(No Model.)

F. T. ROOTS.

CHURN DASHER.

No. 305,334.

Patented Sept. 16, 1884.

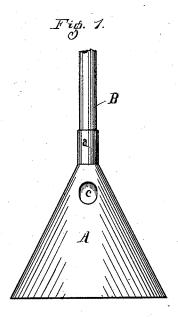
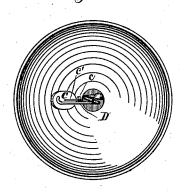
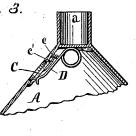


Fig. 2.



Attest: Alfred B. Denedict Emanuel Tory



Unventor. Francis S. Roots By lossfellung Atty

United States Patent Office.

FRANCIS T. ROOTS, OF CONNERSVILLE, INDIANA.

CHURN-DASHER.

CPECIFICATION forming part of Letters Patent No. 305,334, dated September 16, 1884.

Application filed May 19, 1883. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS T. ROOTS, a citizen of the United States, residing at Connersville, county of Fayette, State of Indiana, have invented certain new and useful Improvements in Churn-Dashers, of which the following is a specification.

The object of my invention is a churn-dasher which will, by causing a vertical action of the 10 milk when in use, rapidly produce butter.

My invention consists in the combination, with a hollow plunger having valve-openings in its side walls, of inwardly-opening detachable valves and a spring to normally hold the valve in its closed position.

In the accompanying drawings, in which similar reference-letters indicate like parts wherever they occur, Figure 1 is a side elevation of my dasher. Fig. 2 is an inverted plan view showing the interior of the same. Fig. 3 is a longitudinal vertical section of the upper part of the dasher, enlarged to more clearly show the spring-actuated valve.

The body of the dasher A is a hollow cone,
made preferably of sheet metal. It is provided at the upper part with socket a and the handle B. The sides of the dasher A have one or more perforations, which are normally closed by a valve, C. The valve C is hung from an eye, c, by a hooked wire, c', which is

secured to the back of the valve. The object of thus attaching the valve is to provide for its ready removal for cleansing after use. The removal is accomplished by swinging the valve inward until the hook of wire c' is detached from eye c. The valve is held closed by the arm of coiled spring D, which spring is secured to the transverse partition, which forms the bottom of the socket a, and has its free end, which is bent, pressing against the 40 back of the valve C, to keep it closed until its tension is overcome by the action of the fluid upon the outside during the upward stroke of the dasher.

What I claim as new, and desire to secure 45 by Letters Patent, is—

In a churn-dasher, the combination, substantially as specified, of the hollow coneshaped vessel A, provided with a handle-socket, as shown, and having its inclined walls perforated and provided with inwardly-opening detachable valves C c c', and the spring D, to hold said valves normally closed until opened by the pressure of fluid upon the upward stroke of the dasher.

FRANCIS T. ROOTS.

Witnesses:

GEO. J. MURRAY, JACOB J. GESSERT.