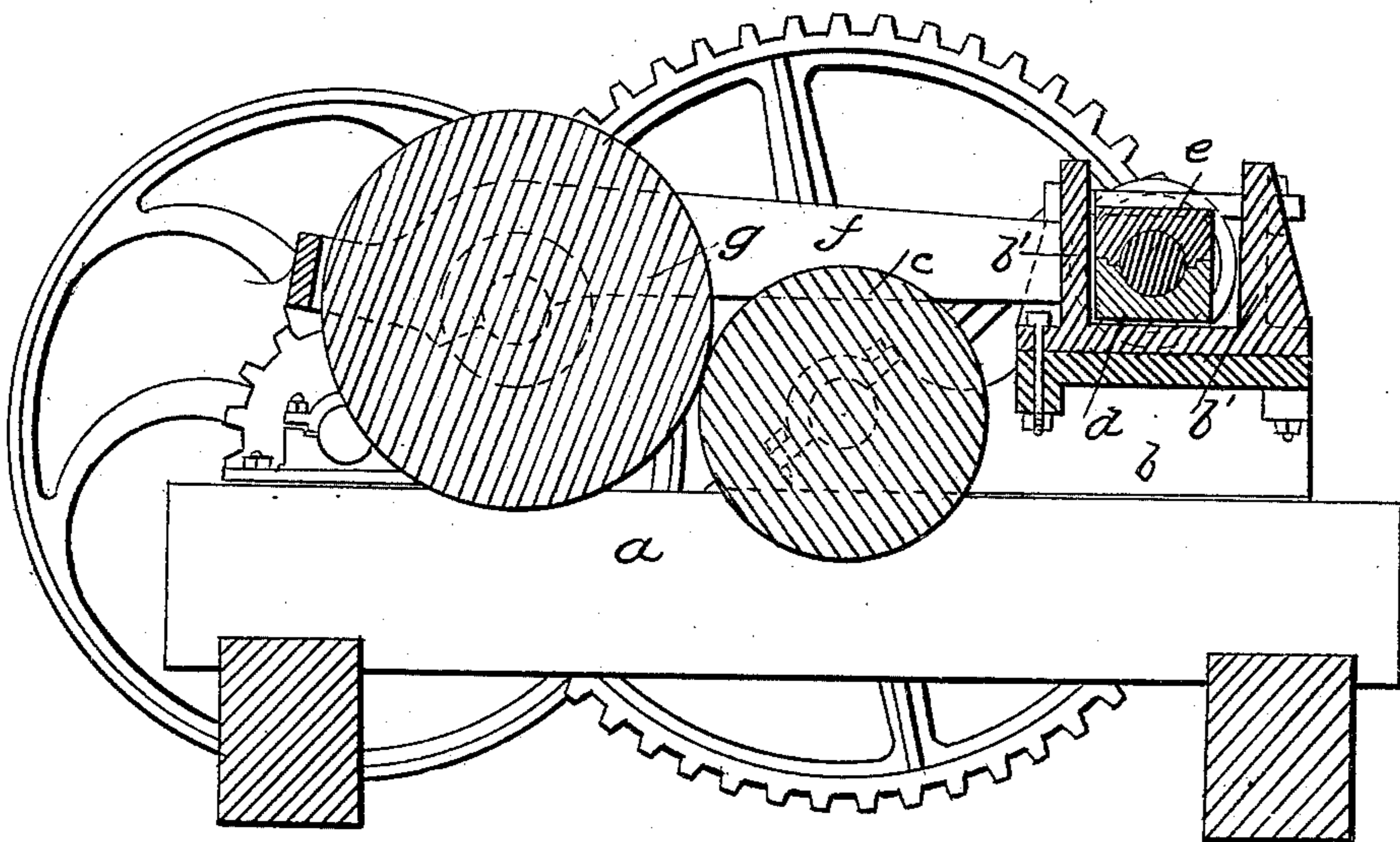
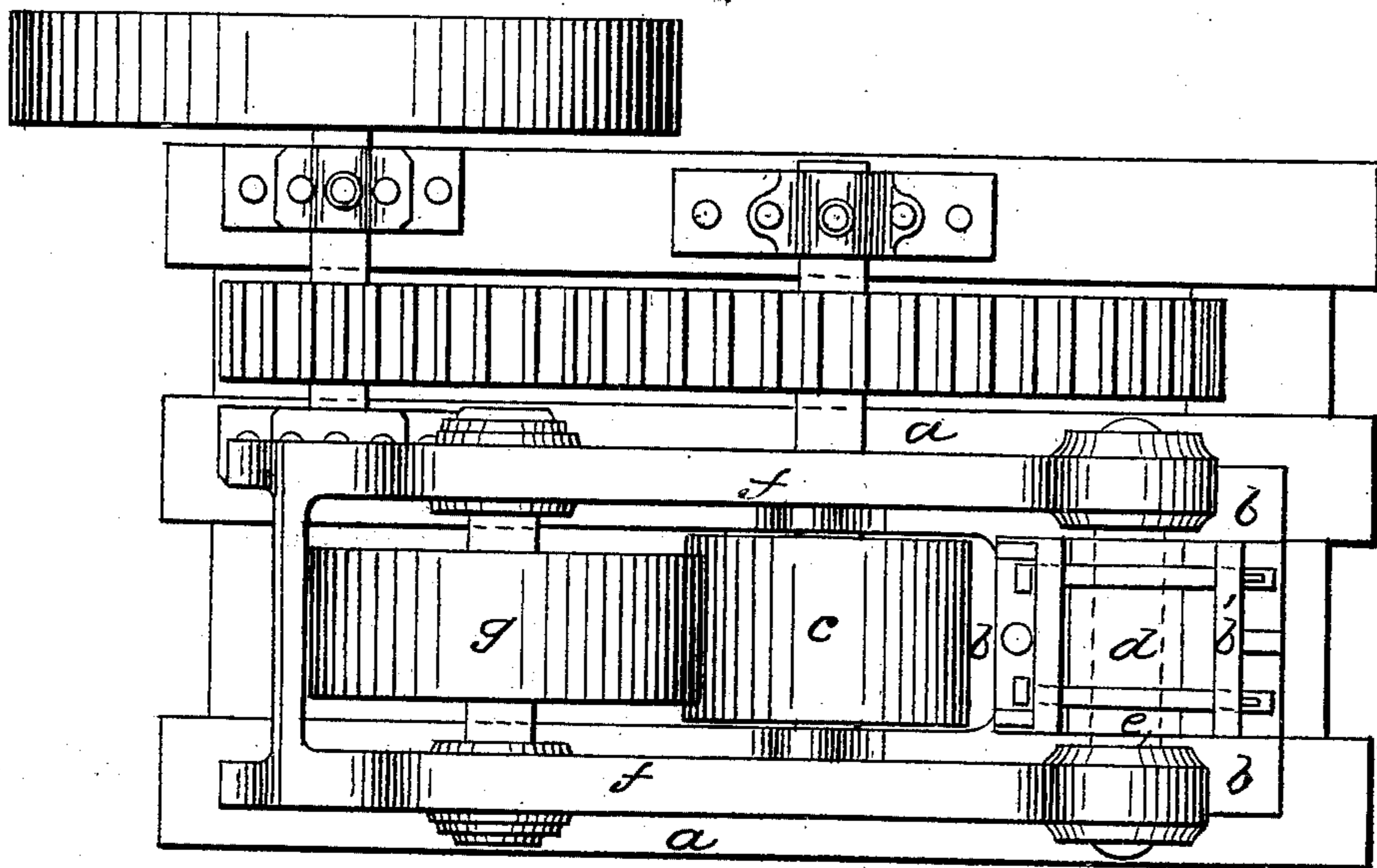


W. H. PLUMB.

Ore Crusher.

No. 16,039.

Patented Nov. 4, 1856.



INVENTOR:

W. H. Plumb

UNITED STATES PATENT OFFICE.

WILLIAM HENRY PLUMB, OF NEW YORK, N. Y.

IMPROVEMENT IN CRUSHING-ROLLERS FOR ORES, &c.

Specification forming part of Letters Patent No. 16,039, dated November 4, 1856.

To all whom it may concern:

Be it known that I, WILLIAM HENRY PLUMB, of the city, county, and State of New York, have invented certain new and useful Improvements in Machinery for Crushing Quartz, which machinery is also applicable to other purposes; and I do hereby declare the following to be a full, clear, and exact description thereof, in which—

Figure 1 is a plan. Figure 2 is a vertical section. The several parts on the two figures are designated by the same letters. Fig. 3 is an end elevation.

My improvement consists in combining a roller having stationary bearings for its shafts with another of the same or different size, supported in one end of a frame that turns at its opposite end in journals that are made adjustable in relation to the bearings of the first-named roller, so that the positions of the two rollers can be varied to suit the circumstances for which they are intended, by which any crushing force can be exerted upon the material subjected to the action of the machine.

The construction is as follows: On a suitable frame *a* I affix the bearings *b*, which are massive iron castings forming the bearings for the journals of the roller *c*, and a seat *b'* for the box *d*, in which the journal or pivot *e* of the frame *f* turns. These boxes *d* are so coupled with the seat *b'* that it can be raised or lowered or moved laterally for adjustment.

The frame *f* is composed of two arms united by a cross-tie at one end and by its axis or pivot *e*, that passes through the bearing, at the other. This frame *f* has two boxes, one in each arm, in which the journals of the second roller *g* rest and turn, so that when the arms are brought into the position shown in the drawings the roller *g* bears upon roller *c* a little above a horizontal line drawn through its axis, this point being adjusted higher or lower by the movable box *d*. It will be obvious from this arrangement that any amount of pressure may be produced between the rollers depending upon the point of rotation of the frame and the point of impingement relatively. The nearer they approach a straight line drawn through the axis of roller *c* the more powerful the pressure becomes, while at all times the roller *g* can rise with sufficient resistance interposed between the rollers.

Having thus fully described my improved crusher, what I claim as my invention, and for which I desire to secure Letters Patent, is—

The construction, combination, and arrangement of the stationary and movable rollers adjusted to the work to be done in the manner and for the purposes set forth.

WM. HENRY PLUMB.

Witnesses:

S. C. SALISBURY,
H. GREENOUGH.