H. A. DALRYMPLE & P. C. McGRATH.

EGG BEATER. Patented June 30, 1896. No. 563,139. Fig. R Avixnesses

United States Patent Office.

HARTWELL A. DALRYMPLE AND PATRICK C. McGRATH, OF RUTLAND, VERMONT.

EGG-BEATER.

SPECIFICATION forming part of Letters Patent No. 563,139, dated June 30, 1896.

Application filed November 26, 1895. Serial No. 570, 158. (Model.)

To all whom it may concern:

Be it known that we, HARTWELL A. DAL-RYMPLE and PATRICK C. McGrath, citizens of the United States, residing at Rutland, in 5 the county of Rutland and State of Vermont, have invented a certain new and useful Improvement in Egg-Beaters, of which the following is a full, clear, and exact description.

This invention relates to that class of "egg-10 beaters," so called, which comprise a tube or cylinder and a dasher, and the special feature of novelty is the dasher, as we will proceed now particularly to set forth and claim.

In the accompanying drawings, illustrating 15 our invention, in the several figures of which like parts are similarly designated, Figure 1 is an elevation showing the dasher-head in situ by dotted lines. Fig. 2 is a bottom plan view. Fig. 3 is a longitudinal section of the 20 lower end of Fig. 1, showing the dasher-head in elevation. Fig. 4 is a cross-section of the dasher-head.

The cylinder a may be made of metal and provided with the reinforcing circumferential 25 bands or hoops b. The lower or active end of the cylinder is provided with series of openings (preferably circular holes) c above its edge and inverted-V-shaped notches d in its edge, these openings serving to admit the 30 substance under treatment into the cylinder under the suction of the dasher and by their irregularity serving effectually to break up or disintegrate such substance, the angular shape of the notches d contributing most effi-

35 ciently to this object.

The dasher-head is composed of a solid, that is to say, an imperforate, disk of metal e, with or without a reinforcing inverted dome f, the handle or dasher-rod g being applied to 40 the disk, and to the dome when used, as shown. The disk e has a cylindrical flange h applied to it within its periphery and at a considerable distance from such periphery, and this flange is perforated thereby to aid in break-45 ing up or disintegrating the substance being treated. The flange being within the periphery of the disk leaves a margin of disk projecting beyond it to a close fit with the inner surface or wall of the cylinder, which 50 serves to prevent the swash of the substance being beaten passing above the disk, and thus makes cleanly the use of the apparatus. Our experience is that not only does the inset flange operate as just described, but it |

serves greatly to expedite the beating opera- 55 tion.

The rod g is, by preference, provided with a shoulder i, upon which rests a knob j', of glass, wood, or other material, which is held in place by upsetting the end of the rod over 60 a washer k on top of the knob.

We do not limit our invention to the precise form of openings or holes or perforations in the cylinder and the dasher-head, but prefer the construction shown. Neither do we 65

limit our invention to the form of knob on

the end of the dasher. Among the advantages of our invention are the simplicity of its construction, its durability, and the quickness with which it oper- 70 ates in achieving its work. In those cylinder egg-beaters in which the upper portion of the plunger or dasher is provided with holes, such holes allow the substance being beaten to fly out and spatter from the top of the cylinder, 75 while our imperforate top disk wholly retains the substance being beaten within the cylinder. The operation of the dasher or plunger, therefore, resembles that of a suction-pump in that it draws the substance into the cylin-80 der through the holes or notches in its lower end and again forces it out, and so on, alternately, as long as the dasher is reciprocated within the cylinder. The perforated flange of the under side of the dasher or plunger be- 85 ing smaller than the cylinder helps to break up the structure of the egg and thereby greatly quickens the performance of its work.

What we claim is—

The egg-beater, comprising the cylinder 90 having its lower end provided with openings, as c, d, and the dasher having a head constructed with a solid or imperforate top disk of substantially the internal diameter of the cylinder, and a perforated flange depending 95 from such top disk and of considerably less diameter than the diameter of the top disk, thereby leaving a margin of top disk between the flange and cylinder-wall, substantially as described.

In testimony whereof we have hereunto set our hands this 21st day of November, A. D. 1895.

> HARTWELL A. DALRYMPLE. PATRICK C. McGRATH.

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Witnesses:

M. J. Francisco, EDWARD LYSTON.