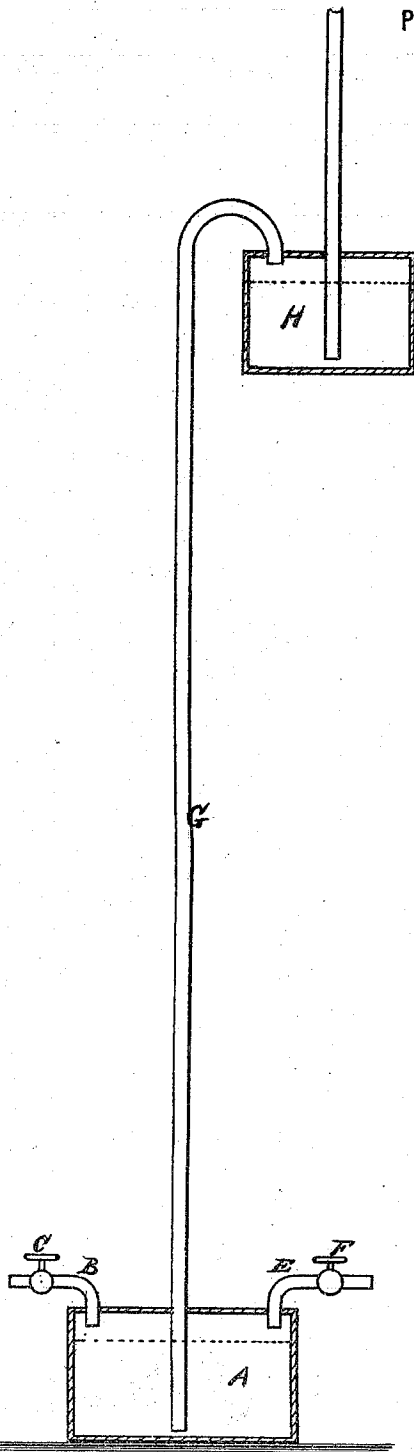


O. HOFMANN.
Improvement in Method of Elevating the Mercury in
Amalgamating Apparatus.

128,623.

Patented July 2, 1872.



Witnesses

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UNITED STATES PATENT OFFICE.

OTTOKAR HOFMANN, OF ELLSWORTH, NEVADA.

IMPROVEMENT IN METHODS OF ELEVATING THE MERCURY IN AMALGAMATING APPARATUS.

Specification forming part of Letters Patent No. 128,623, dated July 2, 1872.

SPECIFICATION.

To all whom it may concern

Be it known that I, OTTOKAR HOFMANN, of Ellsworth, Nye county, State of Nevada, have invented Improved Process for Elevating Quicksilver in Quartz-Mills; and do hereby declare the following description and accompanying drawing 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 and improvement, without further invention or experiment.

My invention relates to an improved apparatus and process for elevating quicksilver in mining operations. One of the most difficult tasks in carrying on the amalgamations of the precious metals in mining operations is the frequent necessity of handling the quicksilver in bulk, especially in transferring it from the settlers to the amalgamation pans. My invention is intended to obviate this difficulty by employing a pressure upon the confined quicksilver or a vacuum above it to transfer it from one vessel to another. In order to more fully illustrate and explain my invention reference is had to the accompanying drawing forming a part of this specification in which—

A represents a closed iron tank or vessel into which the quicksilver is admitted through a pipe, B, until the tank is almost filled, when the cock C is closed so as to cut off communication through the pipe B. E is a steam-pipe which communicates with tank, which is also

provided with a cock, F. G is a vertical pipe which passes down through the top of the tank A and terminates near the bottom. This pipe extends upward and communicates with another tank, H, or with a pan, as the case may be. After the quicksilver has been admitted into the tank A, and cock C has been closed, the cock F is opened and steam forced into the tank until a sufficient pressure is obtained to drive the quicksilver up into the upper tank H. If necessary the tank H can also be made air-tight, and another—similar to C—pipe led from it up into another tank above. Instead of a pressure in the vessel A a vacuum could be produced in the upper tank H, and the quicksilver drawn up in the same manner. By this means I avoid the necessity of lifting the quicksilver physically and carrying it from the settlers to the pans.

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

1. The closed tank A, in combination with the vertical pipe G, for the purpose specified.
2. The process above described of elevating the quicksilver through the pipe G, either by pressure applied in the tank A, or a vacuum in the tank H, as described.

OTTOKAR HOFMANN.

Witnesses:

F. W. SMITH,
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