No. 832,484. PATENTED OCT. 2, 1906.

C. L. JONES.

CHURN DASHER.

APPLICATION FILED JAN. 24, 1906.

2 SHEETS—SHEET 1.

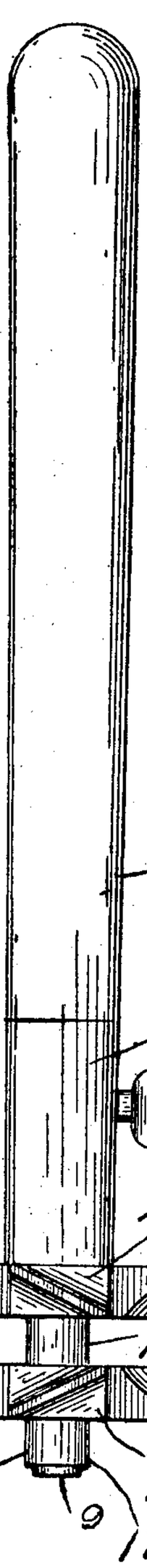

Fig. 1.

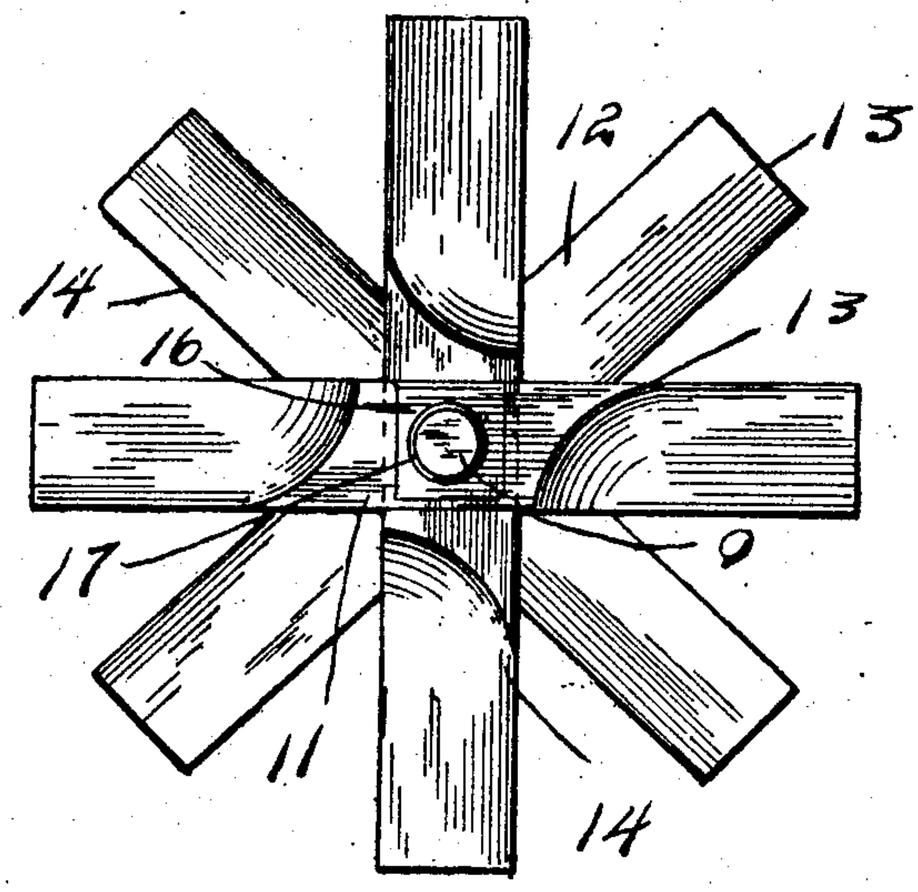

Fig. 3.

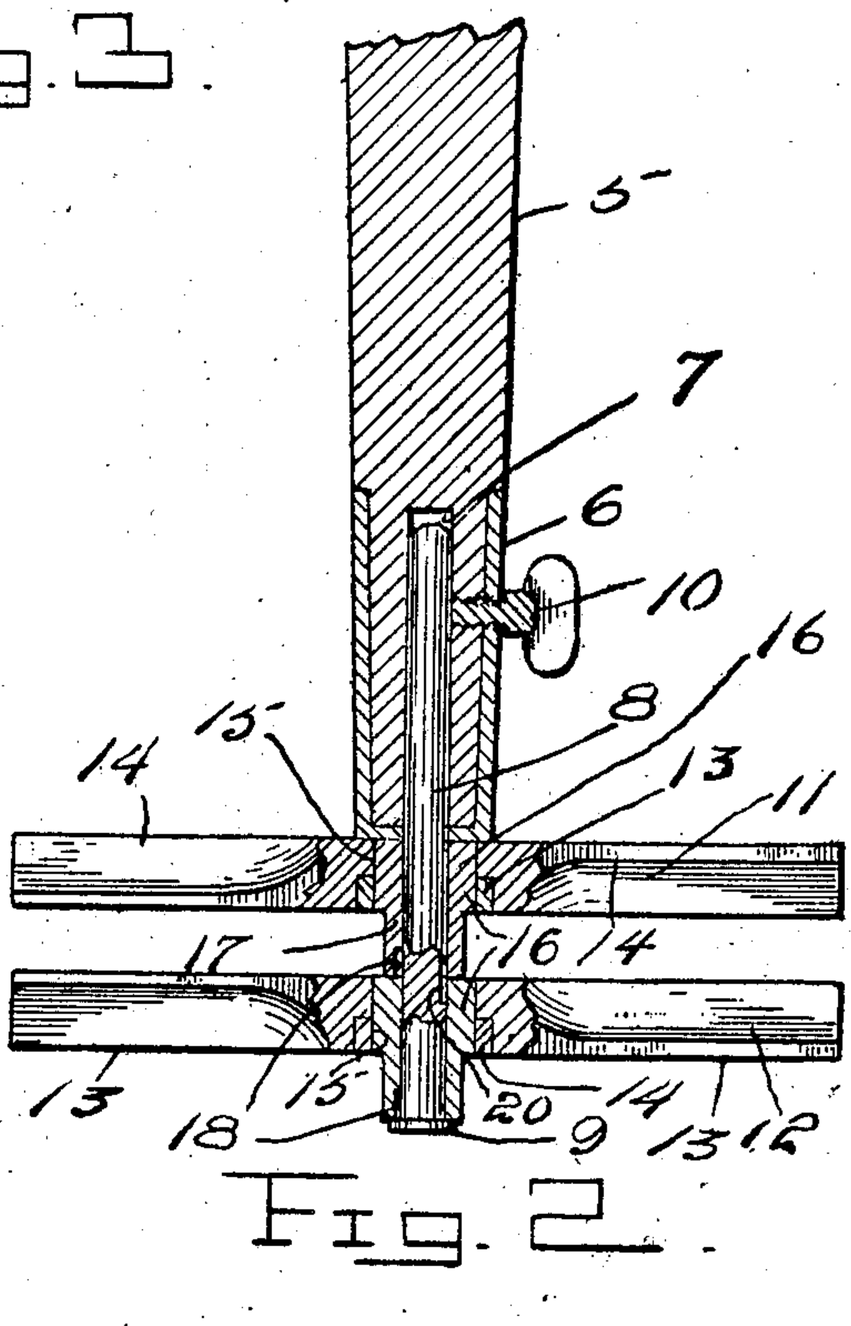

Fig. 2.

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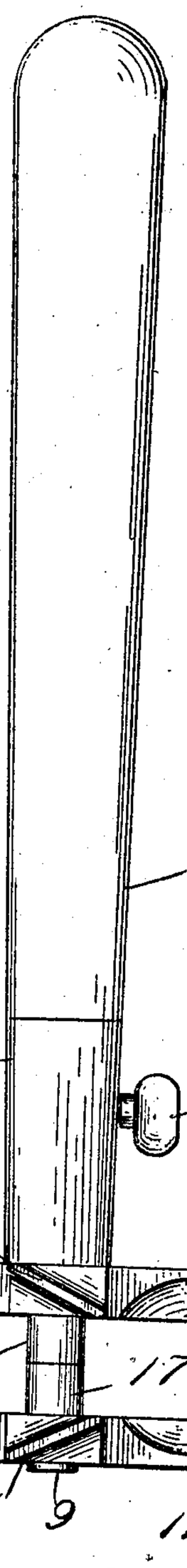

Fig. 4.

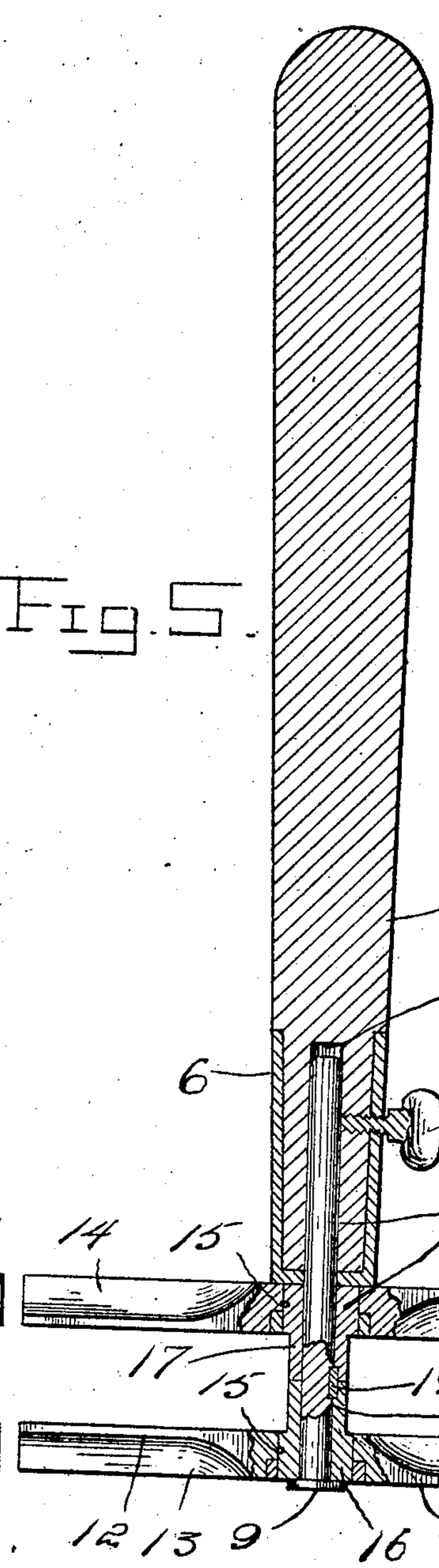

Fig. 5.

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CHARLES L. JONES, OF CARUTHERSVILLE, MISSOURI.

CHURN-DASHER.

No. 832,484. Specification of Letters Patent. Patented Oct. 2, 1906.

Application filed January 24, 1906. Serial No. 297,634.

To all whom it may concern:

Be it known that I, CHARLES L. JONES, a citizen of the United States, residing at Caruthersville, in the county of Pemiscot, State of Missouri, have invented certain new and useful Improvements in Churn-Dashers; and I do hereby 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.

This invention relates to churns, and more particularly to dashers therefor, and has for its object to provide a dasher so arranged that it may be converted into a rotary or reciprocating dasher at will and which will be simple and cheap.

Other objects and advantages will be apparent from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side elevation of the dasher arranged for use to impart a rotary motion to the liquid operated upon. Fig. 2 is a vertical section of Fig. 1. Fig. 3 is an end view of the dasher. Fig. 4 is an elevational view showing the dasher arranged to hold the paddle-wheel stationary. Fig. 5 is a vertical section of Fig. 4.

Referring now to the drawings, the present invention comprises a handle 5, reduced at its lower end to receive a ferrule 6 and having a longitudinal cylindrical chamber opening through its reduced end. A cylindrical stem 8 is removably engaged in the chamber 7 and has a head 9 at its outer end, the stem projecting beyond the end of the handle, as shown. A set-screw 10 is engaged in the handle for operation to impinge against the stem 8 and hold the latter stationary and against removal from the chamber.

Upon the outwardly-projecting portions of the stems there are engaged a pair of paddle-wheels 11 and 12, each consisting of a pair of crossed halved-together members 13 and 14, which thus form a plurality of paddles, and these members of each paddle-wheel have registering rectangular openings 15, which receive the squared end 16 of sleeves 17, which extend beyond one face of their respective paddle-wheels, and these sleeves have the stem 8 engaged in their passages for rotation of the wheels upon the stem.

At its outer end each sleeve has a longitudinal groove 18 in its inner surface opening through its outer end, and these grooves may be registered, as shown in Fig. 5, to receive a key 19, engaged in a key-slot 20, formed longitudinally in the stem 8. It will be seen that when the sleeves are thus disposed they rest at their free ends in mutual engagement and they are held against movement with respect to the handle.

When the sleeves are arranged for rotation, thus permitting the paddle-wheels to revolve upon the stem, one paddle-wheel lies with its sleeve resting at its free end against the head 9 and the sleeve of the other paddle-wheel rests upon the upper end of the first-mentioned sleeve. The paddle-wheels are thus freely revolved when the dasher is reciprocated.

What is claimed is—

1. In a device of the class described, the combination with a handle, of a stem removably engaged in the handle and extending therebeyond, means for holding the stem in the handle at times, said stem having a longitudinal groove therein, paddle-wheels having sleeves in which the stem is revolubly engaged, said sleeves having longitudinal interior grooves arranged for registration for the reception of a key, and a key arranged for removable engagement in the slot of the stem and the registered grooves of the sleeves to hold the paddle-wheels against rotation upon the stem.

2. In a device of the class described, the combination with a handle having a chamber opening through one end, of a stem removably engaged in the chamber and projecting beyond the handle and having a head at its outer end, a set-screw engaged in the handle and impinging against the stem, said stem having a longitudinal slot beyond the handle, mutually-engaging sleeves revolubly engaged with the stem between its head and the handle, said sleeves having interior grooves opening through their engaging ends, a key removably engaged in the slots of the stems and in the grooves, said sleeves being angular at their opposite ends, and halved-together members having angular openings in their halved portions in which the angular portions of the sleeves are engaged, the outer end portions of said members being shaped to form paddle-blades.

3. In a churn-dasher, the combination with a handle having a chamber opening through one end, of a stem removably en-

gaged in the chamber and having a head at its outer end, a set-screw arranged to hold the stem against removal from the handle, paddle-wheels including sleeves engaged with the stem, said paddle-wheels having grooves in their inner faces opening through their mutually adjacent ends, said stem having a groove for registration with those of the sleeves, and a key removably engaged in the grooves of the stem and sleeves, to hold the sleeves against rotation upon the stem.

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

CHARLES L. JONES.

Witnesses:
W. A. RADFORD,
B. T. JONES.