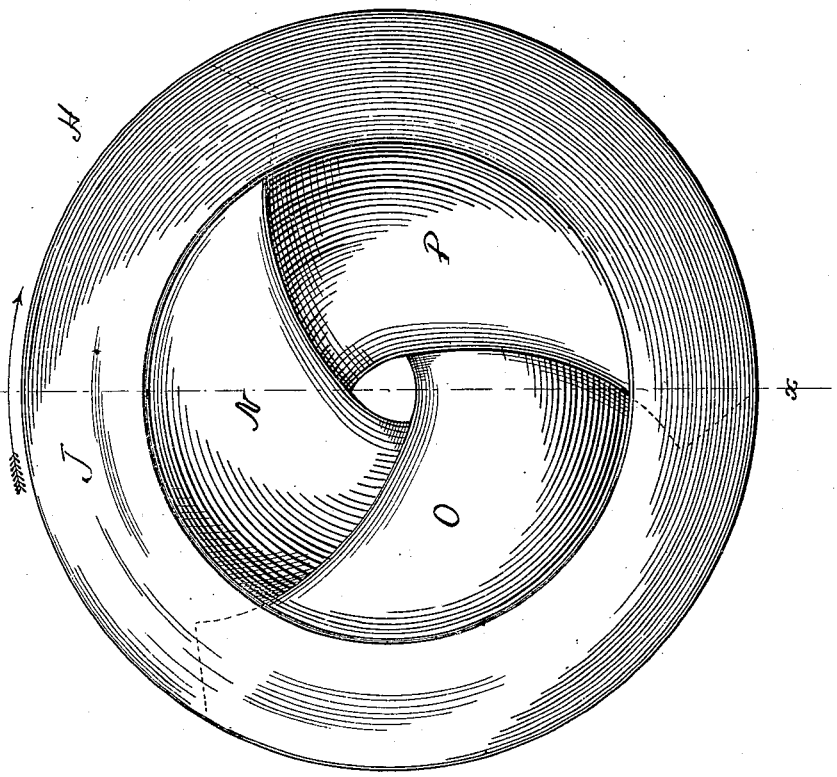
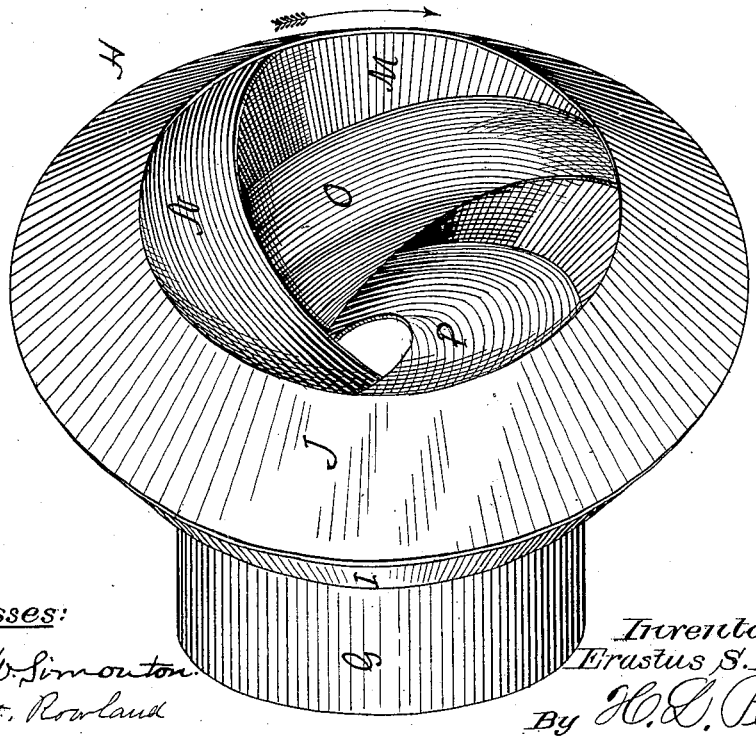


Fig. 1.



Witnesses:
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(No Model.) 2 Sheets—Sheet 2.

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Fig. 4.

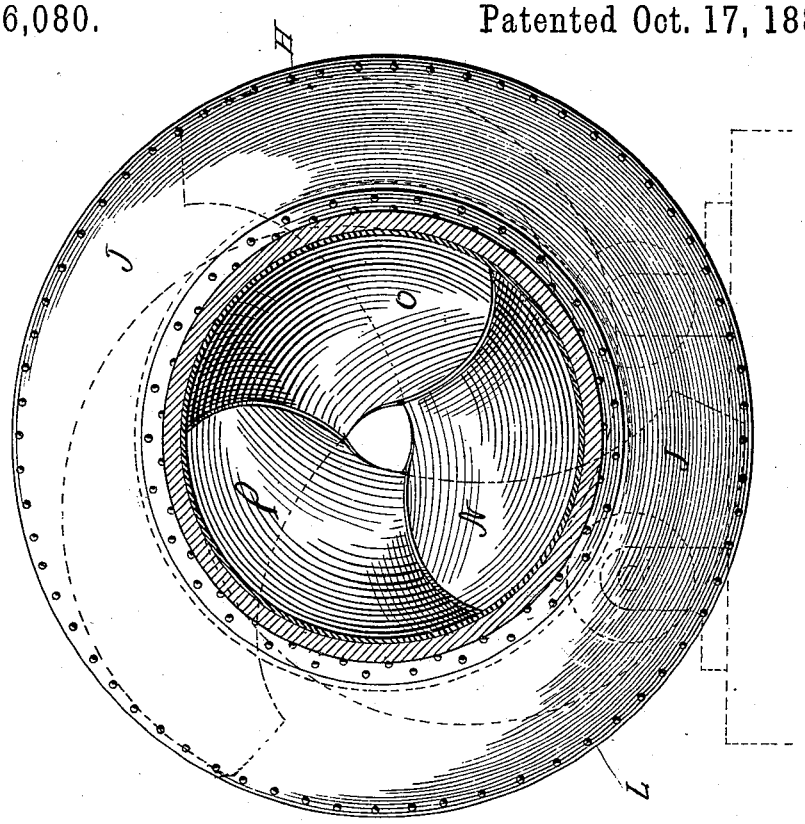
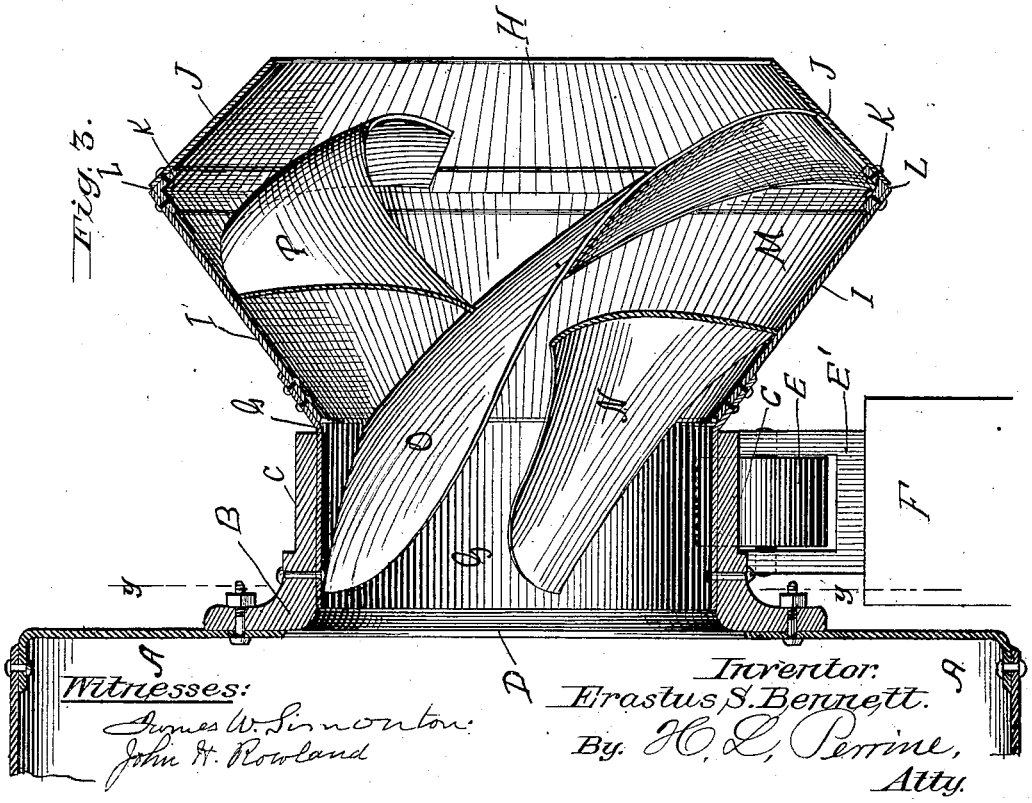


Fig. 5.



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UNITED STATES PATENT OFFICE.

ERASTUS S. BENNETT, OF DENVER, COLORADO.

FEEDER FOR REVOLVING CYLINDERS.

SPECIFICATION forming part of Letters Patent No. 266,080, dated October 17, 1882.

Application filed January 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, ERASTUS S. BENNETT, a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in a Feeder for Revolving Cylinders in which auriferous deposits are treated for extracting the gold therefrom; 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, reference being had to the accompanying drawings and letters or figures of reference marked thereon, which form a part of this specification.

My invention relates more particularly to that class of machines for extracting gold and other precious metals from auriferous deposits, in which the auriferous earth is shoveled into a revolving horizontal cylinder and there washed with water; and it has for its object the providing of an enlarged opening, or "mouth," as I prefer to designate it, and providing it with a self-feeding device; and it consists in the construction and arrangement of parts, as will be hereinafter more fully set forth.

Figure 1 is an isometrical projection of the feeder. Fig. 2 is a front end view of the feeder. Fig. 3 is a longitudinal vertical central section upon the line *x x* of Fig. 2, showing the curved conveyers, the manner of attaching the feeder to the revolving horizontal cylinder, and the manner of supporting the end of the revolving cylinder. Fig. 4 is a rear view taken on the line *y y* of Fig. 3, looking toward the feeder.

A represents a revolving cylinder, and B a tubular bearing bolted to the end of the cylinder in such a position that its dressed bearing-surface C will be concentric with the cylinder and the center open to form the mouth D of the cylinder. The bearing-surface C rests upon the friction-rollers E, set in frames E′ upon a foundation, F, thus sustaining the end of the cylinder. This form of construction dispenses with the shaft running through the center of the cylinder and occupying the central part of the mouth, heretofore used, and leaves the entire mouth unobstructed for the entrance of auriferous earth. To the inside of the mouth is bolted or otherwise suitably secured a pipe, G, which is a horizontal extension for connection with the flaring body I of the automatic feeder H. The pipe G is secured to the body I by one or more rows of rivets, or in any other suitable manner. The body I of the feeder expands at an angle of about forty-five degrees, and is secured to a converging flange, J, by means of a right-angled angle-iron formed into a ring, K, the vertex L forming the periphery, as shown in Fig. 3 of the drawings. To one face of this ring the body I is riveted by a row of rivets, or otherwise suitably secured; and to the other face the flange J is riveted at a right angle, in section, to the body H—hence converging at an angle of forty-five degrees. The flange may extend inward any required distance for forming a receiver, M, for the dirt when thrown in.

Any suitable number (preferably three) of conveyers, N, O, and P, are secured to the inside of the flange J by rivets or bolts, or in any other suitable manner, and each of them consists in an iron plate, of a suitable thickness and width, extending from the bottom of the receiver M, across and in contact with the body I and pipe G, to near the end of the pipe G, by a curve describing about half a circle. The edges of the conveyers are formed to make a close fit against the body I, pipe G, and flange of the ring K, and so curved and set at such angle that they will carry the dirt from the receiver M back to the cylinder, as shown in Fig. 3 of the drawings. Upon dirt being thrown into the receiver M, and the cylinder revolved to the right, the dirt will be automatically fed into the cylinder by the conveyers.

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

A feeder for a revolving cylinder for extracting gold from auriferous deposits, attached horizontally to said cylinder, consisting of the body I, expanding from the mouth of the cylinder, the converging flange J, secured to said body I at its outer rim, and having conveyers secured to the inner side of said flange J, extending in toward the mouth of the cylinder, leaving the center of the feeder entirely open, said conveyers, in combination with the body I and flange J, forming pockets which receive the material thrown or fed into the mouth of said feeder, substantially as described.

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

ERASTUS S. BENNETT.

Witnesses:

JOHN H. ROWLAND,

ISAAC UNDERWOOD.