

A. HORN.
Amalgamator.

No. 71,011.

Patented Nov. 19, 1867.

Fig. 1

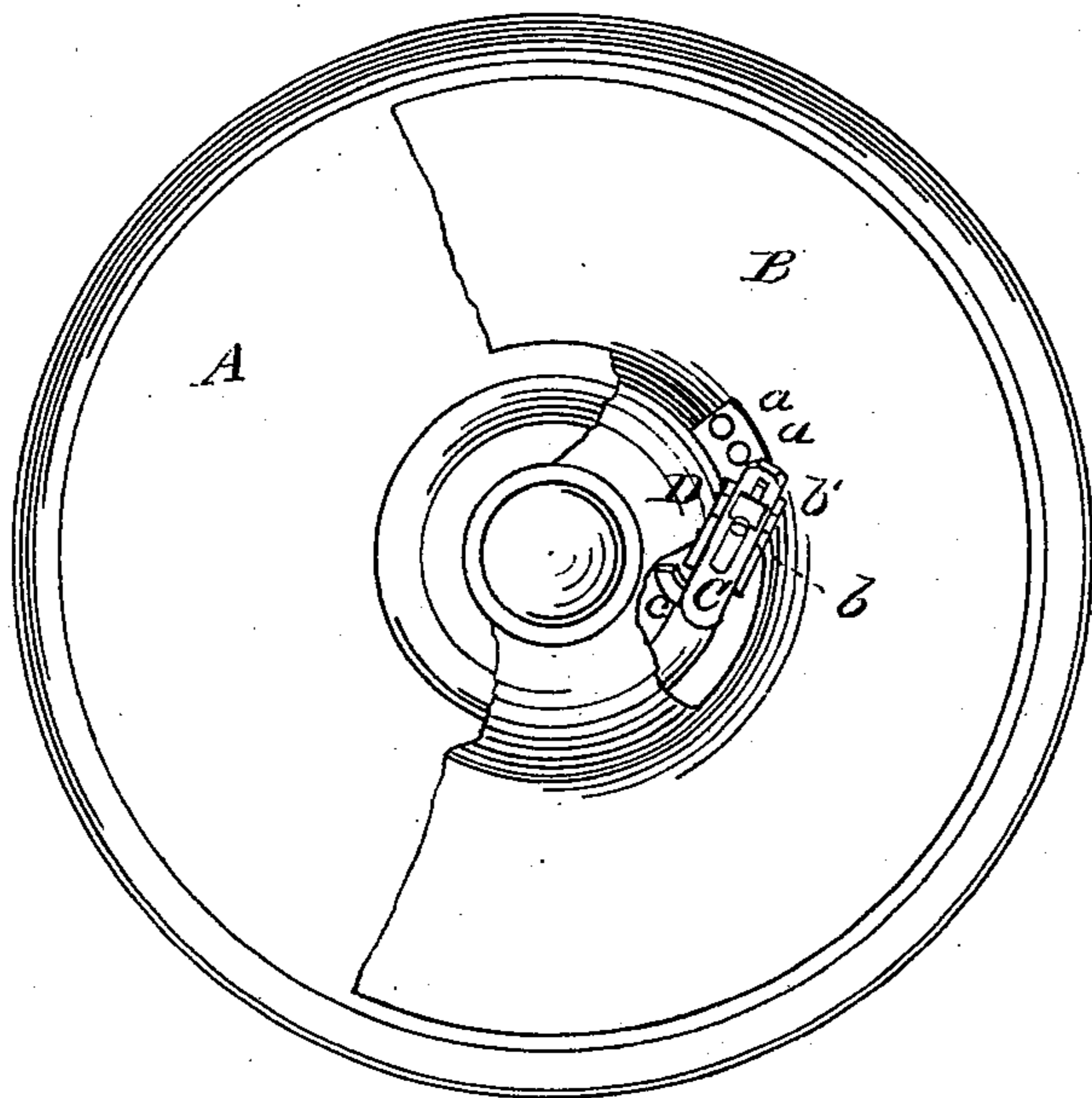
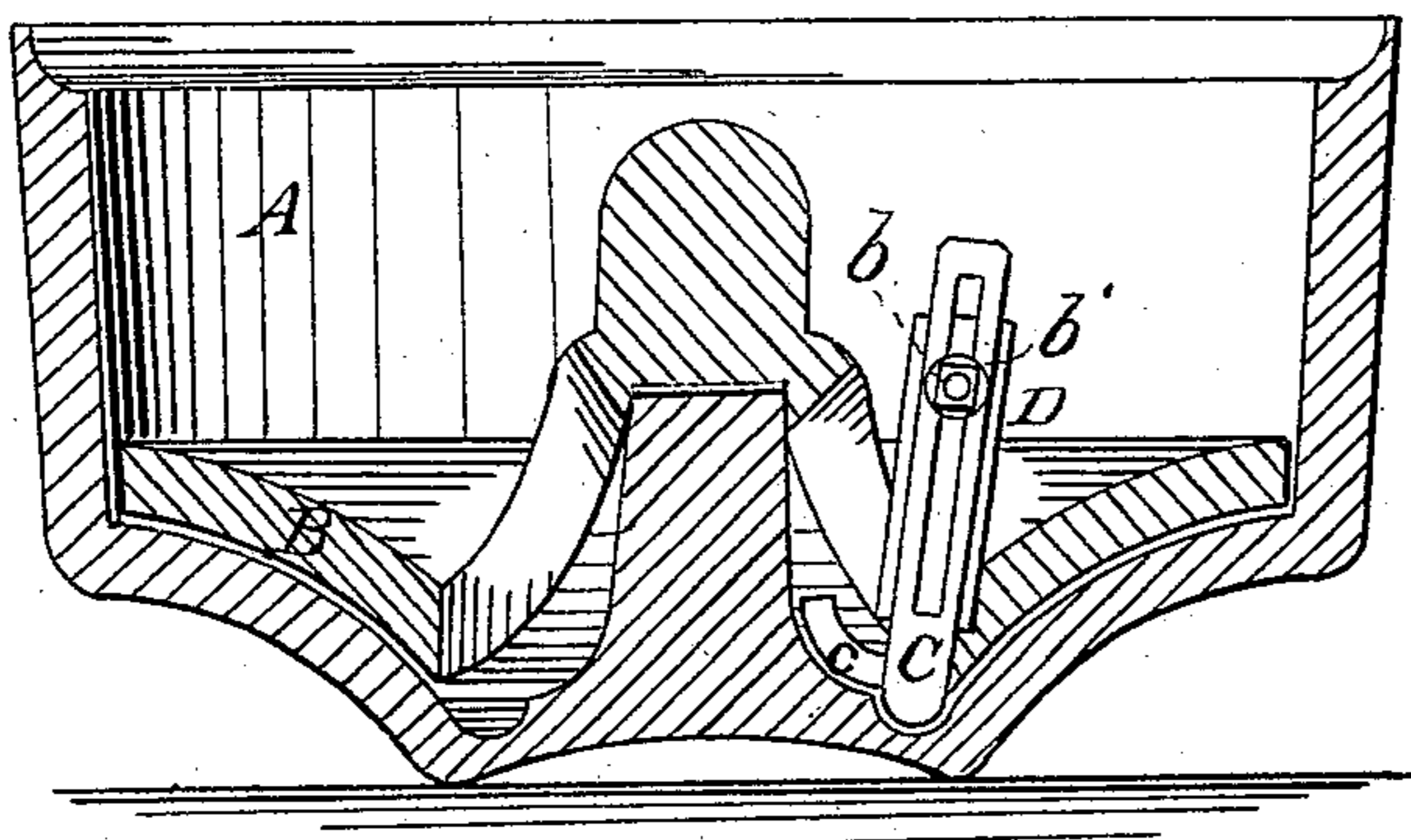


Fig. 2.



Witnesses
C. M. Smith
Gus. A. Monthly

Inventor
Alfred Horn
By his attorney
Dewey & Co.

United States Patent Office.

ALFRED HORN, OF SILVER CITY, NEVADA.

Letters Patent No. 71,011, dated November 19, 1867.

IMPROVEMENT IN AMALGAMATORS.

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, ALFRED HORN, of Silver City, county of Lyon, State of Nevada, have invented certain new and useful Improvements in "Amalgamators;" 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 improvement without further invention or experiment.

The nature of my improvement is to provide a means for constantly enlivening the mercury employed for amalgamating the precious metals, and consists of a scraper or distributor, having an arm attached to it, the end of the scraper operating in a groove in which the quicksilver is placed around the bottom of the pan, the whole being attached to the muller-frame to be carried around with it.

In most amalgamating-pans there is a space between the inner ends of the mullers and the cone that is recessed for the purpose of holding mercury, and which large body of mercury has no means whereby it may be distributed through the pulp, except by the friction of the pulp, or ore passing over its surface; and in many instances the surface of the mercury becomes covered with a film or coating, which renders it wholly inactive and ineffective for taking up the precious metals, the friction of the pulp being insufficient for removing the scum or coating.

To provide some means of overcoming this obstacle of perfect amalgamation with the metals, and keeping the mercury constantly enlivened and active, is the object of my invention.

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

Figure 1 is a top view of an amalgamator, with the muller broken away.

Figure 2, a side sectional elevation of the amalgamator and muller.

A represents an amalgamating-pan, in which is placed a muller-frame, B. To either arm of the muller-frame is attached the scraper or distributor C by bolts *a a*, and consists of a piece of metal having an oblong, oval point, with a curved arm, *c*, projecting toward the axis of revolution, and is adjustable, up and down, in a slide, D, a slot being made in the scraper through which a bolt, *b*, passes, having a set-nut, *b'*. By this means the scraper can be adjusted to the wear of the shoes and dies, and have a uniform dip in the mercury, constantly agitating and evenly distributing it in the pulp.

Having thus described my invention, I do not claim any particular form of apparatus, or manner of attaching it to the muller; but what I do claim, and desire to secure by Letters Patent, is—

1. The application of a scraper or distributor, C, to an amalgamating machine or pan, for the purpose of distributing the mercury through the pulp, substantially as described.

2. Arranging the said distributor to an amalgamating machine, so that it may be easily adjusted to the wear of the shoes and dies, substantially as described.

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

ALFRED HORN. [L. s.]

Witnesses:

JNO. W. GRIER,
HENRY GOOLDING.