

(No Model.)

2 Sheets—Sheet 1.

H. SUNDQUIST.  
STONE CRUSHER.

No. 296,795.

Patented Apr. 15, 1884.

Fig. 1.

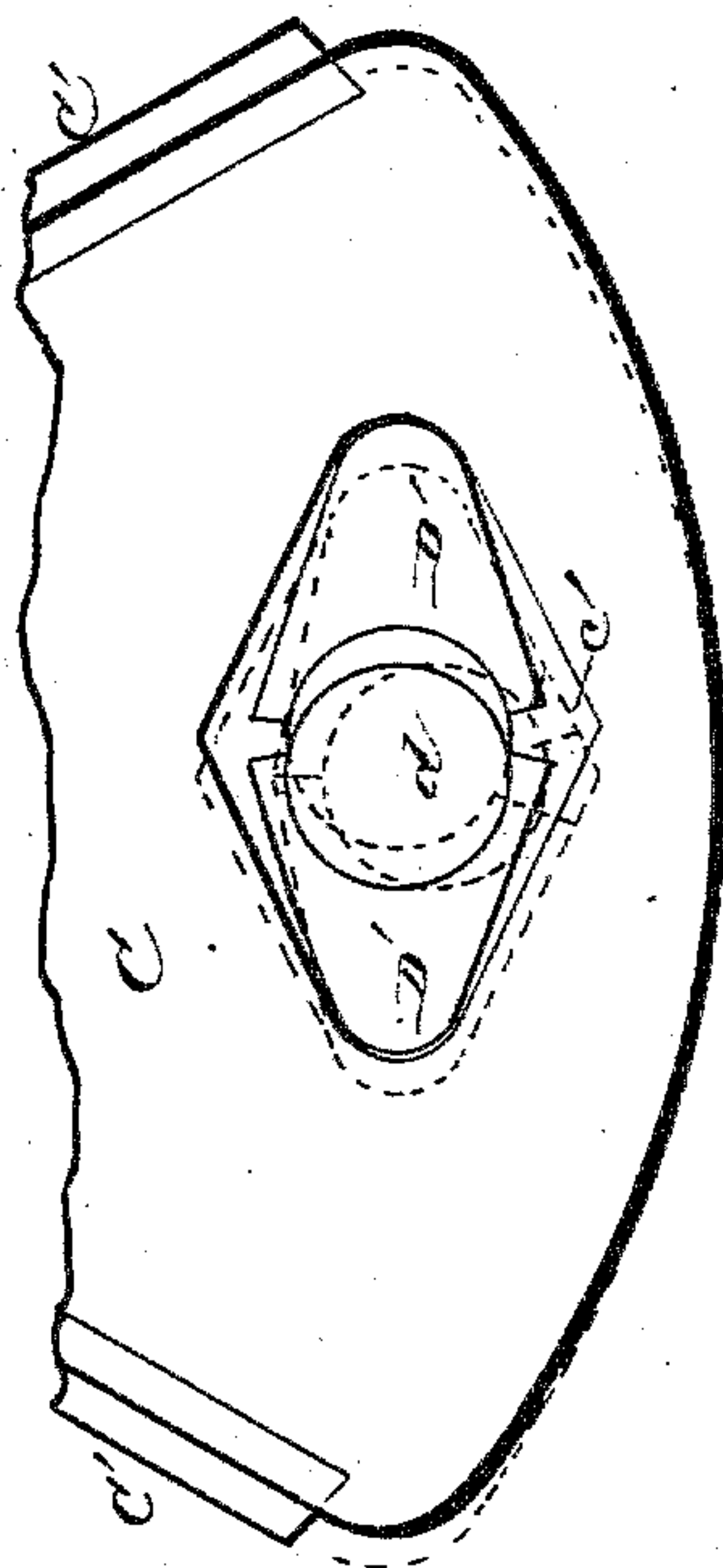
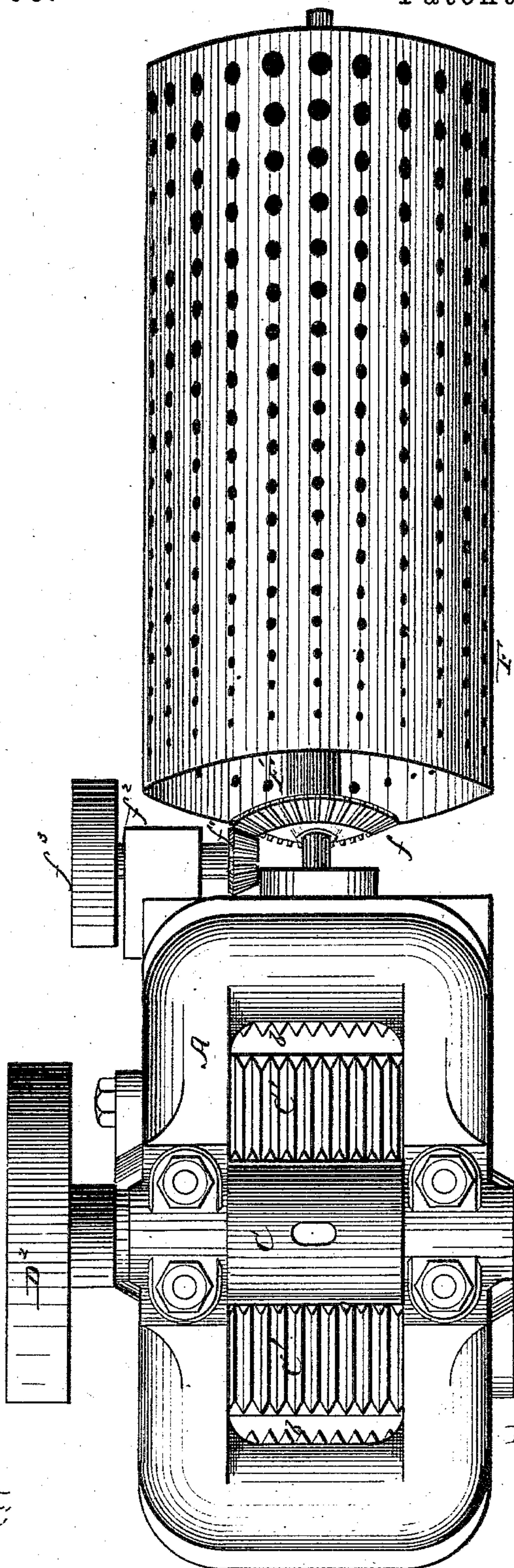


Fig. 2.

Attest:  
C. S. Carman.  
H. C. McArthur.

Inventor.

Henning Sundquist  
Per

H. Harrison  
Attorney



(No Model.)

2 Sheets—Sheet 2

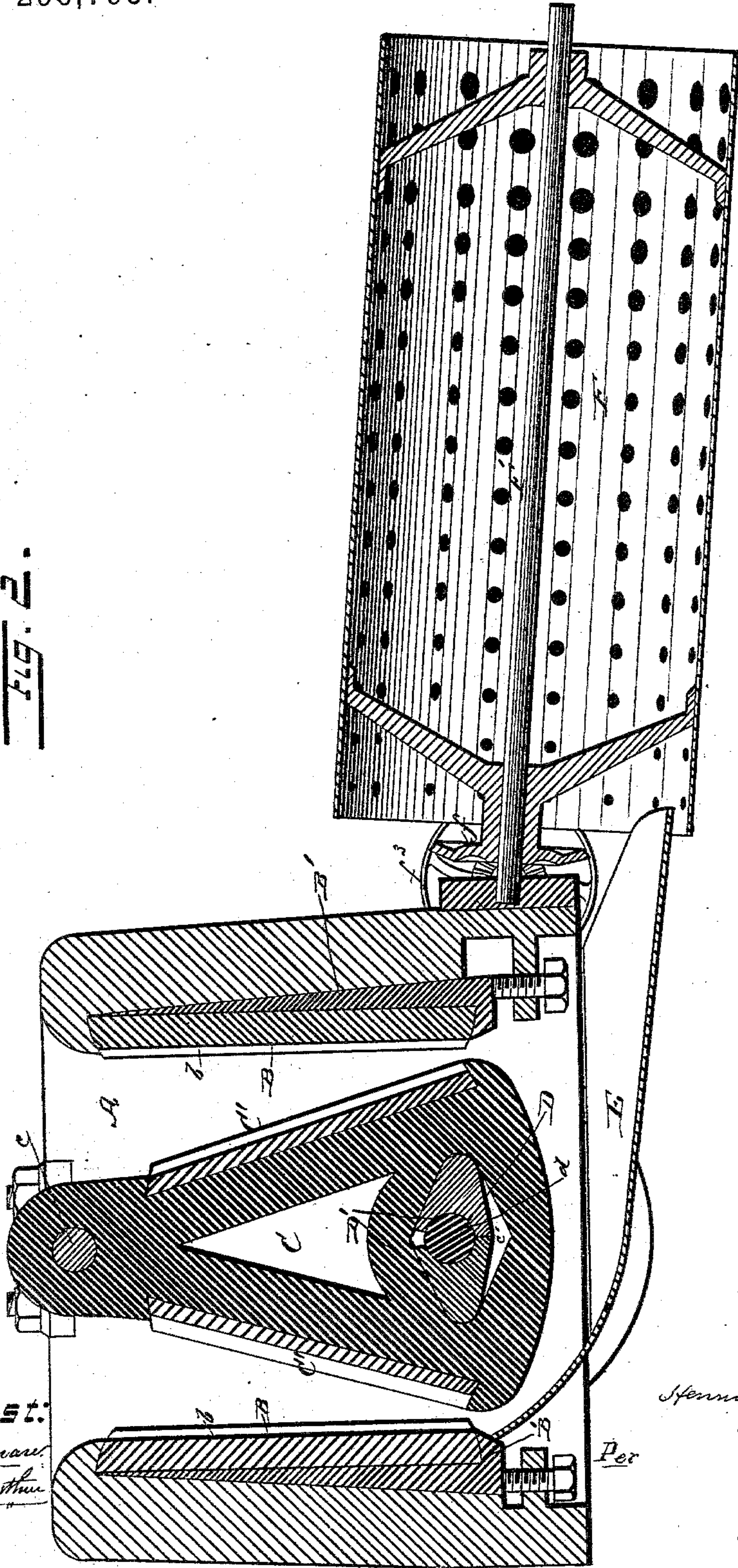
H. SUNDQUIST.

STONE CRUSHER.

No. 296,795.

Patented Apr. 15, 1884.

Fig. 2.



Attest:

*W. C. Thomsen*  
Attorney

Inventor.

*Henning Sundquist*

Per

*H. Hammon*  
Attorney



# UNITED STATES PATENT OFFICE.

HENNING SUNDQUIST, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO  
JOHN SONTAG, OF SAME PLACE.

## STONE-CRUSHER.

SPECIFICATION forming part of Letters Patent No. 296,795, dated April 15, 1884.

Application filed March 5, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, HENNING SUNDQUIST, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Stone-Crushers, of which the following is a specification.

This invention relates to an improvement in stone-crushers; and it consists in the peculiar construction and arrangement of the same, substantially as will be hereinafter more fully described and claimed.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the accompanying drawings, in which—

Figure 1 is a plan view; Fig. 2, a vertical longitudinal section of the same; and Fig. 3 is a detail view of the eccentric which oscillates the crusher.

A represents a frame or box, of suitable form and material, which is made open at the upper and lower sides, and is provided on two of its inner sides with steel plates B, formed with vertical corrugations *b b*. These plates are held in position by a bevel upon either end, fitting in corresponding grooves in the box or frame A above, and into similar-shaped wedge-plates, B', below and in rear of the corrugated plates, which wedges are rendered vertically adjustable by set-bolts upon the main frame.

In boxes upon the upper edges of the box or frame A is journaled a shaft, *c*, upon which is hung the oscillating crusher C within the crushing-chamber. This crusher is formed of a casting, made larger at the lower than at the upper end, and provided upon each face with corrugated steel plates C', similar to those already described. The lower end of the crusher C is formed with a transverse hole, *c'*, diamond-shaped in cross-section, through which passes the driving-shaft D, formed within the crusher with an eccentric, *d*, upon either side of which is a V-shaped block, D', which, though fitting the hole *c'* at its outer corners, are not as thick as the vertical diameter of this opening at its vertical center, and, being concaved to fit the eccentric *d*, they have a vertical motion without affecting the crusher, to which they impart an oscillating one.

Beneath the crushing-chamber A is a chute, E, into which the crushed stone falls, and is

conducted into the upper end of an inclined perforated cylinder, F, journaled in suitable bearings on the same frame and open at both ends. The perforations in this cylinder are graduated in size, the larger ones being at the lower end of the cylinder, and as the crushed stone passes through it the dirt and dust are screened out at the upper end and the fine stones farther on, until only crushed stone of the desired size is discharged at the lower end. The central shaft, F', of this perforated cylinder is provided with a bevel-gear wheel, *f*, meshing with a pinion, *f'*, on a shaft, *f''*, journaled in the main frame, and having a belt-pulley, *f'''*, as shown by Fig. 1, the said belt-pulley having a suitable belt connected to a revolving shaft operated by a steam-engine or other motor. The shaft D is also provided with a driving-pulley, D<sup>2</sup>.

In operation, the stone is fed into the crushing-chamber on either side of the crusher C, and as this is oscillated by the eccentric it is crushed, allowed to drop, and crushed again until the proper size is reached, and it is then fed to the screening-cylinder F, and passes through it to be cleaned of dirt and dust. It will be seen that though the eccentric makes a complete revolution, and has both a vertical and horizontal motion, it only imparts a nearly horizontal motion to the lower end of the crusher, as its bearing-blocks D' rise and fall with it without affecting the crusher.

I have illustrated and described various parts which are old, and which I do not claim in connection with my improvement, which is specifically set forth in the claim.

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

In a stone-crusher, the combination of the crusher C, formed with a transverse hole, *c'*, diamond-shaped in cross-section, the driving-shaft D, having an eccentric, *d*, within the crusher, a V-shaped block, D', upon either side of the eccentric, said block being concaved to fit the eccentric, substantially as shown and described, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HENNING SUNDQUIST.

Witnesses:

J. E. STEVENSON,  
FRANK JOHNSON.