

(No Model.)

2 Sheets—Sheet 1.

G. FRISBEE.  
MACHINE FOR PULVERIZING ORES, &c.

No. 321,430.

Patented July 7, 1885.

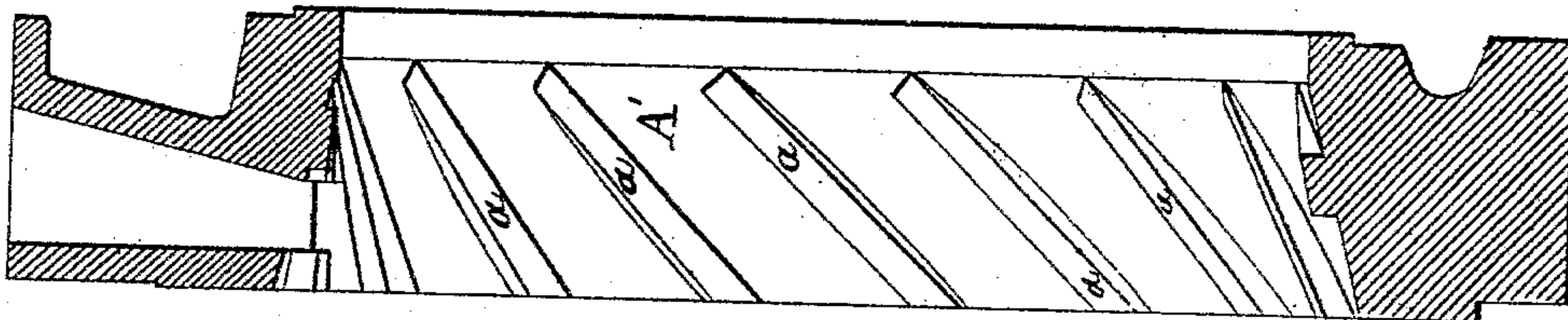


Fig. 2.

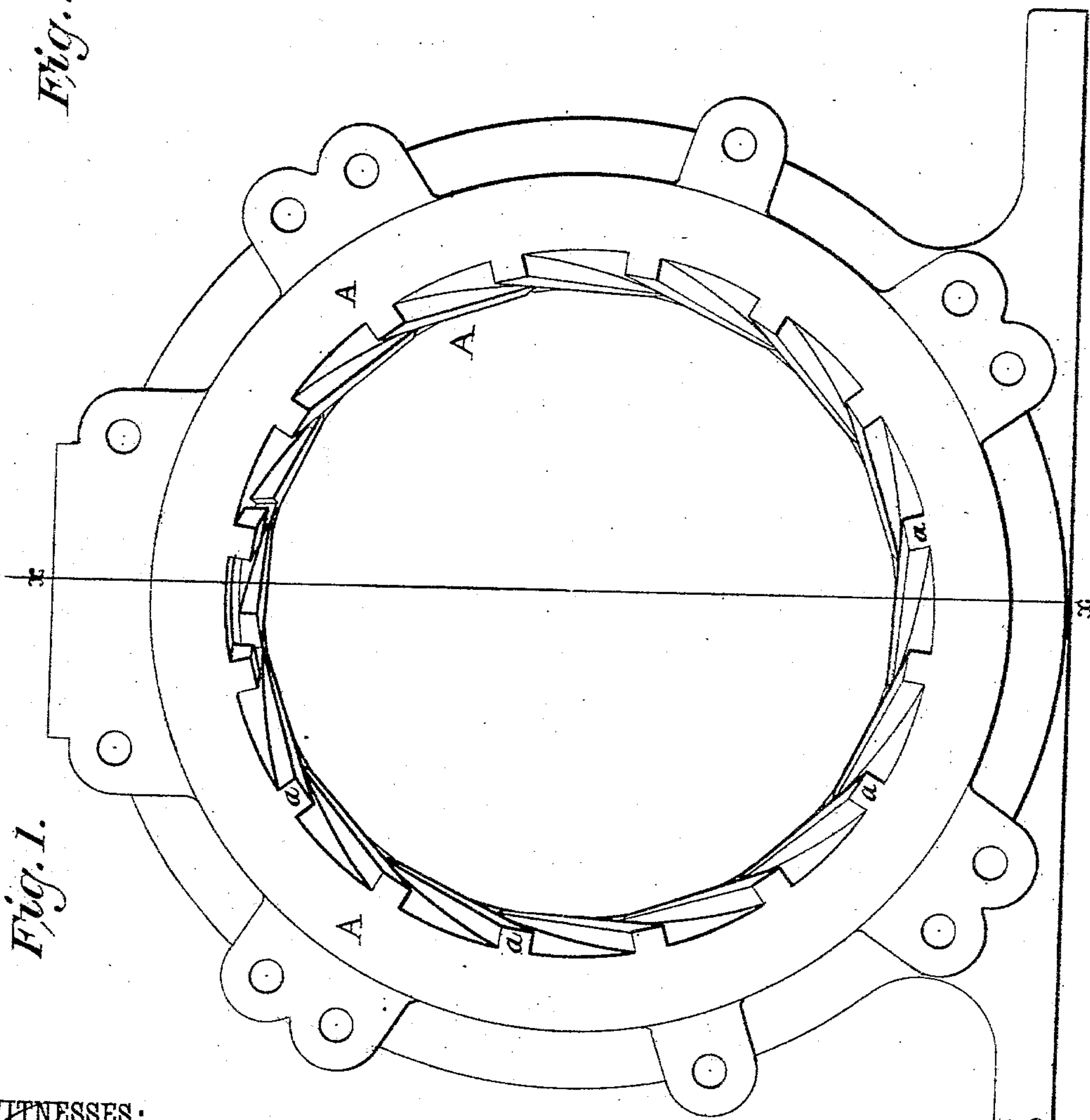


Fig. 1.

WITNESSES:

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*Gideon Frisbee*

BY

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ATTORNEY

(No Model.)

2 Sheets—Sheet 2.

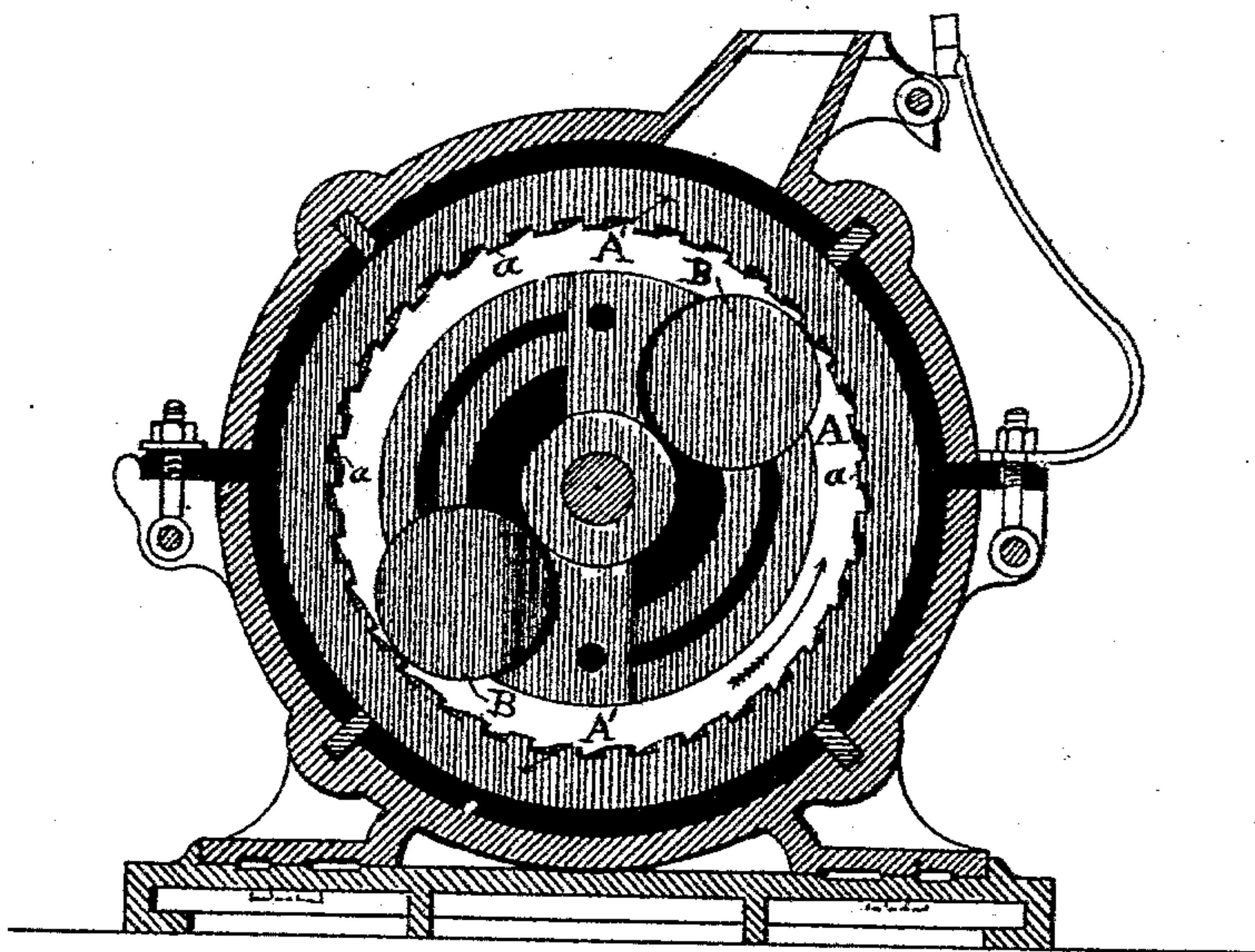
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Fig. 3.



Witnesses

*Chas. H. Young*  
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# UNITED STATES PATENT OFFICE.

GIDEON FRISBEE, OF ELMORE, OHIO.

## MACHINE FOR PULVERIZING ORES, &c.

SPECIFICATION forming part of Letters Patent No. 321,430, dated July 7, 1885.

Application filed September 8, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, GIDEON FRISBEE, of the village of Elmore, in the State of Ohio, have invented certain new and useful Improve-  
5 ments in Machines for Pulverizing Ores and other Substances; and I have herein given a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part thereof.

10 The object of my invention is to provide a new means for retarding the motion of the ore or other substance to be pulverized, and directing or converging it into the path of the rollers while the machine is in operation.

15 In the drawings, Figure 1 represents an end view of the cylinder to which my invention is applied. Fig. 2 is a transverse vertical section of Fig. 1 on *xx*. Fig. 3 is an inside view of a centrifugal machine, showing the rollers and drivers in position.  
20

In constructing and arranging my invention in a pulverizing-machine, such as is shown in Fig. 3, I have made a series of tapering lugs or ribs, *a a a*, which are bolted to or fastened  
25 inside the periphery of the chamber A. These lugs or ribs are made heavy and square or rectangular in form at one end, as shown in the drawings, at the verge of the pathway in which the rollers operate, and taper toward  
30 the back of the chamber. This construction of the ribs I regard as the best adapted to resist the force which the ore, &c., exerts upon them when the machine is in operation. These lugs or ribs *a a a* are arranged diagonally to  
35 the path of the rollers B, Fig. 3, so that when the latter are put in motion, as indicated by

the arrow, the ore or other substance will be caught by the ribs and directed into the path of the rollers.

In operating a pulverizing-machine of the 40 class to which my invention relates, when the ore or other substance is forced into the chamber A adjoining the path of the rollers, and it is put in motion around the periphery of the chamber, it makes a great many revolu- 45 tions in a path outside the rollers before coming in contact with them, and there is in this way a great waste of force and time. To overcome this obstacle to the proper operation of such pulverizing-machines, and to direct and 50 concentrate the ore, &c., in the path of the rollers, I have constructed and arranged the series of lugs or ribs diagonally in the chamber, as indicated, whereby the motion of the ore, &c., is partially retarded and directed 55 into the path of the rollers.

Having thus described my invention, what I claim and desire to secure, is—

In a pulverizing machine, a chamber provided with a series of wedge-shaped lugs or 60 ribs, arranged diagonally on the inside of the chamber, in combination with the rollers, the wedge-shaped ribs being for the purpose of retarding the material and directing it into the path of the rollers, substantially as and for 65 the purpose described.

In testimony whereof I have hereunto subscribed my name in presence of two witnesses.

GIDEON FRISBEE.

Witnesses:

WM. J. McGRANAHAN,  
PETER THOMSON.