L. G. MARSHALL.

MACHINE FOR CRUSHING STONES.

No. 43,882. Patented Aug. 16, 1864.

Fig. 1.

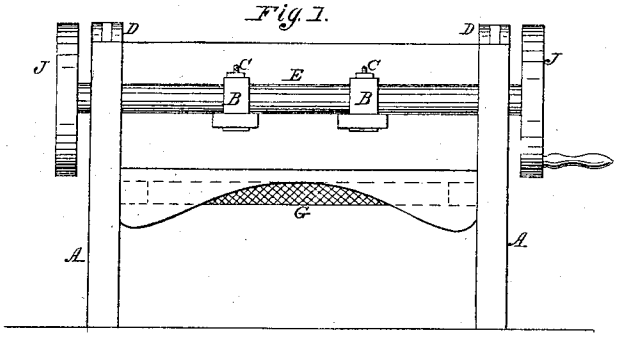


Fig. 2.

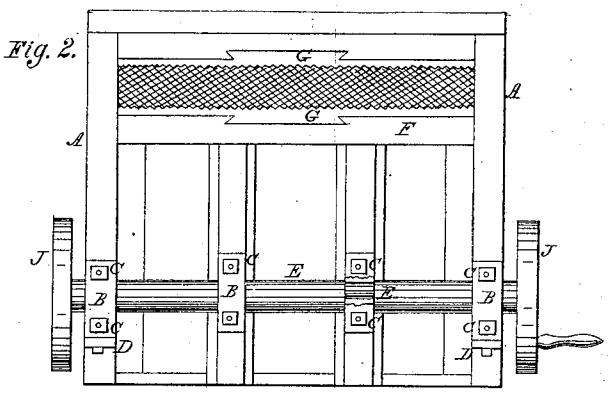
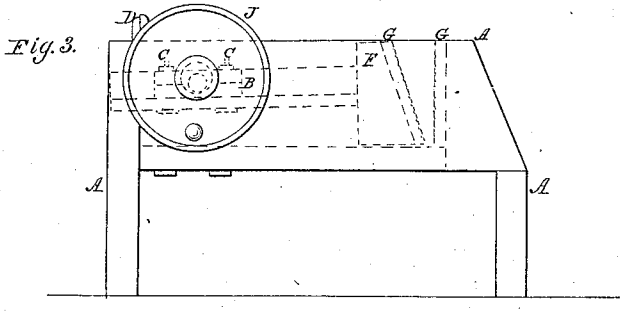


Fig. 3.



Witnesses:
F. Harperday
John C. Parker

Inventor:
Loomis G. Marshall,
by his Atty
J. Franklin Reigart

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

LOOMIS G. MARSHALL, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND ANDREW COCHRAN.

IMPROVEMENT IN STONE-CRUSHING MACHINES.

Specification forming part of Letters Patent No. **43,882**, dated August 16, 1864.

To all whom it may concern:

Be it known that I, LOOMIS G. MARSHALL, of the city of New York, and State of New York, have invented new and useful Improvements in Machines for Crushing Stones; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the arrangement and combination of movable boxes, eccentric shaft, and incline-shaped working-jaw, with plates fitting in a dovetail in the face of the jaw.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 represents a back view; Fig. 2, a top view, and Fig. 3 a side elevation.

A represents the upright square frame, upon which the machine operates.

B represents the boxes, that are made in the ordinary way, with loop-holes about one and a half inch in length, through which the bolts C pass, and are moved and supported by keys D, which can be used at either end of the box, and which operate the eccentric shaft, so as to be adjusted to the size of rock or stones to be crushed fine or coarse, as required.

The shaft E is eccentric-shaped and set permanently in the two outside boxes, and the eccentric gain at every revolution moves the working-jaw F backward and forward, thus crushing the stones between the two face-plates G, which are movable plates set in the face of the jaw in dovetail. They are checkered, so as to be held firm and solid, the jaw F moving and operating horizontally and answering by its incline shape the purpose of a crusher and hopper to receive the stones.

Balance-wheels J are attached to each end of the eccentric shaft E for the purpose of keeping up the regular motion of the machine and maintaining its power, and enable the machine to operate closer to the center than the usual mode of constructing crushers.

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

The arrangement and combination of the movable boxes, eccentric shaft, and working jaw, all as herein described, and for the purposes set forth.

Witnesses: LOOMIS G. MARSHALL.
A. B. COCHRAN,
WHEELER F. CLARKE.