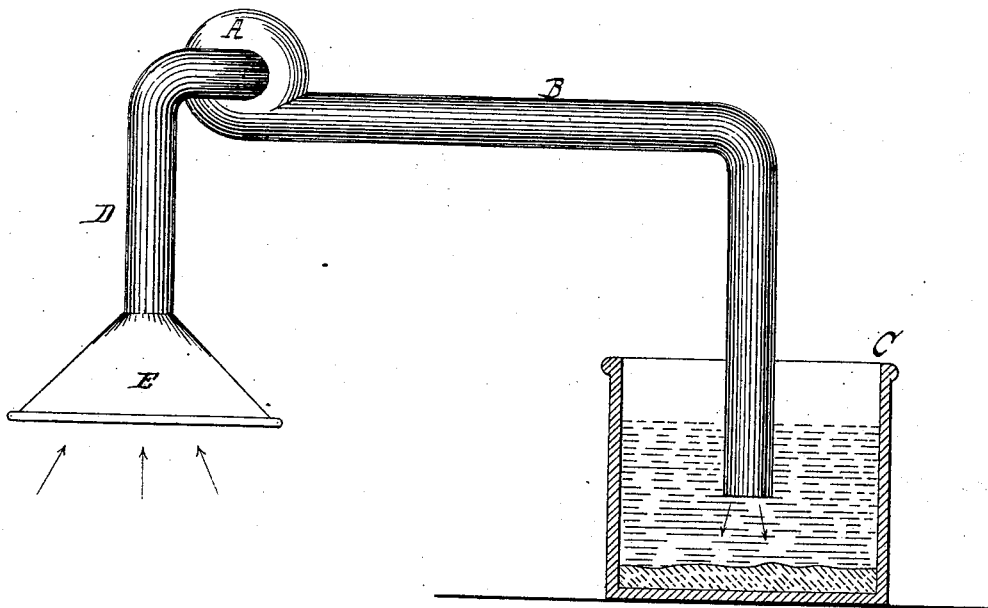


W. HOOPER.
Dust-Trap for Ore-Separators.

No. 196,455.

Patented Oct. 23, 1877.



Witnesses.

Otto Hufeland
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Inventor.

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per
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UNITED STATES PATENT OFFICE.

WILLIAM HOOPER, OF TICONDEROGA, NEW YORK, ASSIGNOR TO NEW YORK
ORE SEPARATOR COMPANY.

IMPROVEMENT IN DUST-TRAPS FOR ORE-SEPARATORS.

Specification forming part of Letters Patent No. **196,455**, dated October 23, 1877; application filed
April 12, 1876.

To all whom it may concern:

Be it known that I, WILLIAM HOOPER, of Ticonderoga, in the county of Essex and State of New York, have invented a new and Improved Dust-Trap for Ore-Separators and other Machines, which invention is fully set forth in the following specification, reference being had to the accompanying drawing.

This invention consists in the combination of a flaring hood, a suction-pipe, a fan-blower, and a dust-escape pipe, the end of which is turned down into a tank containing water or other liquid, so that by adjusting the flaring hood over an ore-separator or other machine, the dust rising from said machine is drawn through said hood and suction-pipe, and then expelled by the action of the fan-blower through the dust-escape pipe, and finally precipitated in the receiving-tank.

The drawing represents a sectional side view of this invention.

In this drawing, the letter A designates a fan-blower, the suction-spout of which connects, by means of a pipe, D, with a flaring hood, E, while the discharge-pipe of said blower connects with the dust-escape pipe B, the outer end of which is turned down into a tank, C, which is partially filled with water or other liquid.

The hood E is adjusted over the machine from which rises the dust to be collected, and when the fan-blower is started the dust is

drawn through said hood and through the suction-pipe D, and then expelled through the escape-pipe B. In issuing from this pipe the dust is compelled to pass through the liquid in the tank C, and as the same is forced down under the surface of said liquid, it is precipitated in the tank, while the pure air escapes into the open atmosphere.

I do not claim as my invention the combination of a fan-blower with a dust-escape pipe dipping beneath the surface of water or other liquid contained in a tank, such combination having already been used; neither do I claim, broadly, the flaring hood; but

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

The combination of the flaring hood E, arranged vertically above the ore-separator, the pipe D, rising from the apex thereof, the fan-blower, into which said pipe enters, the dust-escape pipe B, extending from the fan-blower, and the tank C, for containing water, beneath the surface of which liquid the end of the dust-escape pipe extends, as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 23d day of March, 1876.

WILLIAM HOOPER. [L. S.]

Witnesses:

HORACE TRUMBULL,
J. B. RAMSEY.