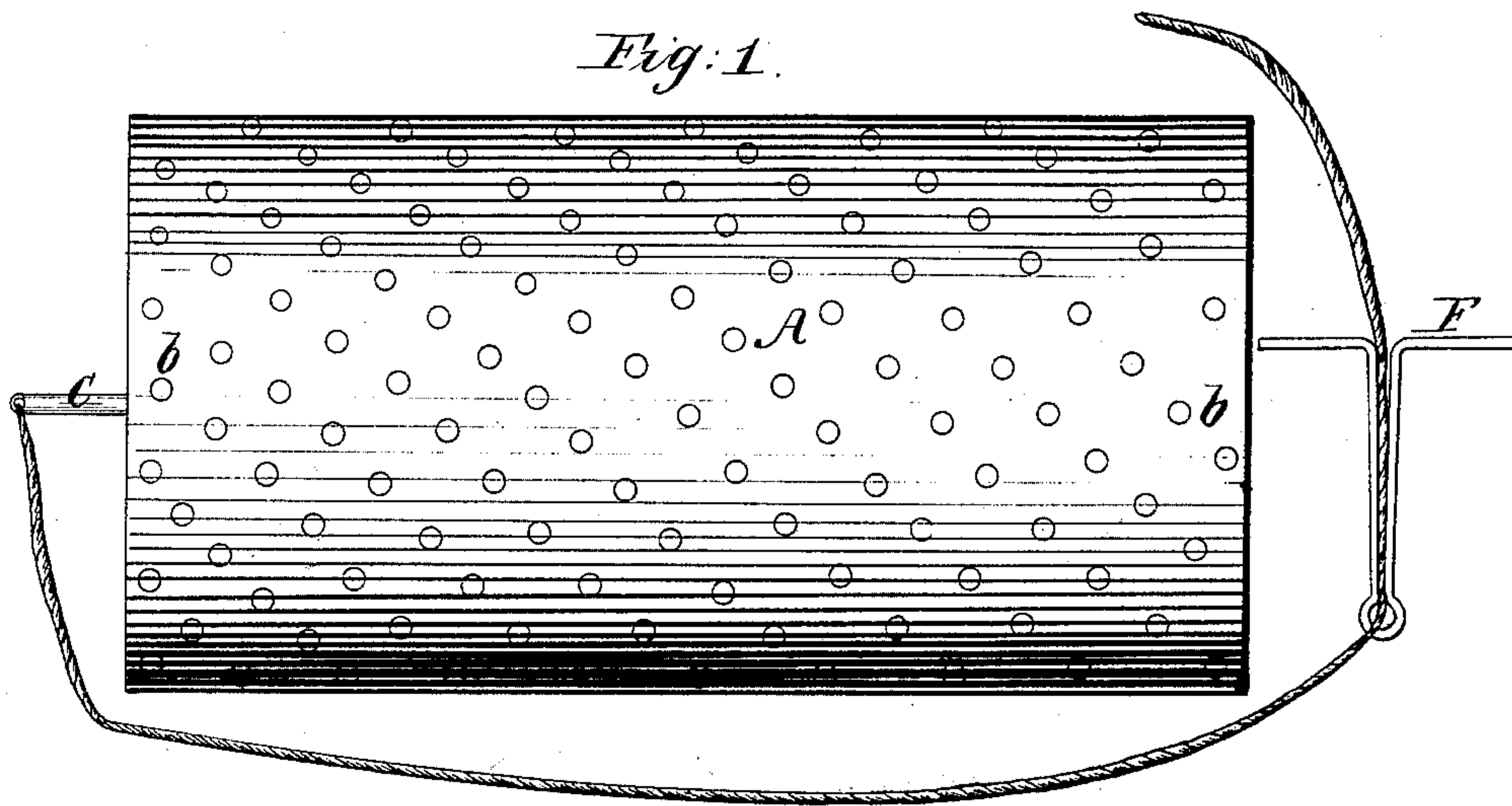


*J. Gay,*  
*Ore Washer.*

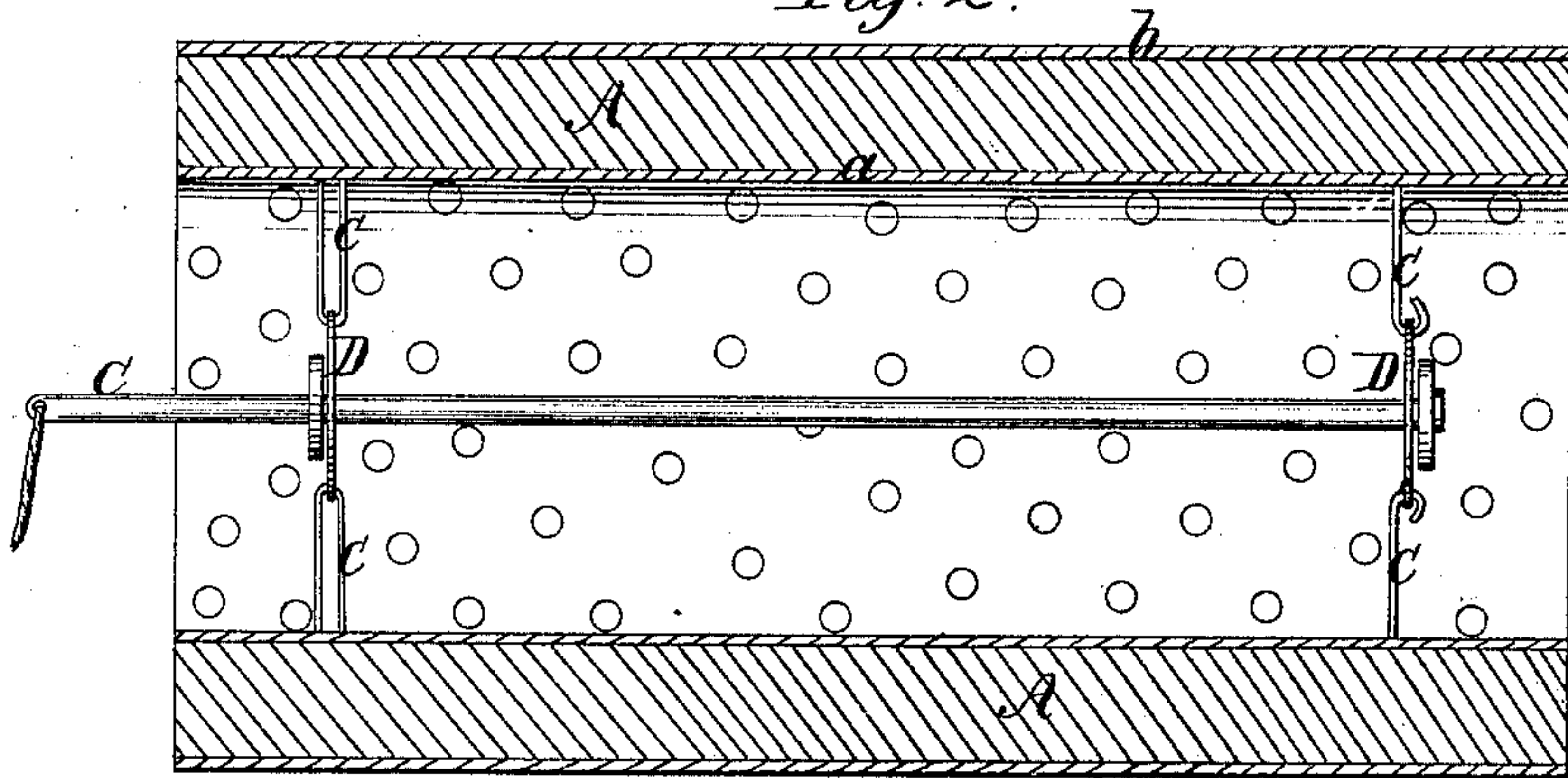
*No. 86,388.*

*Patented Feb. 2. 1869.*

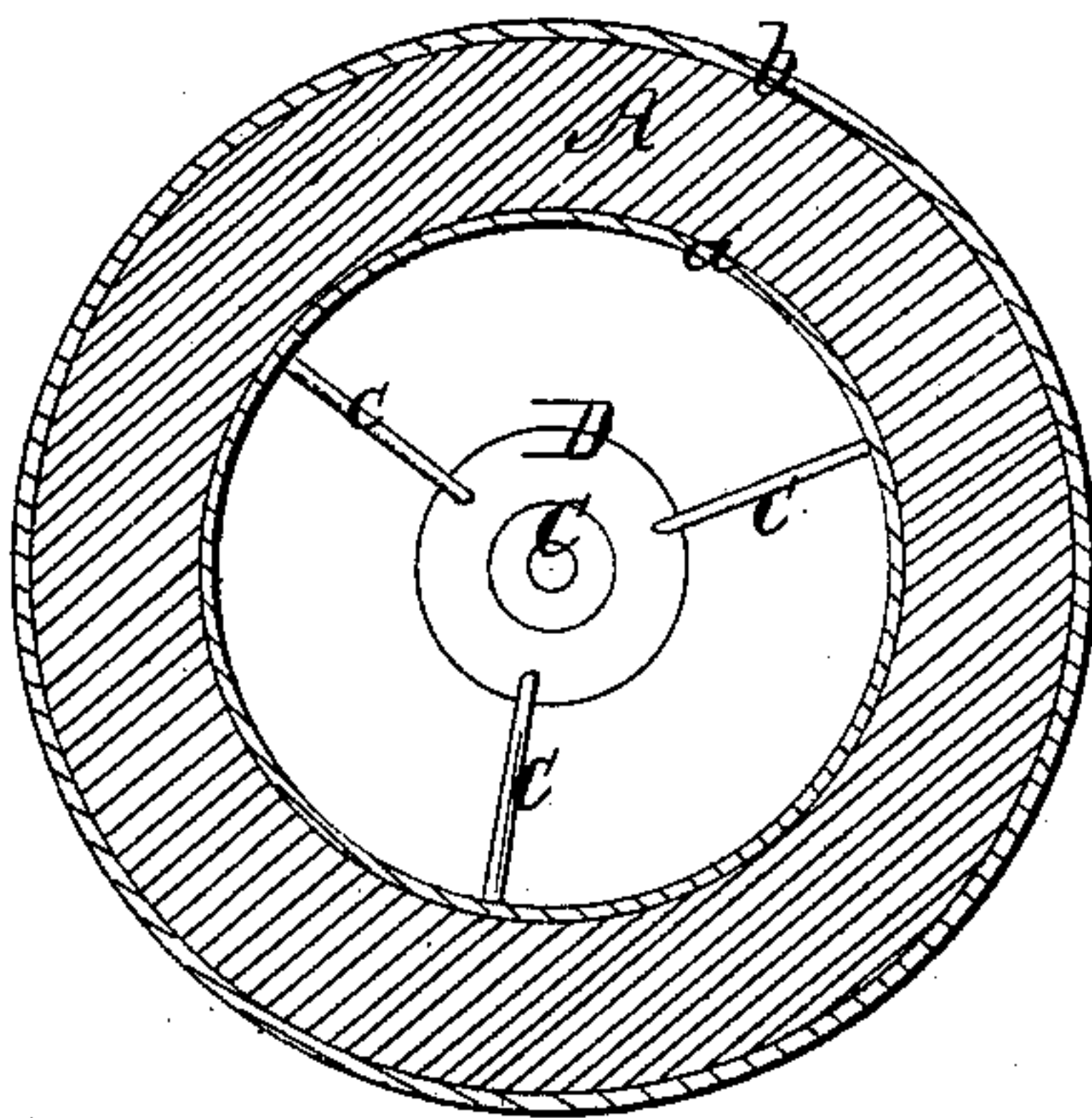
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses;*  
*Geo H. Schuyler*  
*J. L. Bone*

*Inventor*  
*David Gay Jr*  
*Per; Dewey & Co Attys*



# United States Patent Office.

DAVID GAY, JR., OF VALLEJO, CALIFORNIA.

Letters Patent No. 86,388, dated February 2, 1869.

## IMPROVED APPARATUS FOR SAVING FLOATING GOLD.

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, DAVID GAY, Jr., of Vallejo, county of Solano, State of California, have invented an Improved Device for Saving Float-Gold on the sea-beach; 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 improvements without further invention or experiment.

The object of my invention is to provide a device for catching and saving the fine gold which is moved by the tides or surf of the ocean in localities where the sands are auriferous. The action of the surf on the sands of the beach tends to keep it in motion, carrying with it the fine or float-gold; and

My invention consists in forming a hollow tube or cylinder having a covering on the outside and a lining on the inside, made of copper, which are indented over their entire surfaces and amalgamated with quicksilver, so as to catch and retain the gold that may come in contact with them. The cylinder is then anchored in the surf, so that the action of the water upon it will keep it in a continual motion, gathering up the gold as it moves.

To more fully illustrate and explain my invention, reference is had to the accompanying drawings and letters marked thereon, of which—

Figure 1 is a side view.

Figure 2 is a side sectional elevation.

Figure 3 is an end view.

A is a hollow cylinder, made of wood or other material, light enough to be easily moved by the force of the waves, and heavy enough to sink and remain on the bottom.

This cylinder is lined on the inside with sheet copper, *a*, or other metal, capable of being amalgamated with mercury, which is indented, as shown, around its entire surface.

The cylinder is also provided with a covering, *b*, similar to the lining on the inside, and provided with like indentations and the surfaces of both the lining *a* and covering *b* are amalgamated with quicksilver, so that when rolling over the sand on the bottom, the fine gold will gather on the surface and in the indentations, and be held by the amalgamated surfaces.

A spindle, C, passes through the centre of the cylinder longitudinally, and is supported at each end by passing through holes in metal plates, D D, one at

each end, which are supported in the centre of the hollow cylinder by arms, *c c c*, radiating from them and secured to the cylinder.

To one end of the spindle C, a cable is attached.

This cable is of sufficient length to give the cylinder the desired scope, and has a small anchor, F, secured to it, near its middle, or near enough to the cylinder to prevent its being carried out too far from the shore, and when the tide comes in and raises the cylinder, the anchor is disengaged and carried with it up the beach, thus allowing the cylinder to keep where the waves strike the sand and create the greatest commotion.

A round ball, pierced with holes and covered and amalgamated similar to the cylinder above described, would answer, perhaps, quite as well, but I prefer the cylindrical form.

With this device, I am able, after having found a beach where the sands are auriferous, by simply attaching the cable to some stationary object along the shore, and casting adrift my amalgamated cylinder, to gather gold without further labor or expense.

Having thus described my invention,

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

1. Surrounding a hollow cylinder of light material, A, either inside or outside, or both, with indented and amalgamated metal plates, *a* and *b*, or equivalent device, for gathering the gold from auriferous sands on the beach, substantially as described.

2. The spindle C, rotating in the metal plates D D and the supporting-arms *c c c*, in combination with the hollow cylinder C; or equivalent device, substantially as described.

3. The cable E, when attached to the hollow cylinder A, together with the anchor F, for regulating the movements of the cylinder, substantially as described, for the purpose set forth.

4. Washing the auriferous sands on the sea-shore by means of amalgamated surfaces, either cylindrical or otherwise, when the same are operated by the surf or waves of the sea, substantially as and for the purpose described.

In witness whereof, I have hereunto set my hand and seal.

DAVID GAY, JR. [L. S.]

Witnesses:

J. L. BOONE,

GEO. H. STRONG.