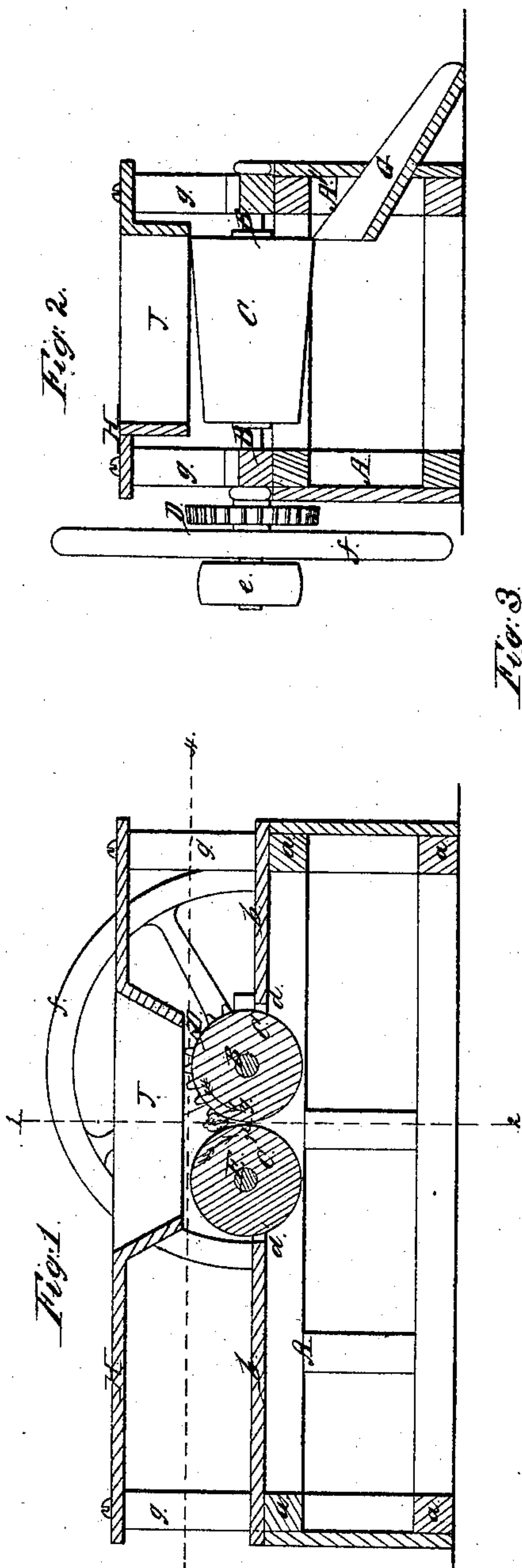
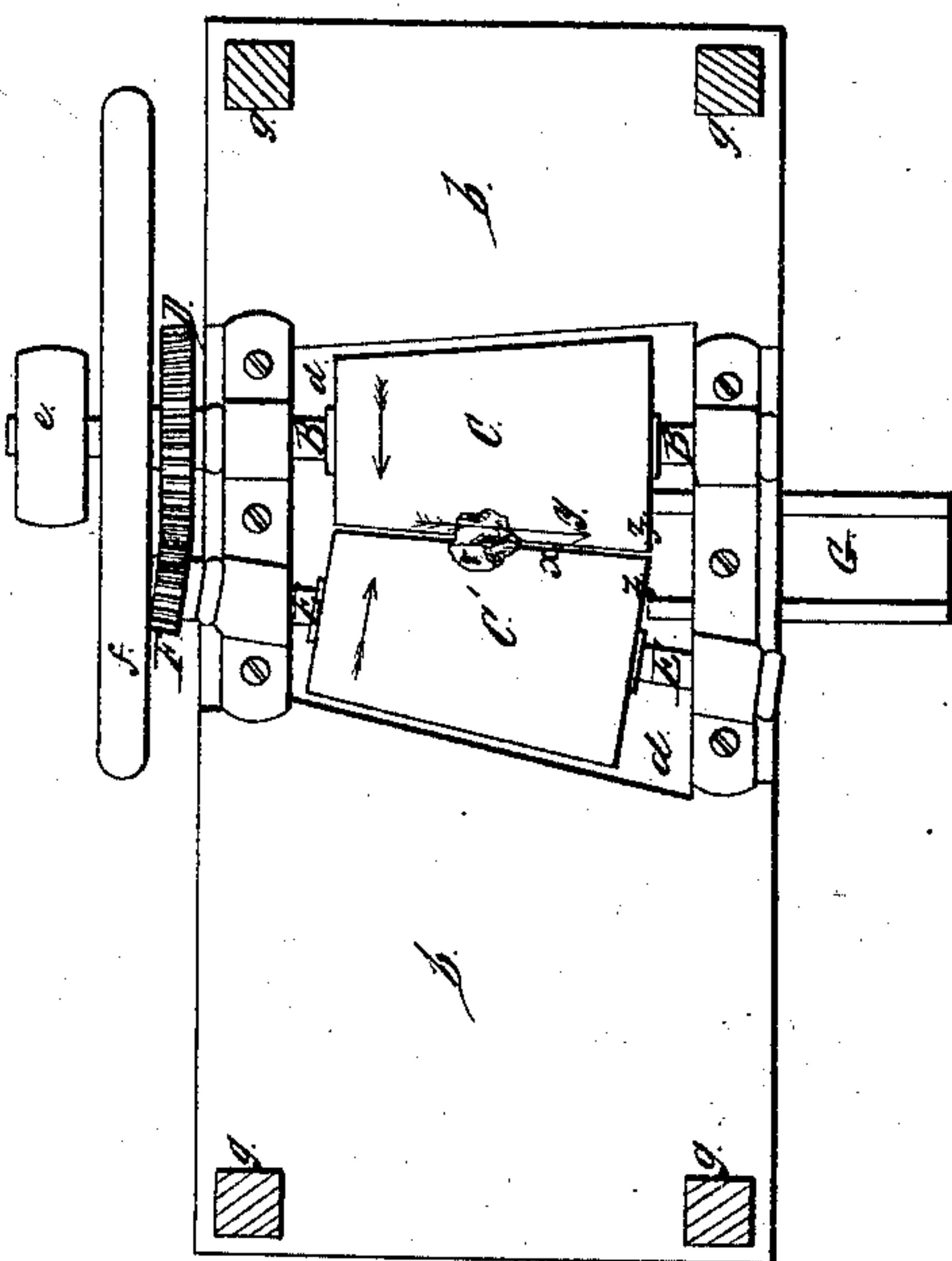


*I. Gregg,*  
*Pulverizing Clay,*  
*No 66,488,*  
*Patented July 9, 1867.*



Witnesses,  
*Wm. Allen Lee,*  
*John Parker*

Fig. 3.



Inventor,  
*Irene Gregg,*  
*By this Atty.*  
*H. Houson*

# United States Patent Office.

ISAAC GREGG, OF PHILADELPHIA, PENNSYLVANIA.

*Letters Patent No. 66,488, dated July 9, 1867.*

## IMPROVED APPARATUS FOR TREATING CLAY.

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, ISAAC GREGG, of Philadelphia, Pennsylvania, have invented an improvement in Apparatus for Treating Clay; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

My invention consists of two tapering rollers, geared together and arranged to operate on clay and on stones contained therein in the manner described hereafter, so that the said stones may be removed automatically from the said rollers and prevented from injuring the same.

In order to enable others to make and use my invention, I will now proceed to describe its construction and operation.

On reference to the accompanying drawing, which forms a part of this specification—

Figure 1 is a sectional view of my apparatus for treating clay for brick-making.

Figure 2, a transverse section of the same on the line 1-2, fig. 1; and

Figure 3, a sectional plan on the line 3-4, fig. 1.

Similar letters refer to similar parts throughout the several views.

The opposite side-frames A and A' are connected together by cross-pieces *a a*, and at the top by a platform, *b*. Turning in suitable bearings on the opposite side-frames is a shaft, B, provided with a tapering roller, C, which is contained within an opening, *d*, in the platform *b*. On the shaft B is also a driving-pulley, *e*, a fly-wheel, *f*, and a cog-wheel, D, the teeth of the latter being slightly bevelled. A tapering roller, C', is also contained within the opening *d* of the platform, and is so situated as to coincide with the roller C, and is secured to an inclined shaft E, which turns in the opposite side-frames, and is provided with a pinion, F, gearing into the teeth of the wheel D before described. Secured to the side-frame A' of the apparatus, and beneath the rollers C and C', is a chute, G, and on uprights *g*, projecting from the platform *b*, is a table, H, and a hopper, J, the latter being situated immediately over the rollers C and C'. Heretofore straight or cylindrical rollers have been employed for treating clay to be used in the manufacture of bricks, the clay passing between and being triturated or ground by the rollers and falling into a receptacle beneath. The objection to these rollers is that when the clay, as is very often the case, contains a hard stone too large to pass between the rollers, the surfaces of the latter are scratched, and the machine must be stopped for the purpose of removing the stone. This objection is obviated by the employment of tapering rollers; for as the latter revolve at different speeds, and the clay from the hopper is subjected to their action, it is thoroughly broken and disintegrated, while stones which are too large to pass between or to be crushed by the rollers traverse toward those ends of the same which have the greatest diameter, and fall over the edge *z*, fig. 3, and into the chute G.

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

The two tapering-rollers C and C', geared together, and arranged to operate on the clay and stones contained therein, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ISAAC GREGG

Witnesses:

CHARLES E. FOSTER,

W. J. R. DELANY.