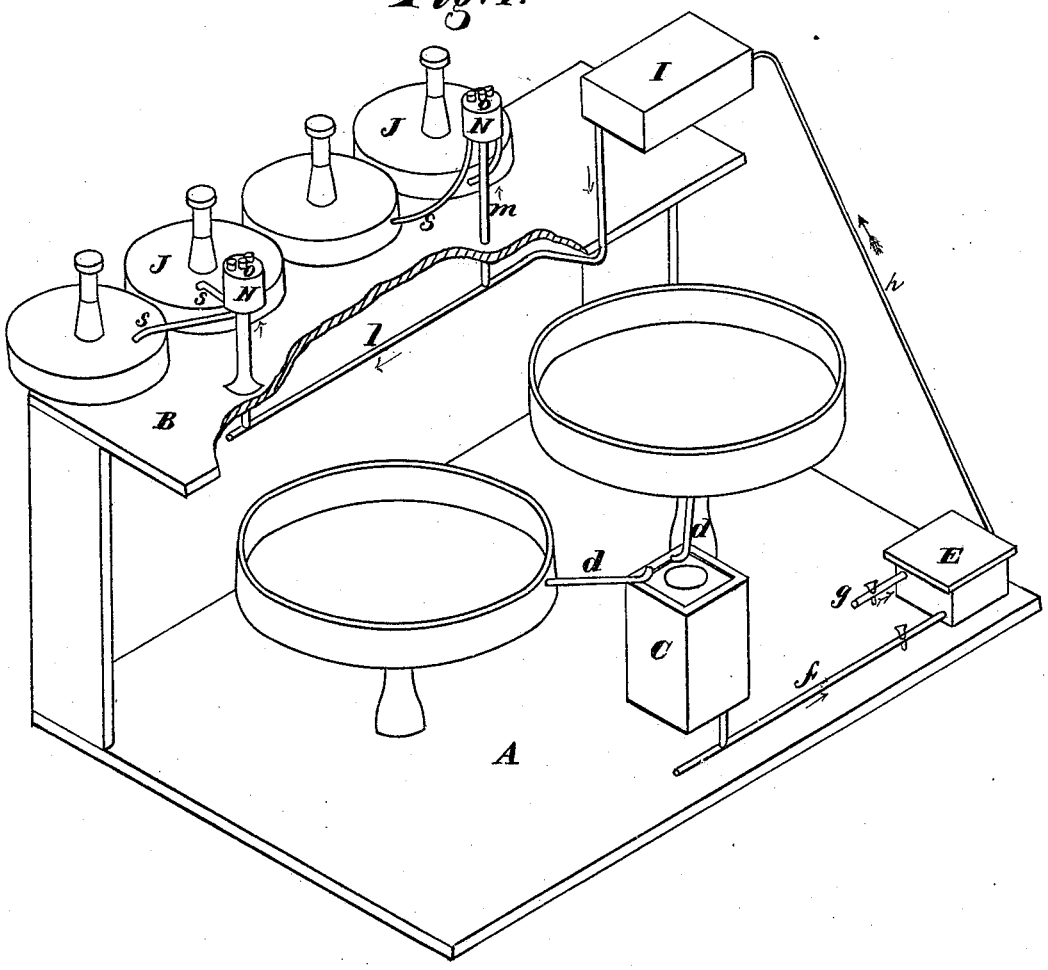
M. P. BOSS.

Distributing Quicksilver in Quartz Mills.

No. 167,059. Patented Aug. 24, 1875.

Fig. 1.



Witnesses

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MARTIN P. BOSS, OF VIRGINIA CITY, NEVADA.

IMPROVEMENT IN DISTRIBUTING QUICKSILVER IN QUARTZ-MILLS.

Specification forming part of Letters Patent No. **167,059**, dated August 24, 1875; application filed July 13, 1875.

To all whom it may concern:

Be it known that I, MARTIN P. BOSS, of Virginia City, Storey county, State of Nevada, have invented Improvements in Distributing Quicksilver; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvement without further invention or experiment.

My invention relates to a system of distributing-pipes, through which the quicksilver is conducted to the various places where it is to be used.

In order to further explain my invention, reference is had to the accompanying drawings forming a part of this specification, in which—

Figure 1 is a perspective view of my machine.

It is usual, in arranging the apparatus used in a quartz-mill, to place the settlers below the amalgamating-vessels, so that the contents of the amalgamators can be readily drawn off into the settlers.

Let A represent the floor or level upon which the settlers are placed, and B the higher floor or level, upon which the amalgamating-vessels are located. C is the strainer, into which the quicksilver is conducted through the pipes *d d* from the settlers when the charge is ready to be drawn off. The bottom of the settler C I connect with a tight vessel or tank, E, which I call a "pressure-tank," by means of a pipe, *f*, so that when the quicksilver has passed through the strainer it will be conducted into the tank E by gravity. This tank is quite strongly constructed, and a pipe, *g*, which leads from an elevated head of water, or from a force-pump or other device for forcing water, enters the tank near its top, so that by introducing water into the tank a pressure can be created that will force the quicksilver contained in the tank up through the pipe *h* into the elevated tank I, which is located above the amalgamator J on the upper floor K. A pipe, *l*, leads from the bottom of the elevated tank I down through the upper floor K, and thence along under the floor to near the amalgamating-vessels J. At suitable points I connect a short upright pipe, *m*, with the pipe *l*, so that the pipe *m* will pass upward through the floor and enter a measuring-vessel, N, which is properly located to feed two amalgamators. A plug, *o*, or other suitable valve or cock, is applied to the upper end of this pipe *m*, inside of the measuring-vessel, so that the flow of quicksilver into the vessel can be easily regulated. The tank I is somewhat higher than the measuring-vessel, so that the quicksilver will be transferred through the pipes *l* and *m* into the measuring-vessel N by gravity when the cock or plug *o* is open. One of these measuring-vessels is placed between each two amalgamating-pans, and a pipe, S, leads from it into each pan, so that the quicksilver can be charged directly from the measuring-vessel into the pans.

I thus provide a device for elevating quicksilver and distributing it throughout quartz-mills, by which much time and labor is saved, and the quicksilver is not wasted by frequent handling.

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

The elevated tank I, connected with measuring-vessel N by means of pipes *l m*, with their cocks or plug *o* and the conducting-tubes *s*, all combined and arranged to operate substantially as and for the purpose described.

MARTIN P. BOSS.

Witnesses:

GEO. H. STRONG,

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