

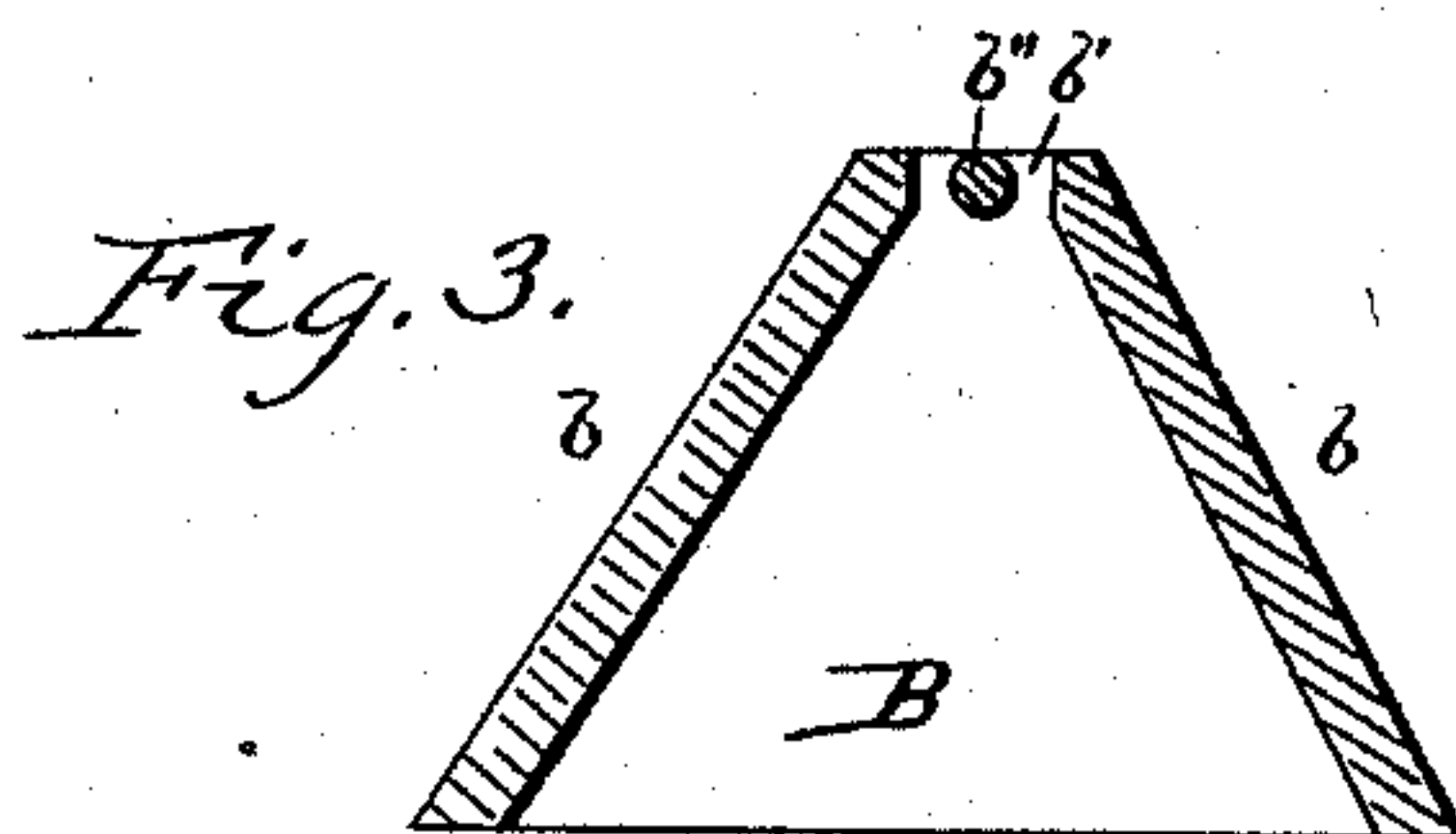
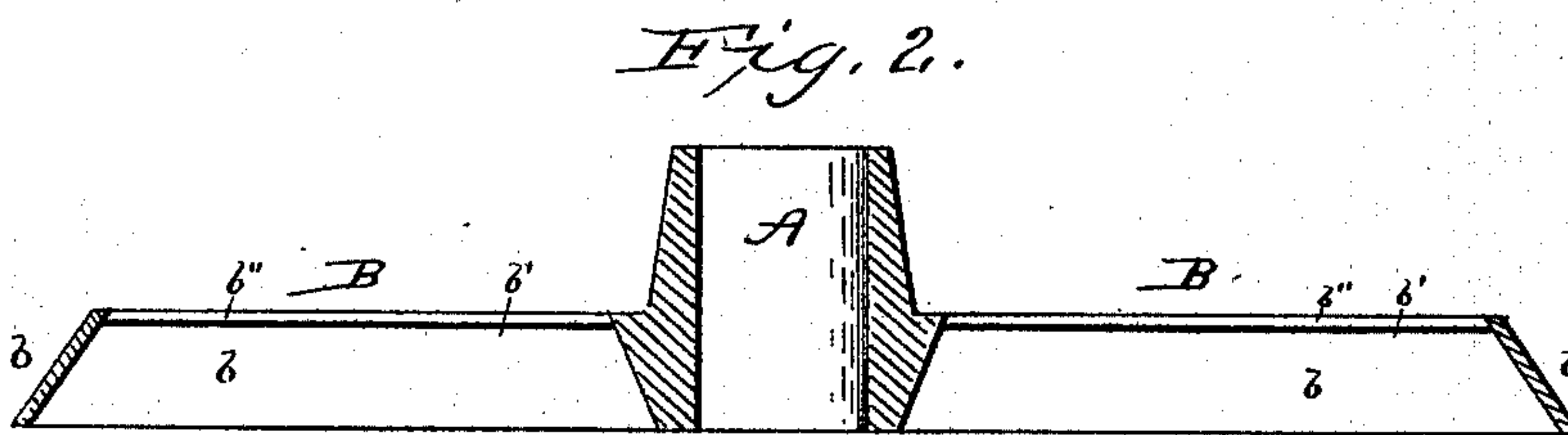
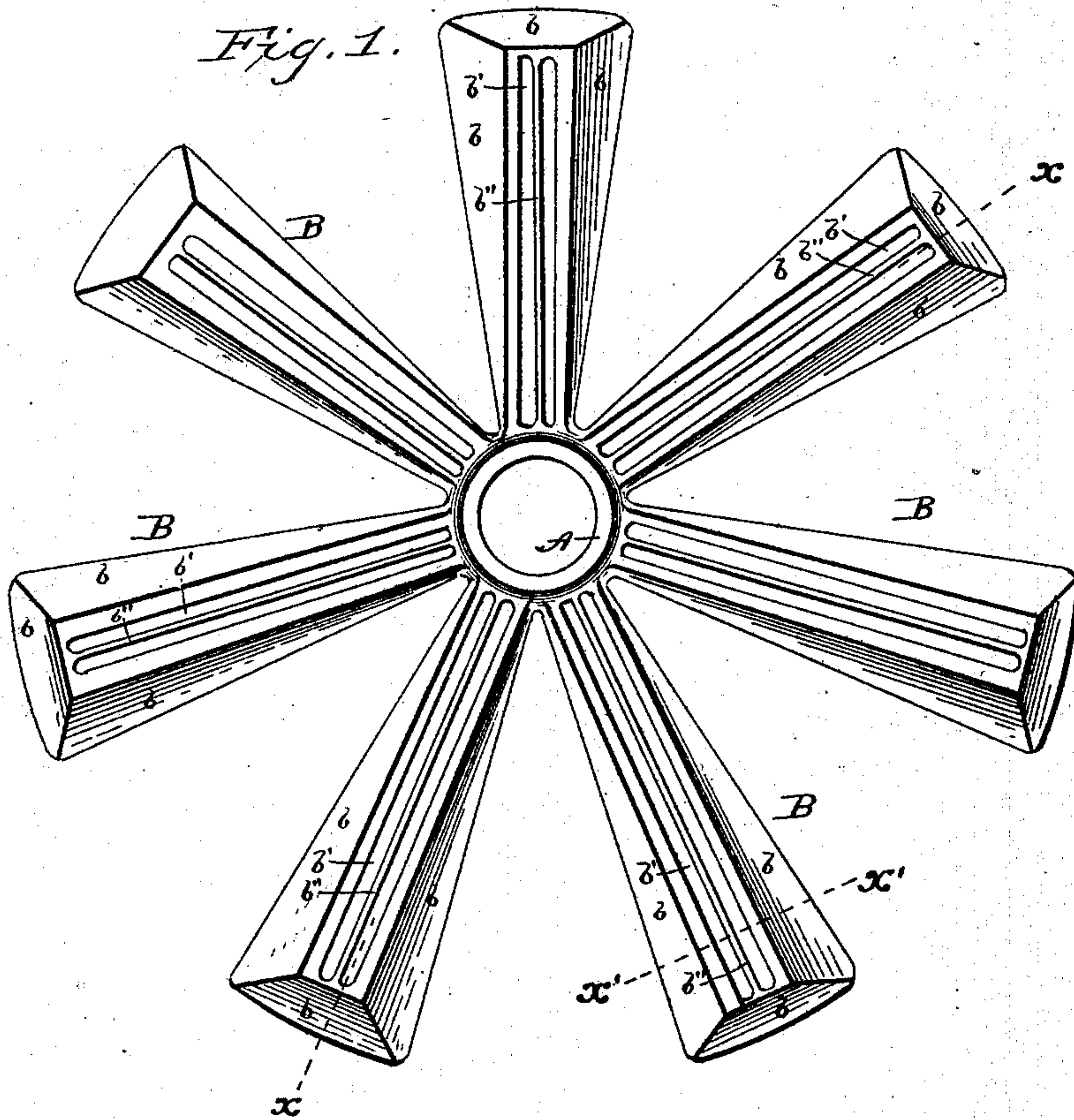
(No Model.)

J. W. McCLURE.

CHURN DASHER.

No. 413,537.

Patented Oct. 22, 1889.



Witnesses

*C. W. Conway*  
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# UNITED STATES PATENT OFFICE.

JACOB W. McCLURE, OF MEMPHIS, TENNESSEE.

## CHURN-DASHER.

SPECIFICATION forming part of Letters Patent No. 413,537, dated October 22, 1889.

Application filed July 9, 1889. Serial No. 316,922. (No model.)

*To all whom it may concern:*

Be it known that I, JACOB W. McCLURE, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Churn-Dashers, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

10 Figure 1 represents a plan view of my improved dasher complete; Fig. 2, a sectional view taken on the line  $x\ x$  of Fig. 1; Fig. 3, a sectional view, enlarged, on the line  $x'\ x'$  of Fig. 1.

15 This invention has relation to certain new and useful improvements upon reciprocating churn-dashers; and it has for its objects the improvement of the general construction of the dash, whereby it will be more rapid and efficient in operation and easier to operate, as will be more fully described.

20 The invention consists in certain peculiarities of construction, which will be fully hereinafter described, and particularly pointed out in the claim appended.

25 In the annexed drawings, A designates a suitable hub or collar, which is adapted to be attached to the dasher-rod in any suitable manner. Formed integral with this hub, and projecting radially therefrom, are a suitable number (preferably seven) of horizontal arms or blades B. These blades increase in size as they leave the central hub A, and are each provided with the downwardly-turned outwardly-inclined flanges or sides  $b\ b\ b$ , which terminate on a level with the bottom of the hub, and are connected therewith at their inner ends. The arms or blades are each pro-

vided with a radial slot  $b'$ , extending from the hub to near its outer end. Extending 40 from one end of each of these slots to the other is a rod or wire  $b''$ , between which and the adjacent inner walls of the slot a suitable space is left for the passage of the cream during the operation of the dasher.

45 In operation, the dasher is reciprocated in a vertical direction. It will be observed that when the dasher is being pushed down into the cream a portion of the cream will be collected and concentrated by the flaring sides 50  $b$  of the arms and forcibly squeezed through the narrow spaces between the radial rods  $b''$  and the sides of the passage  $b'$ , thereby breaking the globules in the cream and insuring a more thorough as well as more rapid produc- 55 tion of butter than has heretofore been possible with this class of dasher.

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

As an improved article of manufacture, a churn-dasher constructed as follows: a hub A, having formed integral with it the radial arms B, which increase in size toward their outer ends, these radial arms being provided 65 with radial slots  $b'$  and downwardly and outwardly extending flanges  $b$ , and radial rods  $b''$ , extending the entire length of the slots  $b'$ , as and for the purposes herein set forth.

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

JACOB W. McCLURE.

Witnesses:

JOHN HUSTED,  
T. H. BRAINARD.