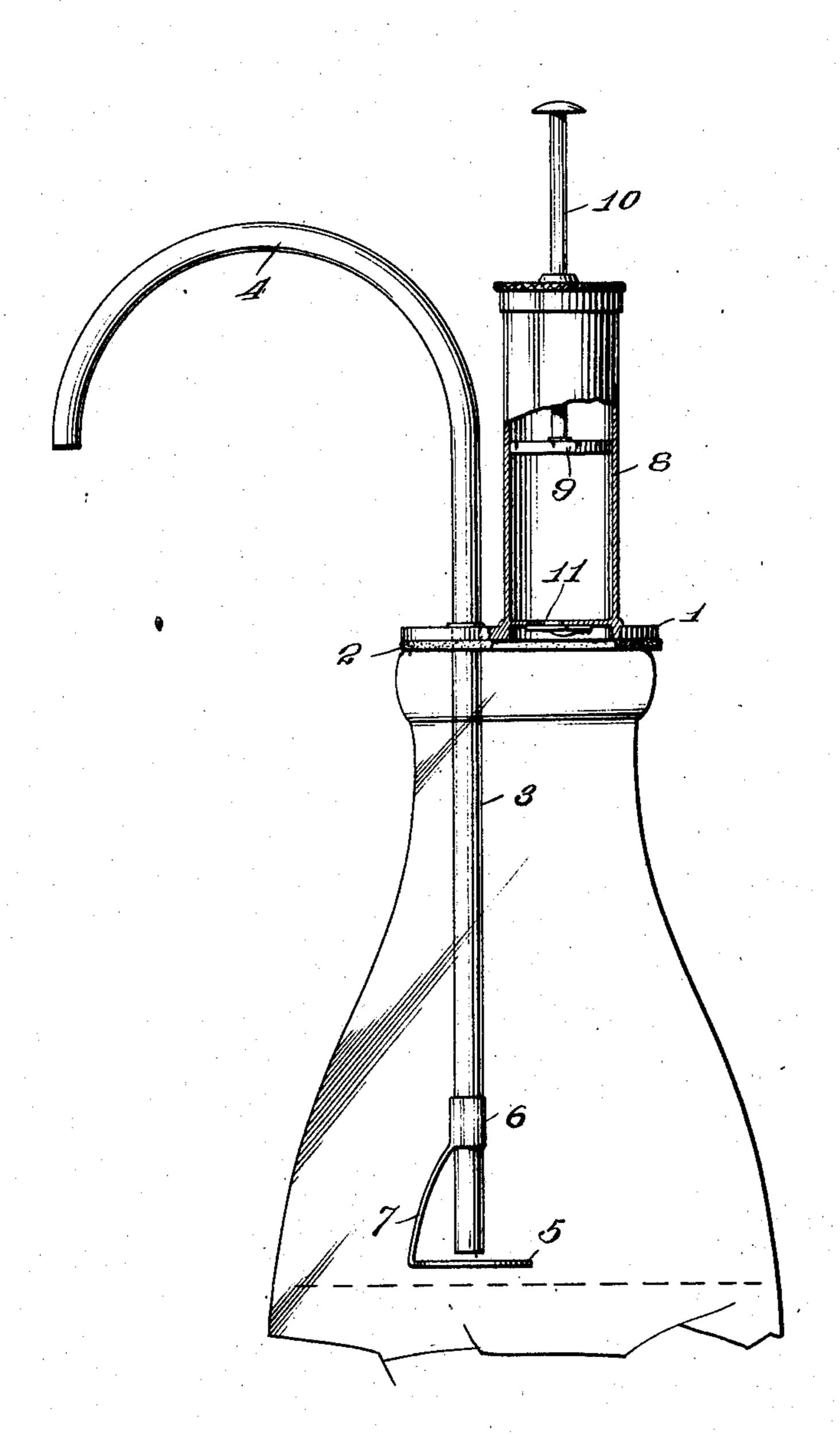
S. W. STEWART.

CREAM SEPARATOR.

APPLICATION FILED AUG. 28, 1906.



Lo. Bud Wander Minn. Wolf Sherman W. Stewart

BY

MITORNEYS

UNITED STATES PATENT OFFICE.

SHERMAN W. STEWART, OF SPENCER, INDIANA.

CREAM-SEPARATOR.

No. 850,805.

Specification of Letters Patent.

Patented April 16, 1907.

Application filed August 28, 1906. Serial No. 332,333.

To all whom it may concern:

Be it known that I, Sherman W. Stewart, a citizen of the United States, and a resident of Spencer, in the county of Owen and State of Indiana, have invented a new and Improved Cream-Separator, of which the following is a full, clear, and exact description.

This invention is a novel device for separating the cream that rises to the upper surface of milk, and is especially designed for drawing off the cream that collects at the top of milk-bottles as delivered for family use, thus adapting it for a household convenience and as a desirable kitchen article.

One embodiment of the invention consists of a cap constructed to form an air-tight connection with the mouth of a bottle and having an air-compressor and a tube in connection therewith, the compressor acting to force the cream through the tube to any convenient receptacle for receiving it.

A diaphragm is carried at the lower end of the tube, acting to prevent the milk from entering it and also forcing the drawing of the

25 cream from the sides of the bottle.

Reference is to be had to the accompanying drawing, forming a part of this specification, in which similar characters of reference indicate corresponding parts, and in which the figure of the drawing represents the upper portion of a milk-bottle with my improved device applied to the mouth thereof, the compressor of the device being shown partly in vertical central section.

The invention comprises a cap 1 of sufficient size to cover the mouth of an ordinary milk-bottle and has a covering 2, of sheet rubber, on its under face, thus adapting the joint between the cap and the mouth of the bottle to be made air-tight by a slight pressure with the hand. Passing through the cap 1 is a tube 3, having a curved overhanging outer end 4 for discharging the milk into any suitable receptacle held or seated at one side of the bottle. The tube 3 projects into the bottle to near the line separating the cream from the milk, as represented in dotted line in the drawing figure.

Attached to the lower end of the tube 3 is a script diaphragm 5, slightly separated from the mouth of the tube and in concentric relation therewith. The diaphragm is preferably

supported above the tube by a sleeve 6, having a downwardly-inclined arm 7, connecting the diaphragm 5 at its outer edge. The 55 sleeve 6, if desired, can be made to slidably fit and frictionally embrace the tube 3, enabling the distance between the diaphragm 5 and the mouth of the tube to be adjusted.

Attached to the upper end of the cap 1 is a 60 small air-compressor composed of a cylinder 8 and a piston 9, adapted to be reciprocated therein. The piston is operated by a stem 10, passing through the upper cylinder-head, acting to force the air by a valve 11, opening 65

downwardly and into the bottle.

In the use of the device it is placed on the bottle as illustrated in the drawing figure and a slight pressure brought to bear on the cap by the hand, acting to make a tight joint 70 between the cap and the bottle-mouth. The stem 10 is then reciprocated to compress the air and force it into the bottle, thus causing the cream to rise in the tube 3 and be discharged from its curved end to any suitable 75 receptacle for receiving it.

Although I have described the invention in detail in order that the construction and operation might be fully understood, I consider that I am entitled to such modifications as 80 fall within the scope of the annexed claims.

Having thus described the invention, I claim as new and desire to secure by Letters Patent—

1. In a cream-separator, means for form- 85 ing an air-tight joint with the mouth of a bottle or the like, a tube passing through said means, a diaphragm carried at the lower end of the tube, and means for forcing air into the bottle.

2. In a cream-separator, a cap having a rubber covering on its under face, a tube passing through the cap, having an outer curved end, a diaphragm carried at the lower end of the tube, and an air-compressor car- 95 ried by the cap.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SHERMAN W. STEWART.

Witnesses:

HOMER ELLIOTT, FRANK E. ROBINSON.