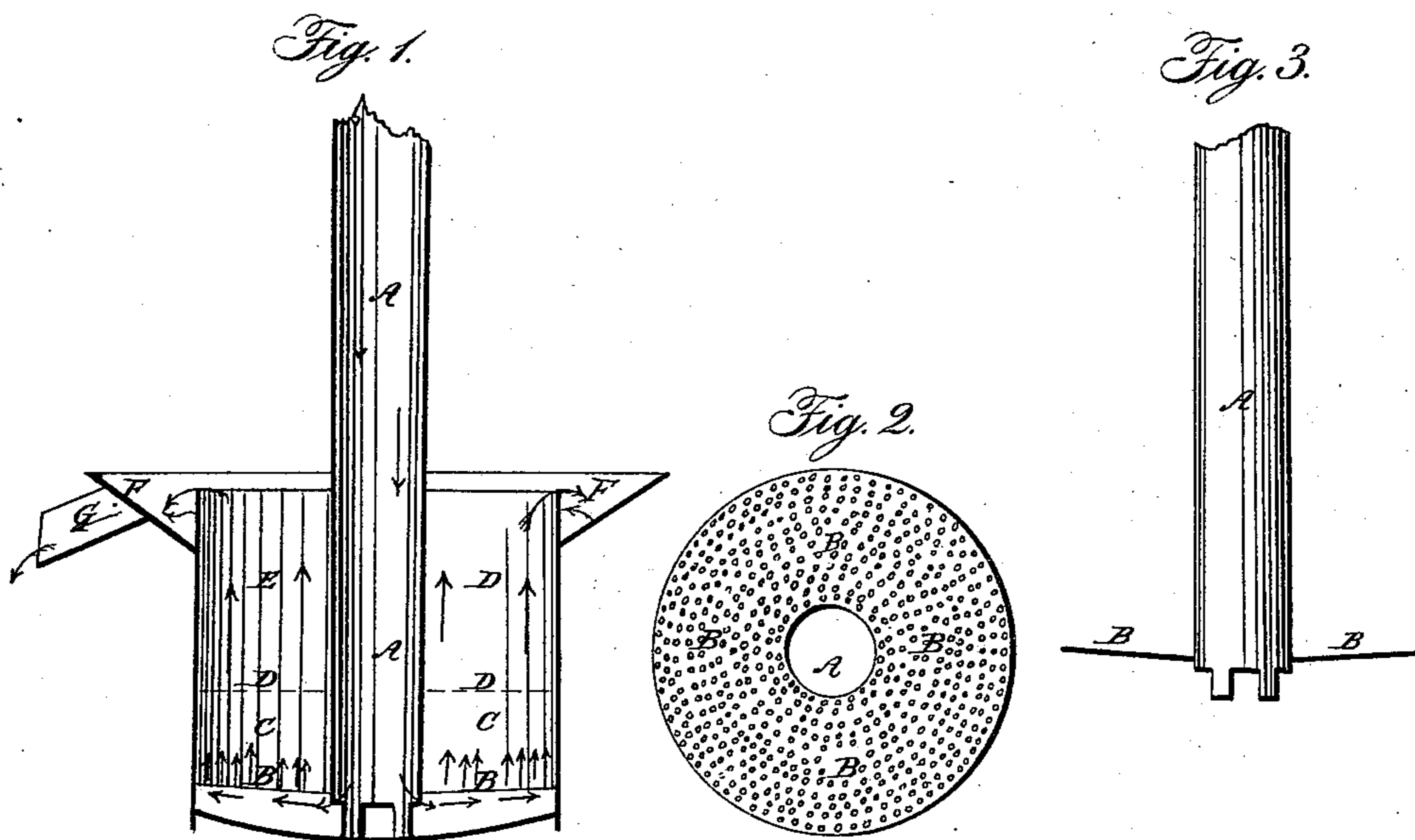


CROSBY & LADD.

Ore Amalgamator.

No. 36,557.

Patented Sept. 30, 1862.



UNITED STATES PATENT OFFICE.

AUGUSTINE B. CROSBY, OF GREENE, MAINE, AND JESSE LADD, OF BOSTON,
MASSACHUSETTS.

IMPROVED MACHINE FOR COLLECTING AND AMALGAMATING FINE PARTICLES OF GOLD.

Specification forming part of Letters Patent No. **36,557**, dated September 30, 1862.

To all whom it may concern:

Be it known that we, AUGUSTINE B. CROSBY, of the town of Greene, county of Androscoggin, State of Maine, and JESSE LADD, of the city of Boston, county of Suffolk, and State of Massachusetts, have invented a new and useful Improvement on Machines for Collecting and Saving Gold, in which mercury or quicksilver is used as the collecting agent, called "Crosby and Ladd's Finest Gold-Saver," of which the following is a full and exact description, to wit:

The application of a perforated or slotted plate, diaphragm, or partition so placed in the body of the gold-saver that all the gold-bearing material flowing from stamps, crushers, sluices, or other appliances for the extraction of gold from rocks or soil shall be forced to pass through it before passing through the body of the mercury or quicksilver; also, giving the plate, diaphragm, or partition a slight rising pitch from the inflowing point of the gold-bearing material outward, so that the gold-bearing material shall flow out to the extremity or circumference of the plate, diaphragm, or partition in order to secure a broad distribution and a fine division of the gold-bearing material preparatory to its passing through the quicksilver, this plate, diaphragm, or partition to be applied singly, as described, or in series overlying each other, so that the perforations or slots of one plate, diaphragm, or partition shall underlie the solid part of its opposite. The application of the single plate, diaphragm, or partition, as represented by the plans herewith submitted, is as follows:

Figure 1 represents a vertical section of a complete machine, of which A is the induction-pipe through which the gold-bearing material passes in the direction of the arrows under the perforated plate, diaphragm, or partition B, through the perforations of which it is forced through the quicksilver C to its surface D, thence through the eduction chamber E, over its top to the riffle F, thence discharged at G.

Fig. 2 represents a horizontal view of the perforated plate, diaphragm, or partition.

Fig. 3 represents a vertical view of the induction-pipe and perforated plate, diaphragm, or partition.

The area total of perforations should be one-fourth more than the area of the induction-pipe, and from one-fourth to one-eighth of the area of the plate, diaphragm, or partition.

We do not claim as new or as our invention the forcing of gold-bearing material beneath the surface into or through the body of quicksilver, nor any particular form or mechanical arrangement; but

We claim as our invention—

The application of a perforated plate, diaphragm, or partition in the manner above described, and for purposes above specified.

In witness whereof we have hereunto subscribed our names the 2d day of August, 1862.

AUGUSTINE B. CROSBY. [L. S.]
JESSE LADD. [L. S.]

In presence of—
OZIAS MILLETT,
GIDDINGS LANE.