

No. 812,041.

PATENTED FEB. 6, 1906.

F. HOLTZHAUSEN.

DECORTICATOR.

APPLICATION FILED JAN. 3, 1905.

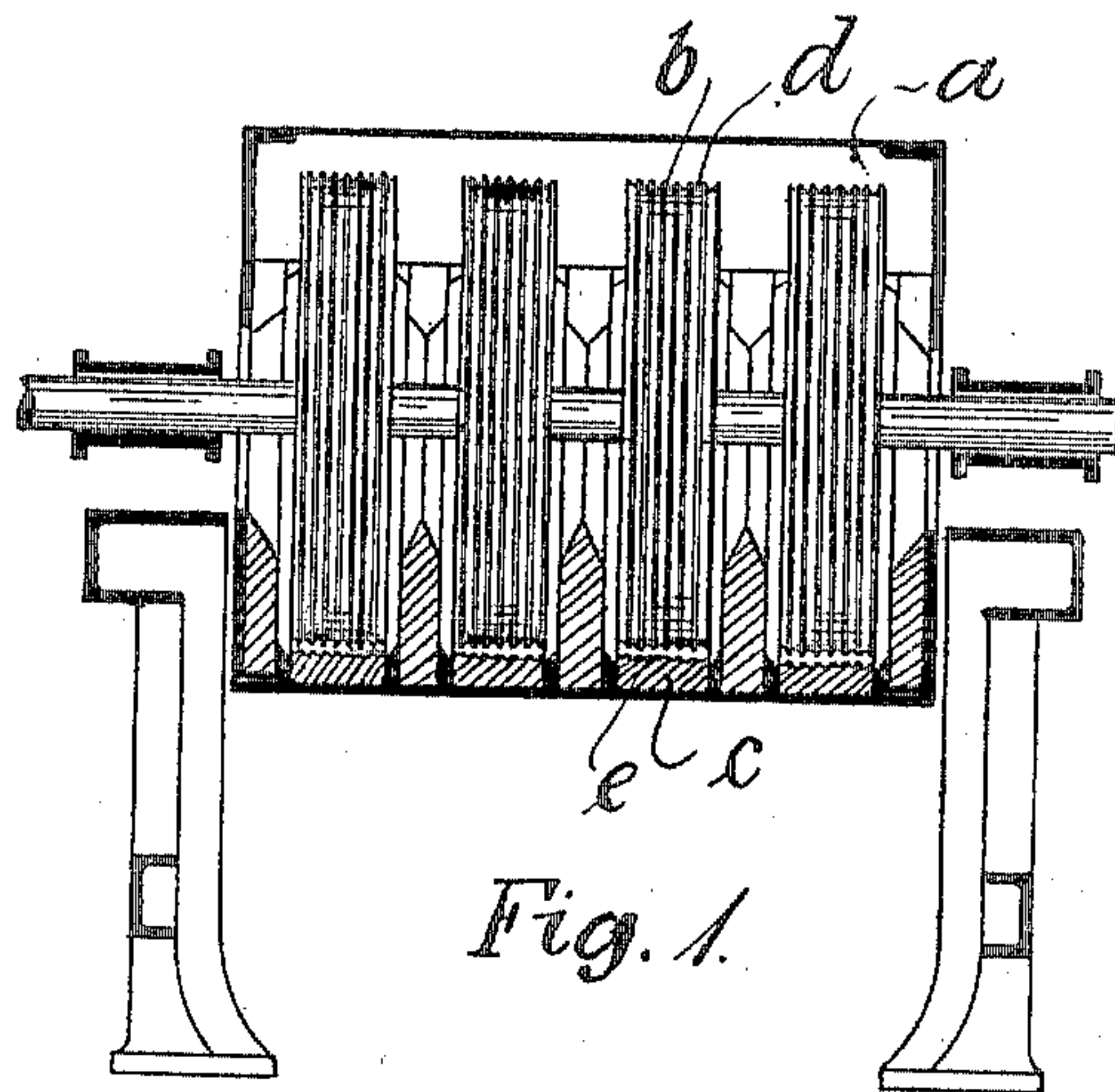


Fig. 1.

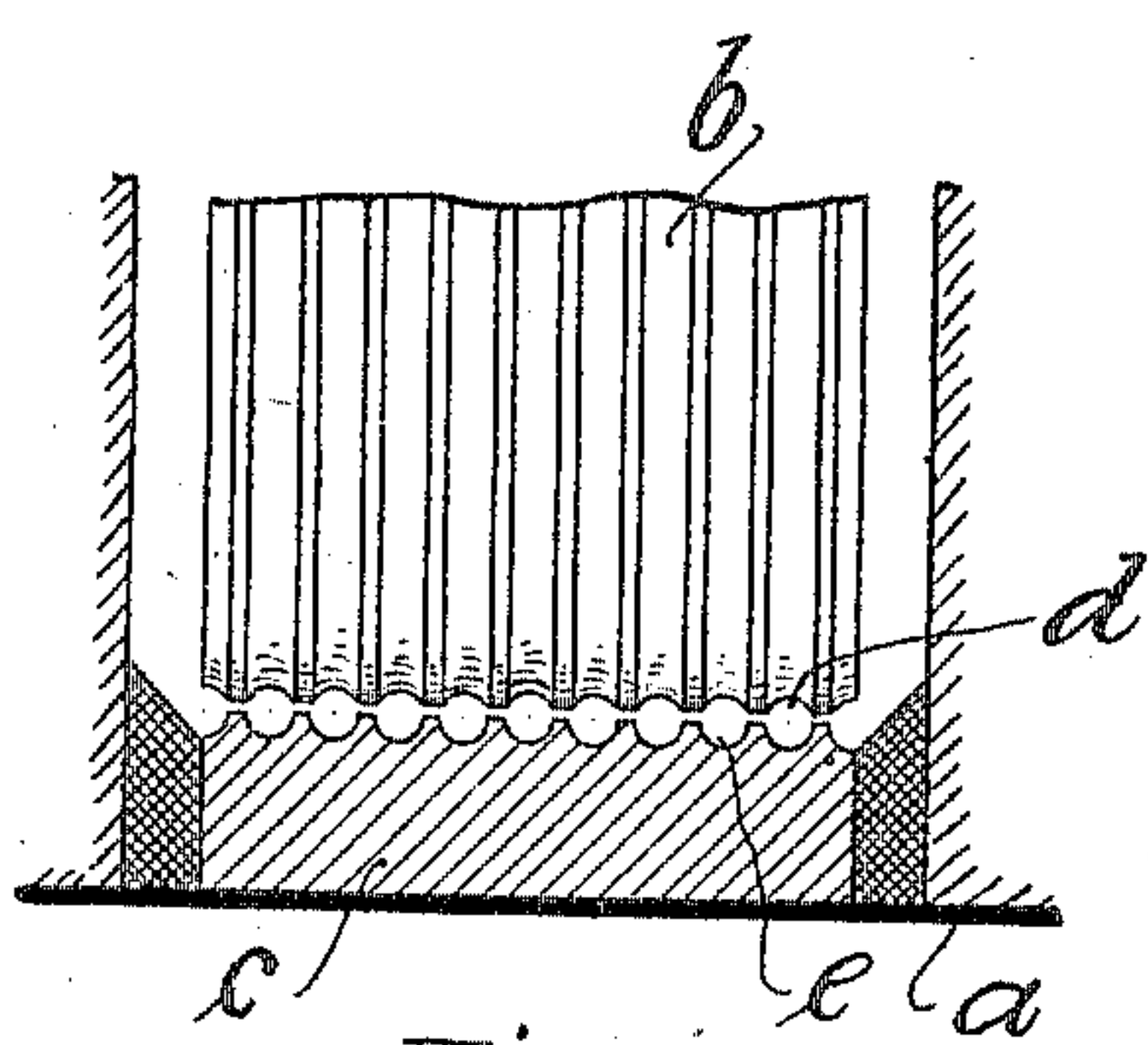


Fig. 2.

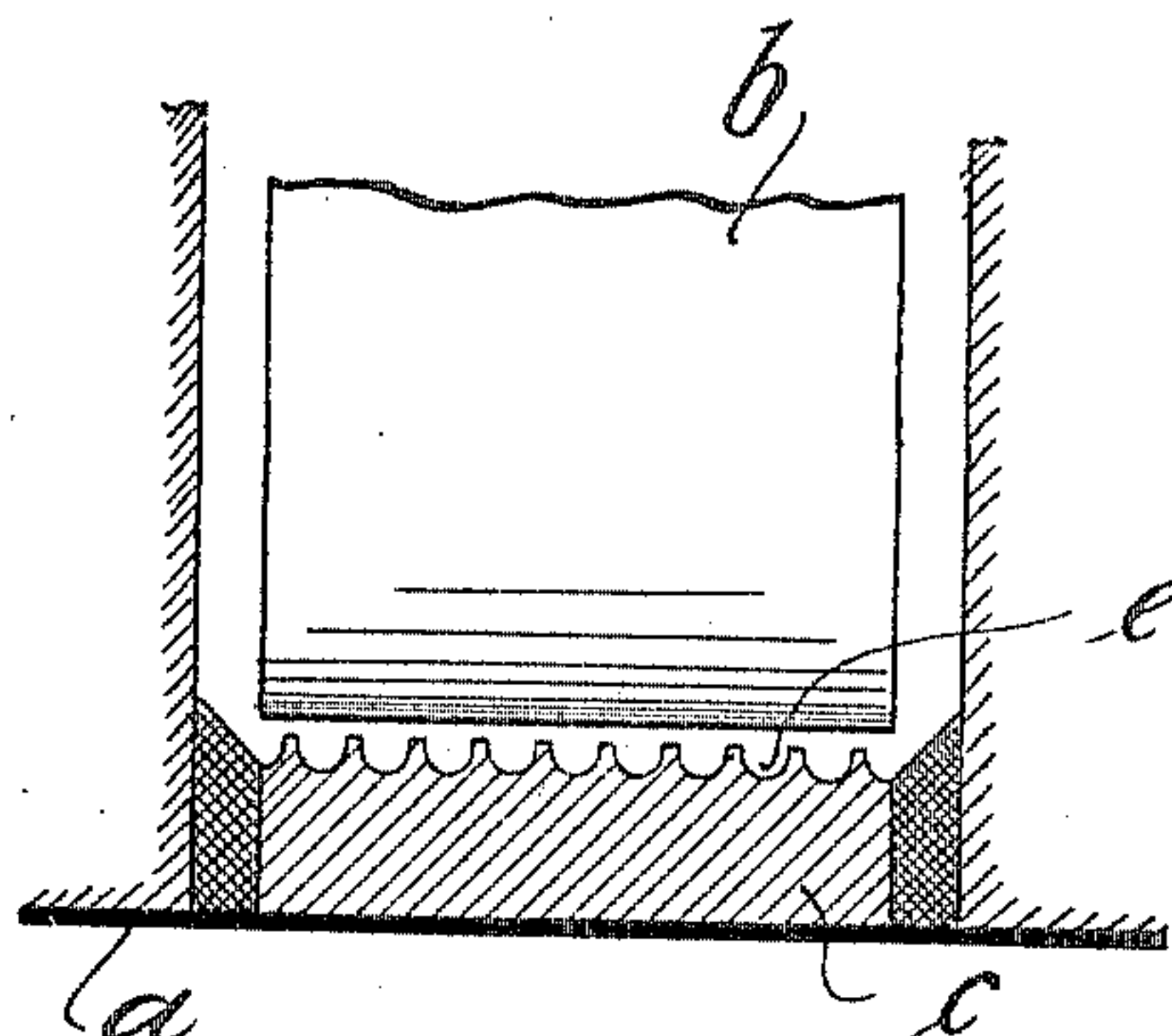


Fig. 3.

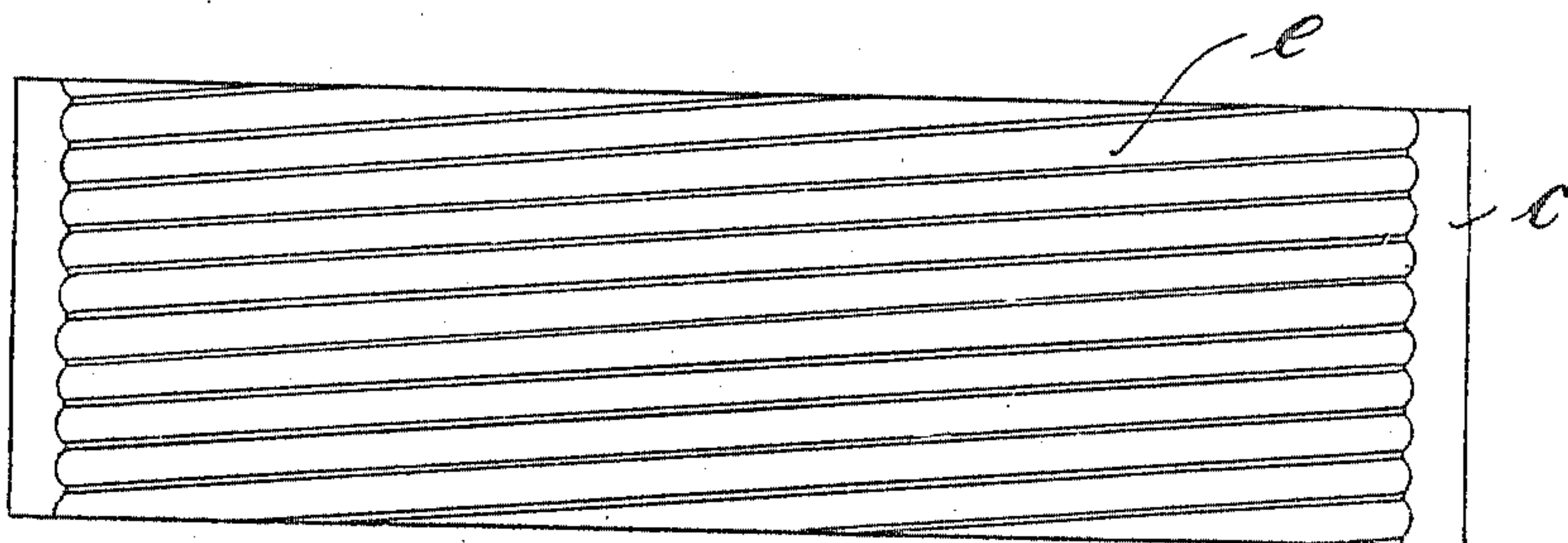


Fig. 4.

Witnesses:-
G. H. Channing
Frank Simon

Inventor:-
Franz Holzhausen
by Paul E. Channing
his attorney

UNITED STATES PATENT OFFICE.

FRANZ HOLTZHAUSEN, OF NOSSEN, GERMANY.

DECORTICATOR.

No. 812,041.

Specification of Letters Patent.

Patented Feb. 6, 1906.

Application filed January 3, 1905. Serial No. 239,480.

To all whom it may concern:

Be it known that I, FRANZ HOLTZHAUSEN, a subject of the German Emperor, residing at Nossen, Saxony, Germany, have invented certain new and useful Improvements in Decorticators, of which the following is a specification.

The present invention has reference to improvements in decorticators such as are used for hulling corn, wheat, rice, maize, and other cereal grains, in the drum of which abrading disks or wheels, preferably of emery, rotate between a number of emery or the like rings or segments. The plane grinding-surfaces of these disks and segments as now used have the disadvantage of being in contact with the grain always only at two points at a time, with the result that the grinding operation progresses comparatively slowly. A speed acceleration which has been proposed by some designers is connected with too great a loss of power.

My invention now entirely does away with the above-indicated disadvantage by constructing the working surfaces of the huller so that they surround the grains and expose them all over their surface to the grinding action. I obtain this by providing the rings or the rotating disks, or both, with channels or corrugations.

The construction of the parts obviously must vary according to requirements; but in order to more readily make the invention understood I have shown several modifications on the accompanying sheet of drawings, in which—

Figure 1 represents a longitudinal sectional

elevation of a huller provided with my invention. Fig. 2 shows a sectional view of part of a fluted rotating disk and a correspondingly-fluted segment. Fig. 3 shows a similar view, the segment alone being corrugated. Fig. 4 shows a plan view of a corrugated segment.

I have found it to be advantageous to sink the corrugations a little deeper in the construction shown in Fig. 3 than in that of Fig. 2. I further find it advantageous to arrange the corrugations slantingly across the respective grinding-surface, as in this case the grains are rolled about and find greater friction on the wall of the corrugations than in the straight corrugations.

In the several figures, *a* is the drum; *b*, the rotating disks; *c*, the segments; *d*, the corrugations in the rotating disks, and *e* those in the segments.

What I claim is—

In a grain-decorticator, a plurality of abrading-disks mounted on a horizontal shaft, ribs on said disks in line with the direction of rotation of the disks, a set of stationary segments coöperatively arranged beneath the disks and being provided with parallel ribs on their surfaces adjacent the disks, said ribs of the segments extending slightly transversely to the direction of rotation of the disks, for the purpose specified.

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

FRANZ HOLTZHAUSEN.

Witnesses:

CHEMNITZ H. SCHILLING,
PAUL ARRAS.