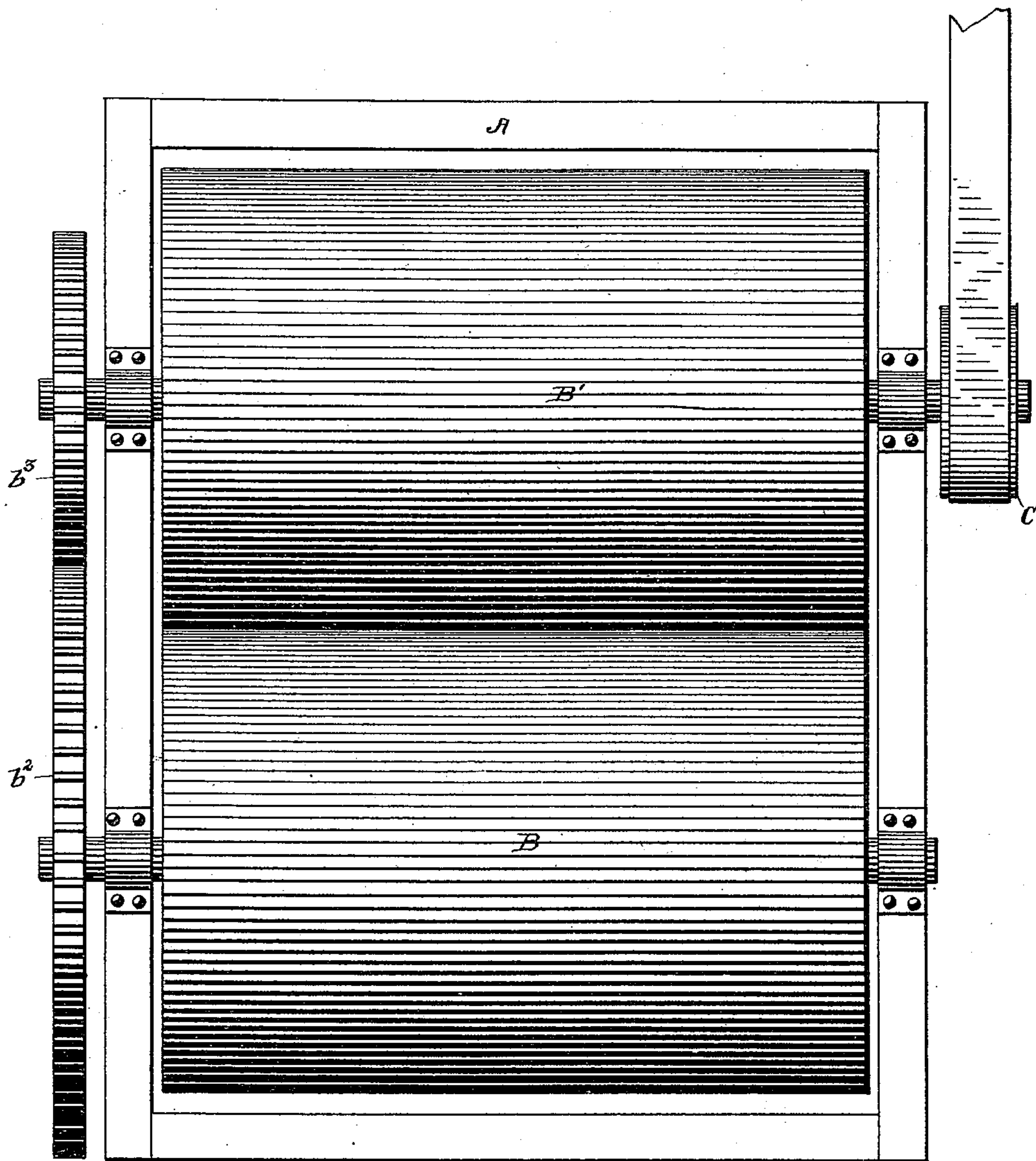


(No Model.)

F. LAUHOFF.
PREPARATION OF CEREALS.

No. 451,059.

Patented Apr. 28, 1891.



Witnesses
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UNITED STATES PATENT OFFICE.

FRANK LAUHOFF, OF DETROIT, MICHIGAN.

PREPARATION OF CEREALS.

SPECIFICATION forming part of Letters Patent No. 451,059, dated April 28, 1891.

Application filed April 23, 1890. Serial No. 349,182. (No specimens.)

To all whom it may concern:

Be it known that I, FRANK LAUHOFF, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in the Preparation of Cereals; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in the reduction of rice to a compressed flake or film, as more fully hereinafter described and claimed, the invention having more particular reference to the production of such a product from rice, although other cereals may be reduced in a similar manner within the scope of my invention.

The drawing is a plan view of a machine by which my improved article of manufacture may be produced.

In carrying out my present invention the rice to be reduced is passed through compression-rollers in its dry, raw, merchantable condition. To accomplish the result aimed at in the most satisfactory manner, I design to employ a drawing compression in the reduction of the cereal. For this purpose I employ two smooth compression-rolls, one of which travels faster than the other, in consequence of which the rice is simultaneously drawn out and compressed into a very thin, broad, light film, the kernel being thus reduced to a flattened and curled lamina, having a large exposed surface. The cells of the cereal in this operation are all crushed and laid open, so that their contents and the entire film may readily and quickly be dissolved. It is to be observed as a matter of great importance that by thus reducing the cereal wholly in its dry raw condition, possessing its normal character, without any steaming or cooking, or soaking or heating, the full strength of the cereal is preserved, in consequence of which the article of manufacture is of superior quality, still retaining in the fullest degree all its normal nutrition and strength, without any diminution thereof in the process of reduction, as has heretofore uniformly been the case. In this manner I am able to reduce rice to a very light, thin,

flattened, curled film, without the necessity of always crushing the material before its compression, but passing the raw material as it is obtained in the market through the compression-rolls.

The process is most economical, simple, and expeditious, while the results are most satisfactory.

Where the rice is steamed or otherwise softened prior to compression it is liable to become sticky and difficult to work. At the same time its strength is materially dissipated. The heating of the product also tends to render it less soluble, impairing and changing its quality also. All such difficulty and injury is entirely overcome by my invention.

The mechanism employed in the formation of the article of manufacture herein described is essentially that embodied in United States Letters Patent No. 333,867, dated January 5, 1886, and consists of a supporting-frame A, on which are journaled rolls B and B'. Said rolls, respectively, are provided with gears b^2 and b^3 , intermeshing with each other, the gear b^3 made smaller than the gear b^2 , so as to give a more rapid rotation to the roller B'.

C is a driving-pulley mounted on the same shaft as the roller B'.

What I claim as my invention is—

1. As a new article of manufacture, the herein-described product from rice, consisting of drawn and compressed films formed from the rice in its normally dry and raw condition, substantially as described.

2. The herein-described process of producing films from rice, consisting of subjecting the normally dry and raw material to a drawing compression, substantially as described.

3. The herein-described process of producing films from rice, consisting of subjecting the normally dry and raw material to compression between rollers, one of which has a faster rotation than the other, whereby the material is simultaneously drawn out and compressed into the said film, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

FRANK LAUHOFF.

Witnesses:

N. S. WRIGHT,
CHARLES F. SALOW.