

(No Model.)

C. H. READ.  
JUICE EXTRACTOR.

No. 411,610.

Patented Sept. 24, 1889.

Fig. 1.

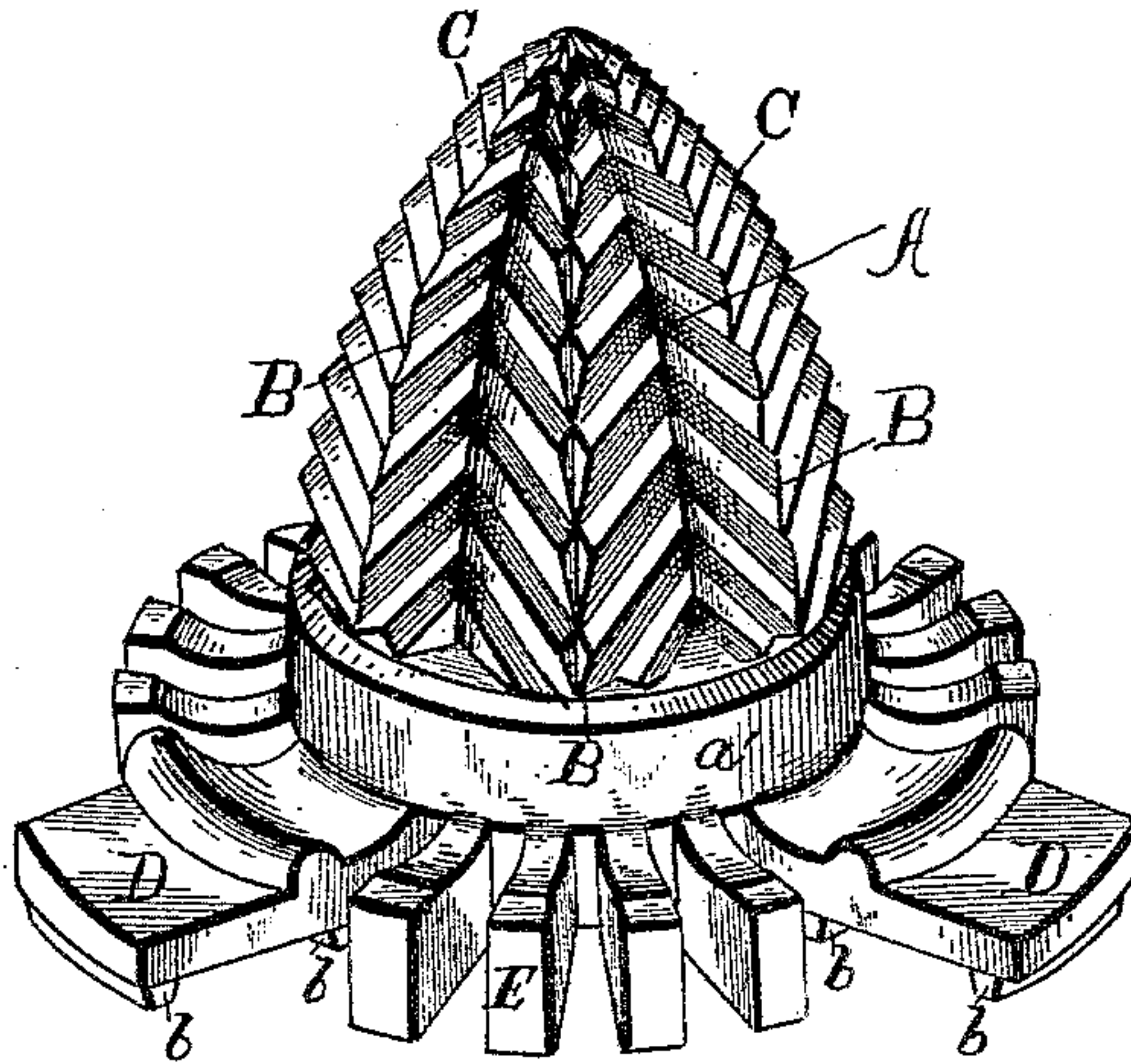


Fig. 2.

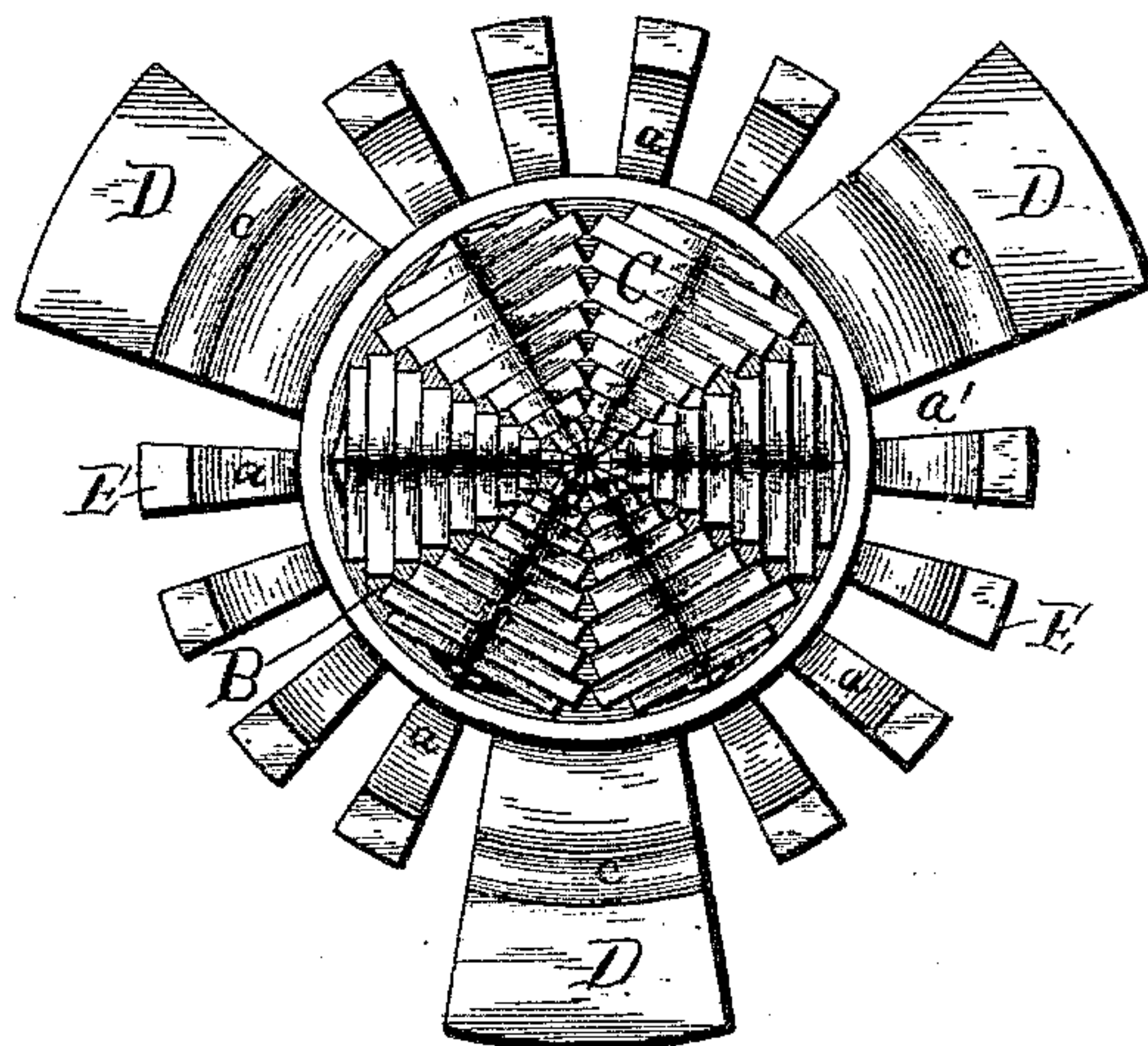
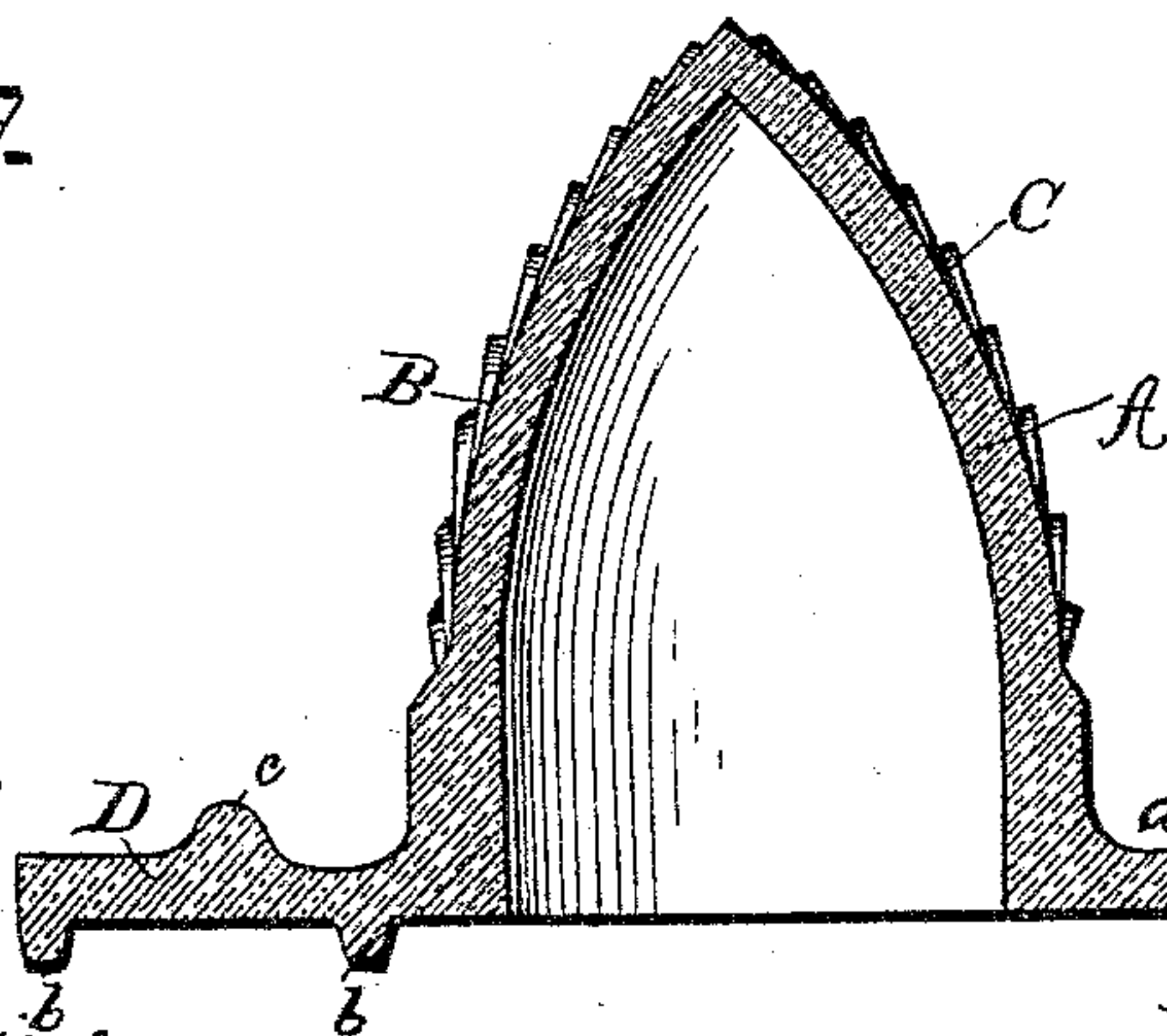


Fig. 3.



WITNESSES  
P. L. Curand  
N. M. Sterling

INVENTOR  
Charles H. Read  
by E. J. Gurnabaugh  
Attorney



# UNITED STATES PATENT OFFICE.

CHARLES H. READ, OF PITTSBURG, PENNSYLVANIA.

## JUICE-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 411,610, dated September 24, 1889.

Application filed May 22, 1889. Serial No. 311,711. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES H. READ, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented new and useful Improvements in Juice-Extractors; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in devices for extracting the juices and pulp from lemons, oranges, and other similar fruits.

The object of my invention is to provide a device for extracting the juice and pulp from lemons, &c., which will be simple in its parts, effective in operation, and cheap in construction.

My invention consists of a cone corrugated and ribbed on its external face, and provided with projecting arms at its base, and with upwardly inclined or curved projections between the arms to arrest and retain the seeds, said projections being made integral with the main body of the device.

Referring to the drawings, Figure 1 is a view in perspective of my improved device. Fig. 2 is a top or plan view. Fig. 3 is a vertical sectional view.

A indicates the main body of the device, which is conoidal in form in general outline. The body A is provided with a series of longitudinal grooves or depressions B, which extends from a slightly-projecting band  $a'$  at its base to the apex, leaving the fluted or raised portions C between the longitudinal grooves or depressions B. The fluted or raised portions C are provided with inverted-V-shaped grooves, which terminate in the grooves B and form channels for conveying the juice into the longitudinal grooves, while the walls of the inverted-V-shaped grooves form cutters

or graters for removing the pulp from the fruit. The lower portion of the body A below the band  $a'$  is provided with a series—three or more—of radiating arms D, which support the device on the tumbler or other receptacle used for catching the juice, the under side of said arms being provided each with two downwardly-projecting lugs  $b$ , which engage with the top of the tumbler to prevent the device from slipping or becoming displaced, the space between the lugs being sufficient to admit tumblers of various sizes. On the upper side of the arms D is provided a bead  $c$ , which forms a gutter between it and the band  $a'$ . Between the radial arms D are formed a series of studs or projections E, which, together with the arms D, are formed integral with the main body of the device. The tops of studs E are curved toward the main body of the device, as shown in Fig. 3, so as to form annular grooves  $a$  for the reception and retention of the seeds.

The device is by preference made of glass, and, as will be noticed, is made in one piece, so that it can be readily and cheaply pressed, and, furthermore, can be readily cleaned.

What I claim, and desire to secure by Letters Patent, is—

A device for extracting the juice and pulp from lemons and similar fruits, a conoidal-shaped body having longitudinal grooves extending from its base to its apex, and intermediate flutings having inverted-V-shaped grooves, forming a series of upwardly-projecting cutting-edges to strip the pulp from the inner portion of the rind of the fruit, as specified.

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

CHARLES H. READ.

Witnesses:

W. R. LINDSAY,  
JAS. H. BLANEY.