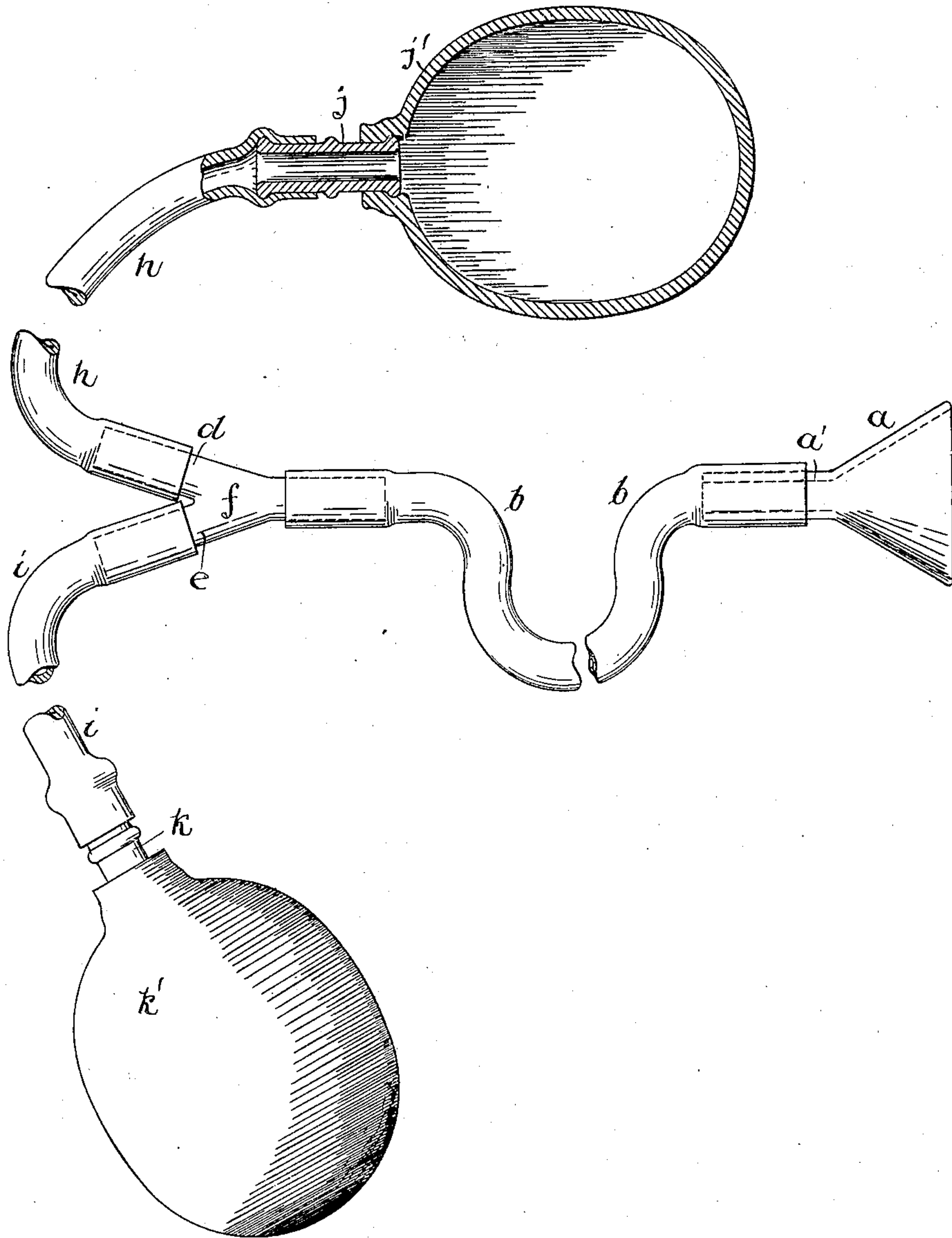


No. 890,975.

PATENTED JUNE 16, 1908.

J. S. GILBERT.
BREAST PUMP.

APPLICATION FILED MAR. 13, 1906.



Witnesses:
Jas. H. Kouns.
Cecil Long.

Inventor,
Joel S. Gilbert
by *J. Heiser* atty.

UNITED STATES PATENT OFFICE.

JOEL S. GILBERT, OF PORTLAND, OREGON, ASSIGNOR OF ONE-FOURTH TO MARY N. MUNLY,
OF PORTLAND, OREGON.

BREAST-PUMP.

No. 890,975.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed March 13, 1906. Serial No. 305,793.

To all whom it may concern:

Be it known that I, JOEL S. GILBERT, a citizen of the United States, and a resident of Portland, in the county of Multnomah, State of Oregon, have invented a new and useful Improvement in Breast-Pumps, of which the following is a specification, reference being had to the accompanying drawings as constituting a part thereof.

My invention relates to the well known surgical device and has for its object to obtain a device which will accomplish its work in an effective manner automatically and without any discomfort to the patient.

To this end my improvement comprises a shield adapted to be applied to the nipple of the breast, a single tube affixed to the neck of the cup, a tubular fork comprising a single tubular member having divided tubular branches, the single member of the fork being inserted in the extremity of said tube affixed to the shield; a tube on each branch-end of the fork and a collapsible suction-bulb or bulbs, made of resilient material, connected with the branch tubes, and by the re-expansion of which bulbs, after having been collapsed, a suction is exerted through the ducts of my device. By this arrangement I have found that one of the branch-tubes serves to convey the milk as drawn from the breast, while the other branch-tube remains clear and is in condition to exert a more effective suction than the branch-tube through which the drawn milk is flowing, and in this wise promoting the efficient operation of my device.

By the particular arrangement of the bulbs, either may be used as a receptacle for the milk, so long as one is below the level of the nipple.

In the drawings Figure 1 is a side elevation partially in section of my improved breast pump.

Referring now to the letters: *a* represents a shield adapted to be placed over the nipple of the breast and provided with a neck *a'*. On the latter is affixed one end of a short rubber tube *b*. In the opposite end of such tube *b* is inserted the member *c* of a tubular fork *f* made with divided branches *d e*, on which are affixed rubber tubes *h i*. In the

extremities of the latter are respectively inserted nipples *j k*, and on such nipples are affixed rubber section-bulbs *j' k'*, of the kind obtainable in the market.

I prefer to make one of the branch tubes *h i* shorter than the other, and when my device is applied to the patient the shorter branch-tube is preferably arranged as to have a more abrupt fall than the longer branch-tube; and when so arranged the milk as drawn is caused to flow first into the suction-bulb on the end of the shorter branch-tube.

In the use of my device, both bulbs *j k* are collapsed in the first place, and then the shield *a* is placed over the breast-nipple. Should there be more milk drawn than can be contained in the suction-bulb of the shorter tube, the surplus milk will be drawn into the suction-bulb of the longer tube.

The great advantage of my device is, there is no manipulation nor repeated collapsing of the suction-bulb, which, no matter how gently done, in other devices always causes more or less irritation to the patient; because as long as the device has to be handled the mind of the patient is kept on the operation and the mental irritation of the patient is continued.

In my device the single collapsion of the suction-bulbs, prior to the application of the cup *a* to the nipple of the breast, is sufficient to draw out all the milk from the breast; and consequently all irritation to the patient is removed; for the shield having once been applied, and the suction started, the tubes of the fork-branches are arranged as convenient to the position in which the patient is lying; and thereupon the work of my device continues automatically until the operation of drawing the milk is completed.

It is to be noted that my device is readily separated into its component parts for cleansing.

The tubing of my device should be made of rubber which has sufficient resistance so as not to collapse when the suction operation is in progress.

The nipple and tubular fork may be made of hard rubber, and the shield may be made of glass.

I claim

A breast pump comprising a nipple shield,
a tube connected to the nipple shield, a
forked branch connection at the other end of
5 the tube, a tube connected to each branch of
the forked shaped connection, and a bulb at
the outer free end of each of the tubes,

whereby either bulb may be used as a re-
ceptacle for the milk.

JOEL S. GILBERT.

Witnesses:

T. J. GEISLER,
JAS. H. KOUNS.