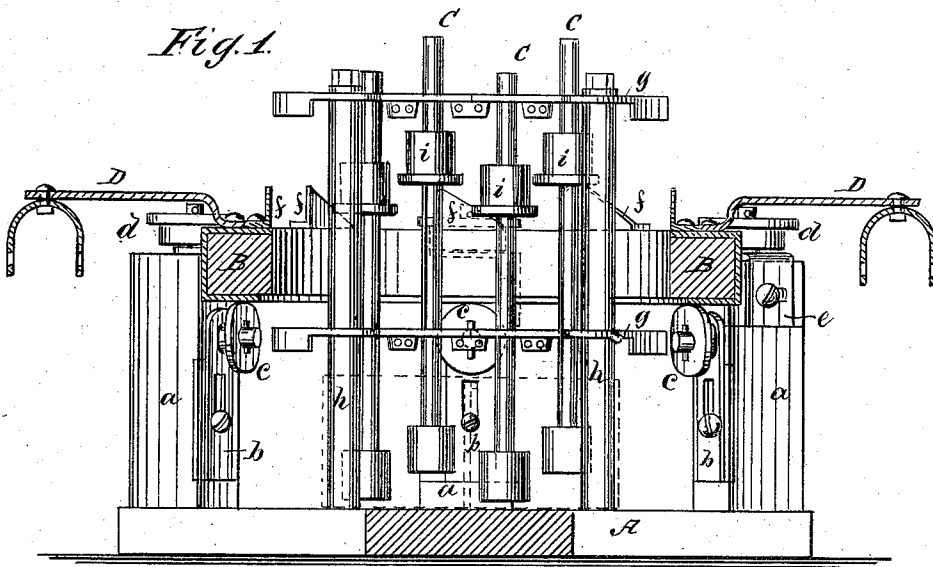
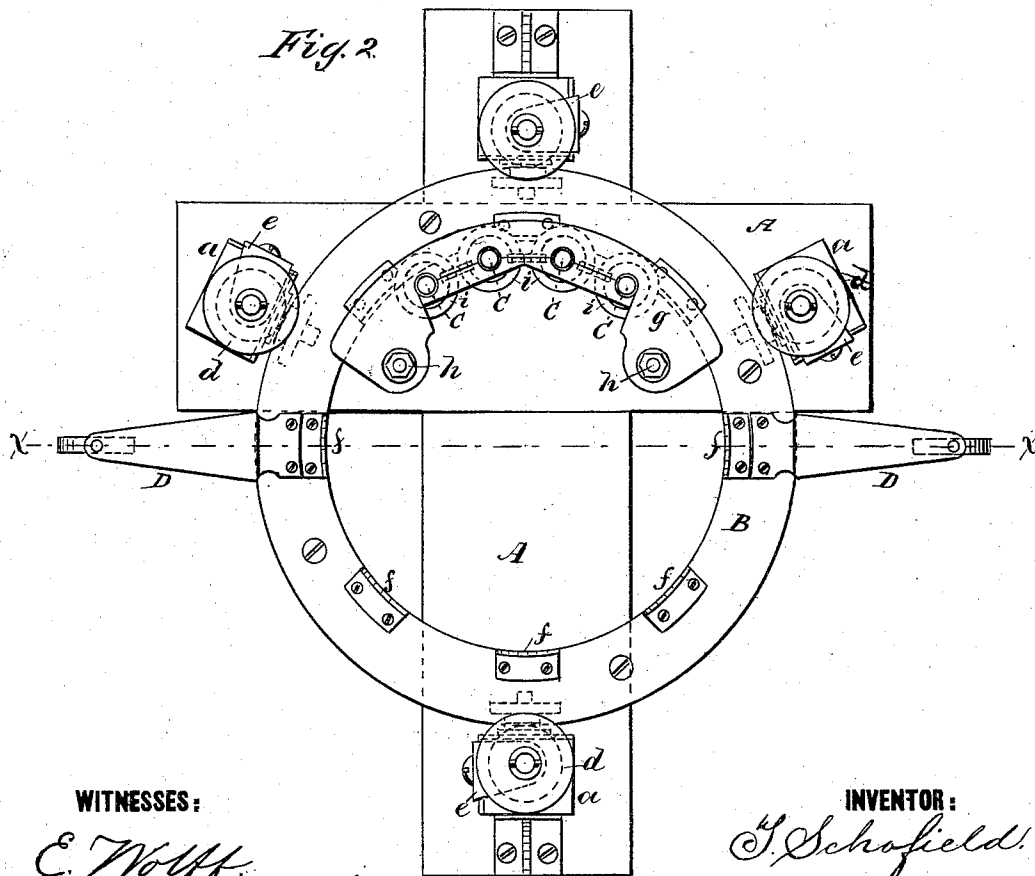


ORE-STAMP.

No. 191,889.

Patented June 12, 1877.



WITNESSES:

E. Wolff.
J. N. Scarborough.

INVENTOR:

T. Schofield!
BY *mmmm*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

THOMAS SCHOFIELD, OF GRASS VALLEY, CALIFORNIA.

IMPROVEMENT IN ORE-STAMPS.

Specification forming part of Letters Patent No. **191,889**, dated June 12, 1877; application filed March 24, 1877.

To all whom it may concern:

Be it known that I, THOMAS SCHOFIELD, of Grass Valley, in the county of Nevada and State of California, have invented a new and Improved Quartz-Battery, of which the following is a specification:

Figure 1 is a vertical section of my improved quartz-battery, taken on line *x x* in Fig. 2. Fig. 2 is a plan view.

Similar letters of reference indicate corresponding parts.

My invention consists in the combination of a ring supported and guided by rollers, and carrying a number of cams, and a number of stamp-rods having collars that are engaged by the cams as the ring revolves.

The common method of crushing quartz by heavy cumbersome machinery, and the difficulty experienced in conveying quartz from a considerable distance to such machinery, has hitherto rendered the prospecting of ledges remote from quartz-mills a laborious and troublesome matter.

To provide a portable and yet efficient quartz-battery, which may be worked by horses or other animals, and by them be drawn from place to place, is the object of my invention.

Referring to the drawing, A is the bed of the machine, which, in the present case, is cross-shaped; but it may, if desired, be made in other forms.

Posts *a a* project upward from the bed A, and to them are secured the adjustable supports *b* of the rollers *c*. The supports *b* are slotted to receive screws, by which they are secured to the posts *a*.

B is a ring composed of wood or iron, or a combination of both, that rests upon the rollers *c*, and is guided by the flanged hori-

zontal rollers *d*, which are journaled upon studs projecting upward from the adjustable castings *e*, that are secured to the tops of the posts *a* by screws, that pass through slots in the said castings and into the posts. To the upper surface of the ring B, and near its inner edge, triangular lifting-cams *f* are attached.

C C are the stamp-rods, that are guided in suitable boxes in curved plates *g*, that are supported by posts *h*. To the lower end of these rods the pestles which work on the mortars are attached, and upon them, between the plates *g*, the tappets *i* are placed in such position as to be engaged by the lifting-cams *f* as the ring B is revolved.

Sweeps D are attached to opposite sides of the ring B, to which horses or other animals may be hitched to furnish the requisite power.

It will be seen that as the ring B revolves the tappets *i* are engaged by the lifting-cams *f*, and are raised as the inclined sides of the cams pass under the tappets, and are allowed to fall when the vertical side of the cam passes the tappets.

Any desired number of stamping-rods may be employed, and two or more sweeps may be used, as circumstances may require.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The plain ring B, supported on bottom rolls *c*, guided by flange side rolls *d*, and having angular lifting-cams *f* on its inner edge, in combination with stamp-rods within the ring, and having tappets, as shown and described, for the purpose specified.

THOMAS SCHOFIELD.

Witnesses:

C. P. THOMPSON,
J. VAN HOETER.