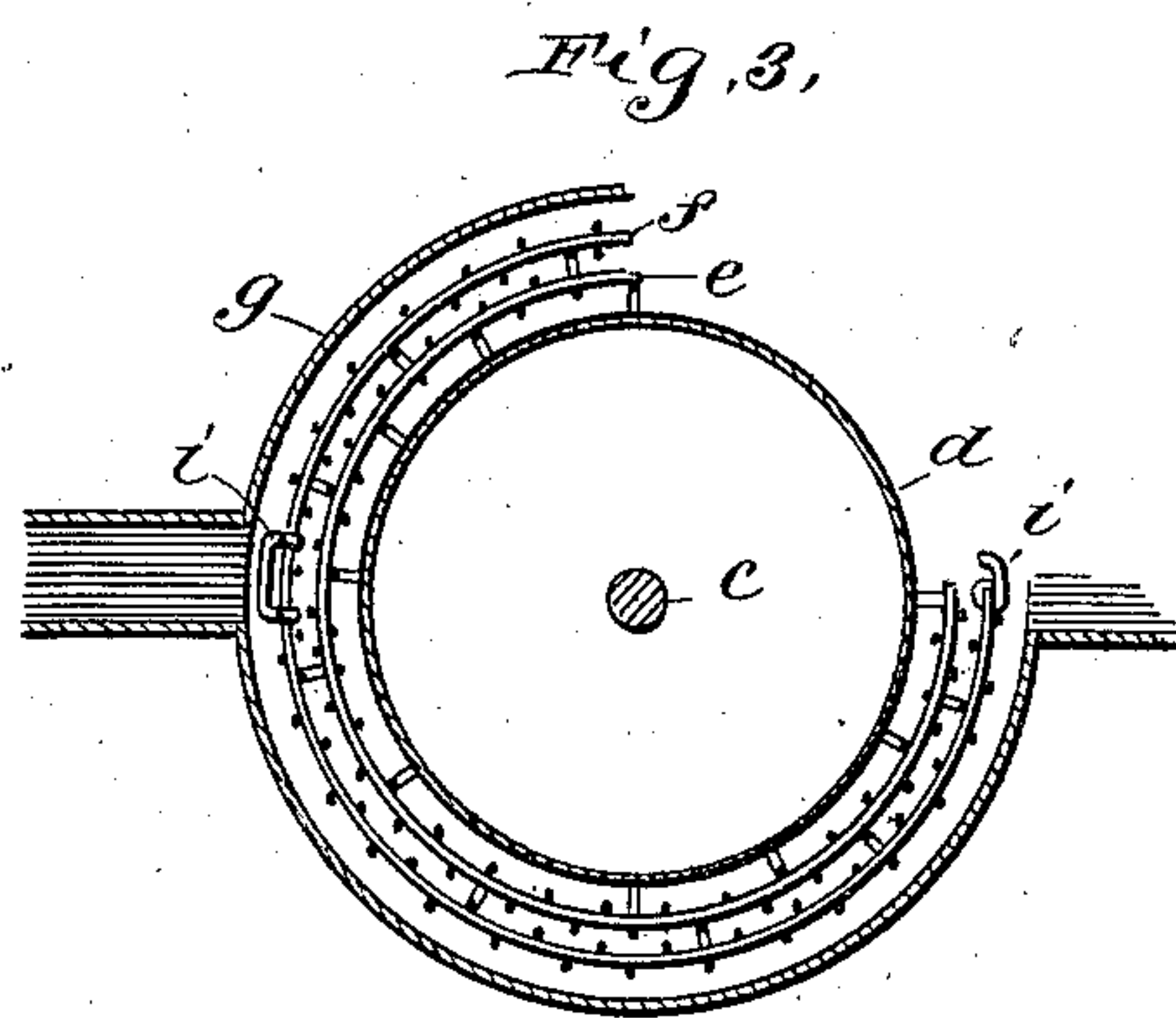
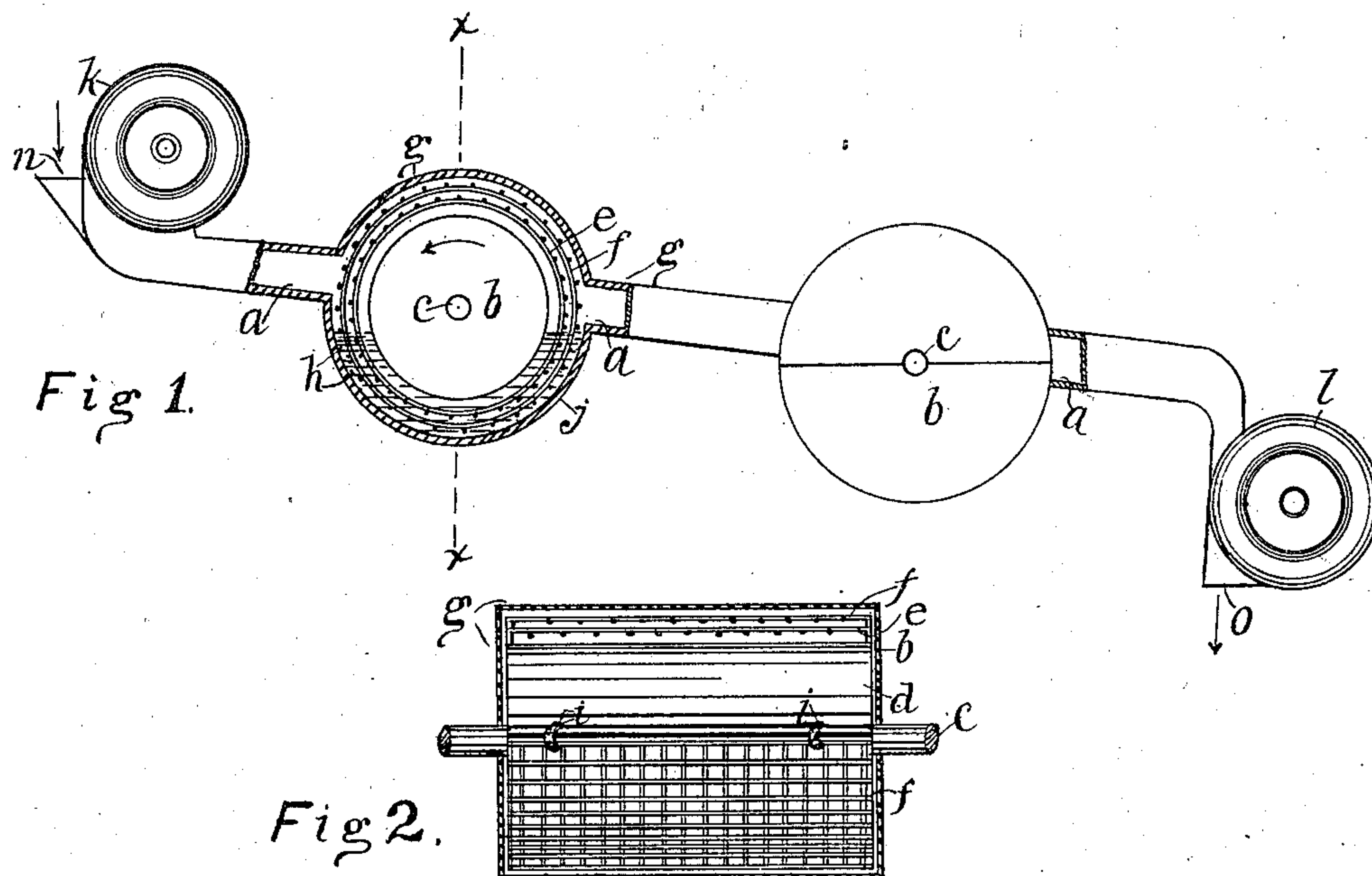


No. 725,309.

PATENTED APR. 14, 1903.

A. H. WOODRUFF.
AMALGAMATING MACHINE.
APPLICATION FILED JULY 7, 1902.

NO MODEL.



WITNESSES:

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AMOS H. WOODRUFF, OF CHICAGO, ILLINOIS.

AMALGAMATING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 725,309, dated April 14, 1903.

Application filed July 7, 1902. Serial No. 114,561. (No model.)

To all whom it may concern:

Be it known that I, AMOS H. WOODRUFF, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Amalgamating-Machines, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part hereof, and in which—

Figure 1 shows, in side elevation and partly in section, my improved amalgamating-machine. Fig. 2 shows Fig. 1 on a transverse sectional plane $x x$ of Fig. 1, the cylinder being left entire, only the upper and front quarters of the surrounding or screen cylinders being removed, the lower front quarters of said cylinders being left in place, while the entire surrounding casing or shell is shown in section. Fig. 3 shows, on an enlarged scale, a transverse view of Fig. 2 on the plane $y y$ of Fig. 2.

Like reference-letters denote like parts.

The object of my invention is to improve the construction and operation of amalgamating-machines used in extracting gold from its dross or rock in its crushed condition by either the dry or the wet process. To attain said desirable ends, I construct my said new device in substantially the following manner, namely:

Around the usual amalgamating-cylinder b , which revolves on a shaft c , and in a trough j , containing mercury h , are placed separably and removably connected and foraminated half-cylinders e and f , held in place by clamps i and on the said cylinder d , so as to revolve with it, all in the direction indicated by the arrow, or in lieu of said jacketing-cylinders being of perforated sheet-copper said surrounding cylinders or casings $e f$ may be of amalgamated copper wire, as here shown. The slightly-inclined table a receives the material to be worked from a hopper n and discharges it from a spout o . A fan k aids to feed dry material, or a suction-fan l draws the material through the machine by suction. Both said fans may also be used simultaneously. The covering g makes closed air-passages over the table or tables a .

What I claim is—

The combination with an amalgamating-cylinder, of foraminated, superimposed cylinders, on said amalgamating-cylinder, longitudinally separable into halves, substantially as specified.

AMOS H. WOODRUFF.

Witnesses:

WM. ZIMMERMAN,
CARL A. LOTHGREN.