

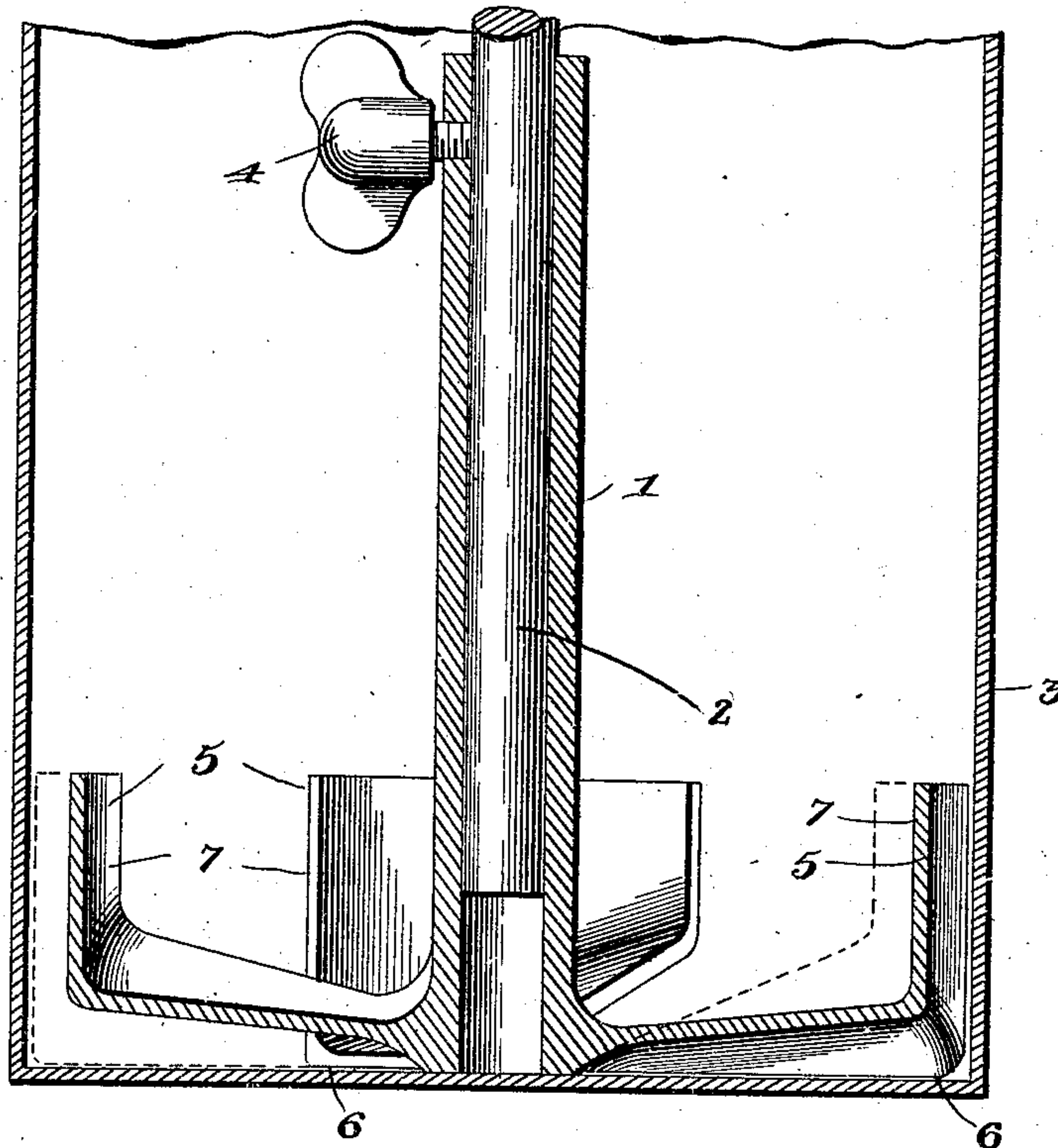
No. 842,386.

PATENTED JAN. 29, 1907.

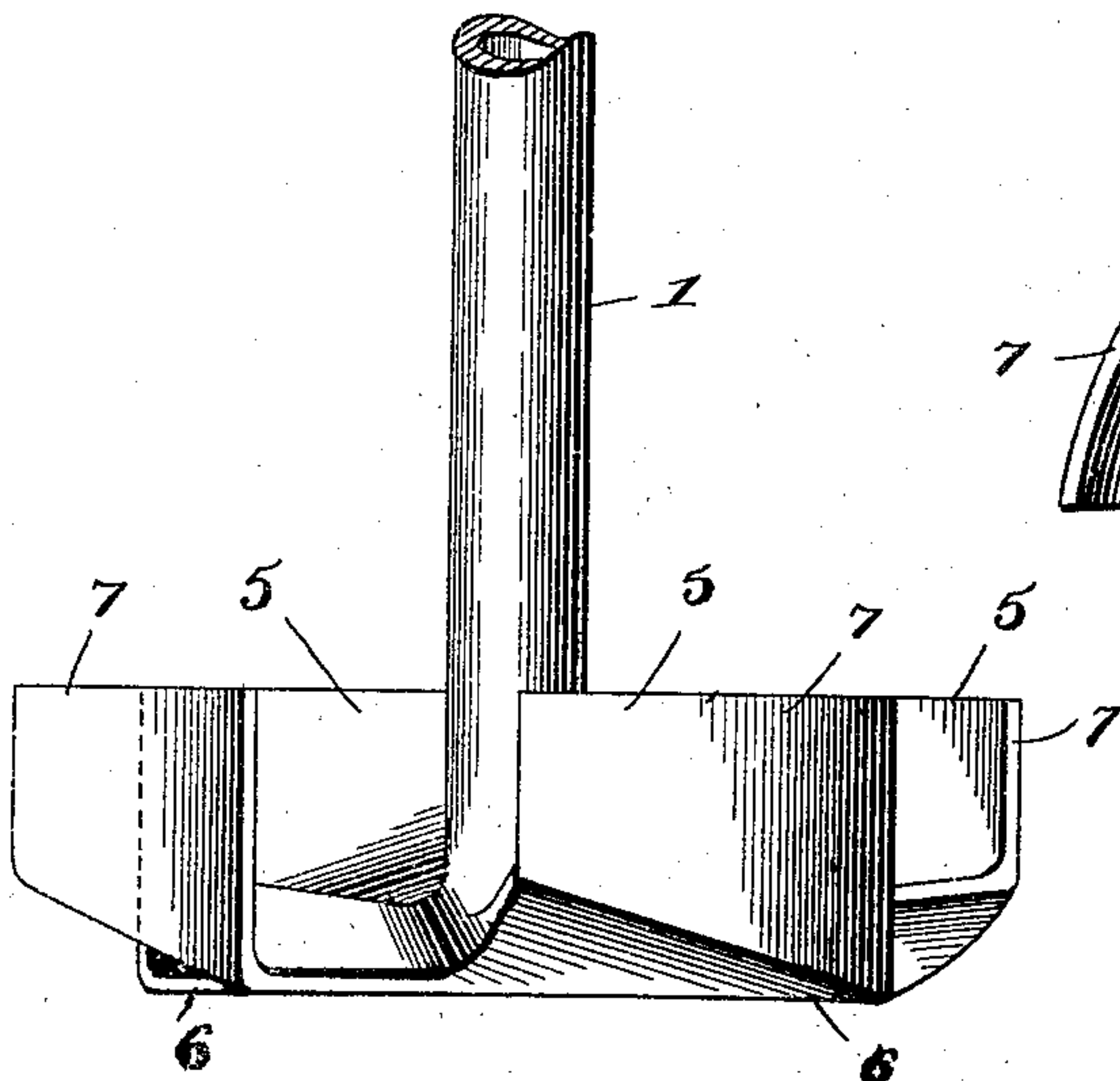
F. W. COOK.  
CHURN DASHER.

APPLICATION FILED MAY 21, 1906.

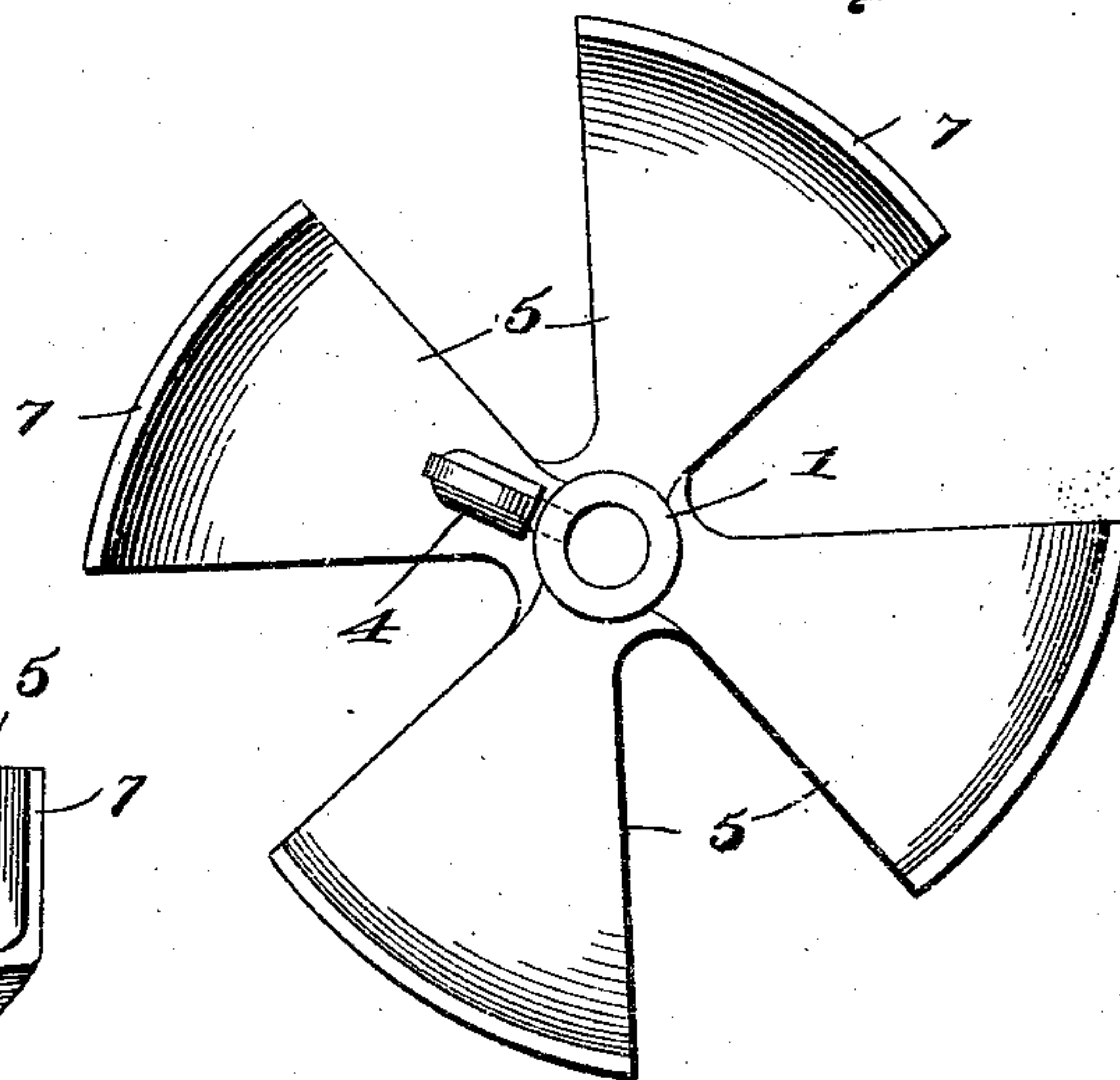
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

FRED WESLEY COOK, OF NORTH CHICAGO, ILLINOIS, ASSIGNOR TO CHICAGO  
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## CHURN-DASHER.

No. 842,386.

Specification of Letters Patent.

Patented Jan. 29, 1907.

Application filed May 21, 1906. Serial No. 318,031.

*To all whom it may concern:*

Be it known that I, FRED WESLEY COOK, a citizen of the United States, residing at North Chicago, in the county of Lake and State of Illinois, have invented a new and useful Churn-Dasher, of which the following is a specification.

This invention relates to churn-dashers; and its object is to provide a rotatable device of this character adapted to impart an upward and inward movement to the liquid acted upon, so as to facilitate the churning operation.

A still further object is to so construct the churn as to enable it to rest close to the bottom of the churn body or receptacle, so that no dead space will be formed thereunder and within which the dasher cannot work.

With the above and other objects in view the invention consists of a plurality of blades disposed radially at one end of a device adapted to be rotated within a churn-body, and the forward or advancing edge of each blade is disposed in a horizontal plane, so as to travel within the churn-body close to the bottom and practically prevent the formation of a dead space beneath the dasher. At the outer or free end of each blade is arranged a curved upstanding wing disposed eccentric with the center of the dasher, so that during the rotation of said dasher these wings will tend to deflect toward the center of the churn the liquid thrown upward by the rotating blades.

The invention also consists of certain other novel features of construction and combinations of parts, which will be hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings, Figure 1 is a section through a portion of a churn and the dasher therein. Fig. 2 is an elevation, and Fig. 3 is an end view.

Referring to the figures by characters of reference, 1 is a sleeve of suitable proportions adapted to be fastened in any desired manner to a spindle 2, disposed within a churn-body 3. A set-screw 4 is preferably employed for the purpose of securing the sleeve upon the spindle. Radiating from the lower end of the sleeve 1 is a series of,

preferably, four blades 5, the forward or advancing edges 6 of which are disposed in the same horizontal plane and are adapted to rest close to the bottom of the churn-body 3. The rear edges of the blades, however, are inclined upward toward their outer ends, so that the faces of the blades are inclined and tend when the dasher is rotated in one direction to direct liquid upward from the bottom of the churn-body. The outer ends of the blades are curved eccentrically in relation to the sleeve 1 and have curved wings 7 upstanding therefrom, the forward or advancing ends of the wings being farther removed from the sleeve than the rear ends thereof, so that when the dasher rotates these wings will throw the liquid inward toward the center of the dasher.

The dasher herein described is adapted to fit snugly within the churn-body 3, and by reason of the peculiar shape of its blades practically no dead space is left below the advancing edges 6 of the blades or outside of the front ends of the wings 7. As a result of this arrangement all of the liquid contained within the churn is acted upon, and said liquid is driven in two directions, the blades serving to throw it upward and the wings to deflect it inward toward the center. The movement of the liquid is thus greatly increased and the churning operation correspondingly facilitated. The dasher is of very simple construction, can be readily cast in a single piece, and is obviously very efficient.

The preferred form of the invention has been set forth in the foregoing description; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes therein as fairly fall within the scope of the claim.

What is claimed is—

1. A churn-dasher comprising a plurality of radially-disposed rotatable inclined blades having their forward edges disposed in the same horizontal plane, and curved wings upon the outer ends of the blades and disposed eccentrically in relation to the center of the dasher.

2. A churn-dasher comprising a central

portion, inclined blades radiating from one  
end thereof, the forward or advancing edges  
of said blades being disposed in the same  
plane with the end of the central portion,  
5 and wings disposed at an angle to the ends of  
the blades and eccentric with the central  
portion.

In testimony that I claim the foregoing as  
my own I have hereto affixed my signature  
in the presence of two witnesses.

FRED WESLEY COOK.

Witnesses:

F. G. STAFFORD,  
B. P. NEUGEL.