

United States Patent Office.

JOHN JOHNSON, OF SACO, MAINE.

Letters Patent No. 63,394, dated April 2, 1867.

IMPROVEMENT IN COLLECTING GOLD FROM RIVER BOTTOMS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN JOHNSON, of Saco, county of York, State of Maine, have invented a new Application of the Siphon, &c., for the Removal of Auriferous Sands and the Recovery of Gold therefrom; and I do hereby declare that the following is a full and exact description thereof.

The nature of my invention consists in the application of the siphon for the recovery of gold from the beds of rivers on the rapids, and for the recovery of gold from other localities, (not accessible by barge or boat,) through hose pipe and pump.

To enable others to make and use my invention, I append herewith a full description and operation of it.

Rivers traversing a gold belt are found to be rich in auriferous sands, gravels, &c., and many such rivers are frequently intersected by falls or rapids, and in many localities have not sufficient depth of water over their beds to be navigable. That I may obtain the gold, from rapids, contained in the sands or gravels of such localities, I construct a siphon of flexible material, of very considerable length, so that I obtain a few feet fall or difference in elevation, the "long leg" being down stream, the "short one" placed in the depression or cavity containing the sand or gravels for removal. The siphon or tube having valves at either end, I am enabled to fill it with water. I next insert the short leg beneath the water and then open the valve, the other end being in position and connected with the gold-washer or saver. On the valve being opened the water flows, and would continue, but on depressing the "short leg" upon the bed or into the sand the auriferous sands, gravels, and water are discharged, carrying therewith the gold contained therein upon the concentrator and saver, the moving force or power employed being that due to difference of head. In some cases, the fall being too slight for efficient work, I find it needful to employ other force to expedite the transferring of the sand, in which case I employ any available power to drive a centrifugal or other suitable pump, the same being connected to the siphon or hose. On rivers not navigable, or only in part navigable, my boat appliances may be found too expensive or too difficult to be conveniently transferred. In such cases I employ the flexible hose and centrifugal or other suitable pump for the transference of the auriferous sands to the concentrator near to or upon the shore for treatment, &c.

What I claim, and desire to secure by Letters Patent, is—

The system herein set forth for the recovery of gold from the beds of rivers.

JOHN JOHNSON. [SEAL.]

Witnesses:

EDWIN A. OVERTON,
JAMES D. HALL.