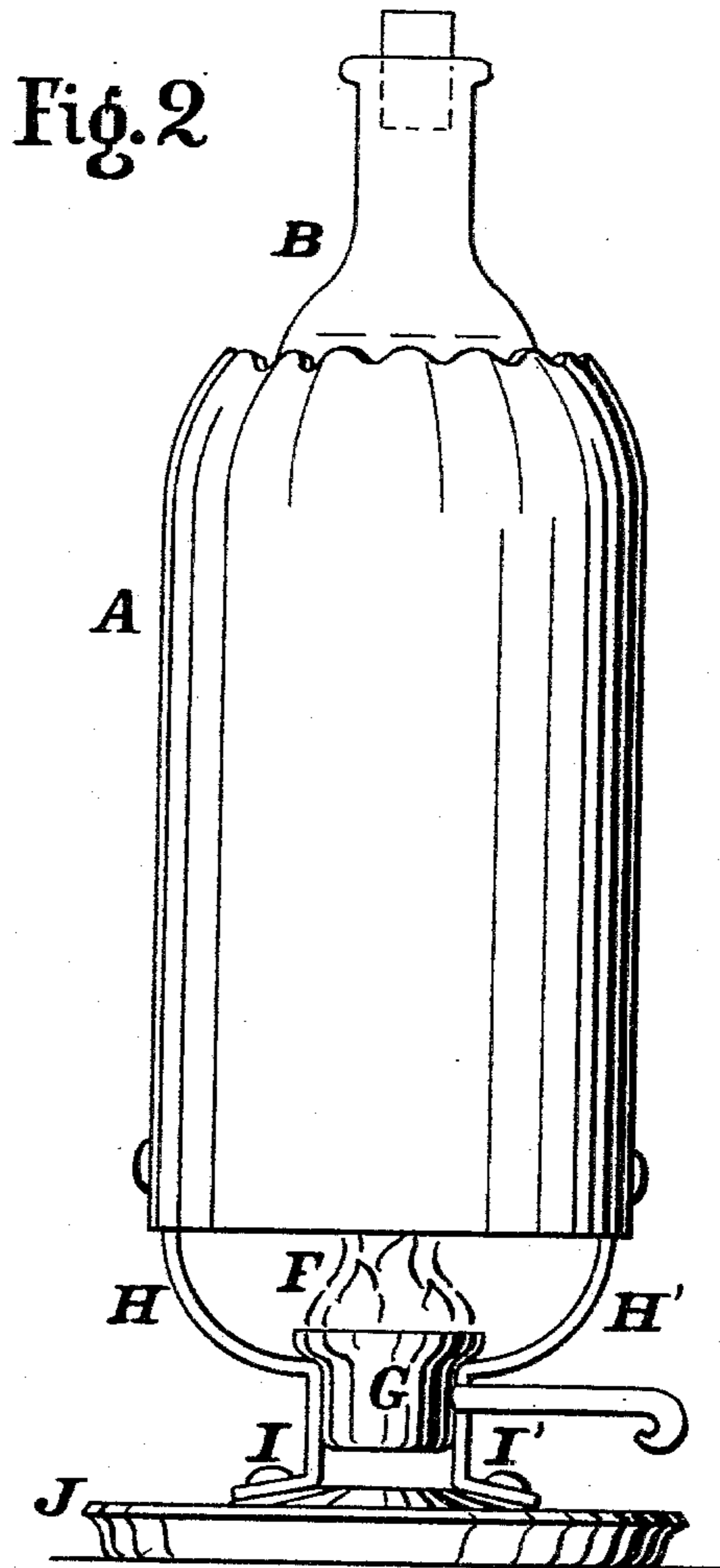
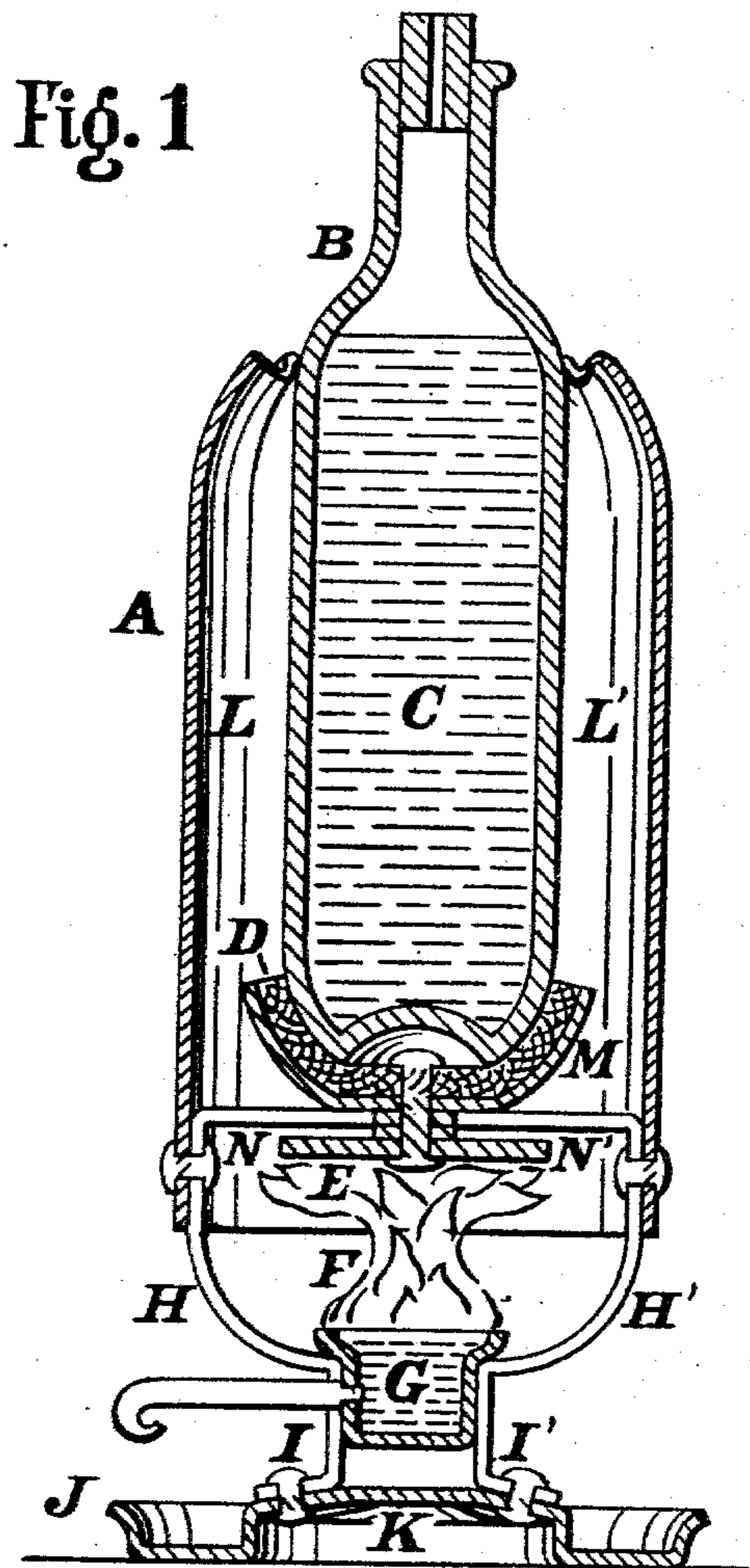


(No Model.)

A. LANGERFELD.  
BABY FOOD WARMER.

No. 584,162.

Patented June 8, 1897.



**Witnesses:**

*Harry C. Baggett*  
*George Strahm.*

**Inventor:**

*Arthur Langerfeld*

# UNITED STATES PATENT OFFICE.

ARTHUR LANGERFELD, OF NEW YORK, N. Y.

## BABY-FOOD WARMER.

SPECIFICATION forming part of Letters Patent No. 584,162, dated June 8, 1897.

Application filed March 11, 1895. Serial No. 541,324. (No model.)

*To all whom it may concern:*

Be it known that I, ARTHUR LANGERFELD, of the city of New York, in the county and State of New York, have invented a new and useful Baby-Food Warmer, of which the following is a specification.

My invention relates to improvements in apparatus for warming milk in bottles for baby-food, especially sterilized milk, to the natural temperature of mothers' milk, and is also useful for warming other things to certain temperatures; and the objects of my invention are, first, to provide means for conducting the heat directly to the bottle or article to be warmed instead of conducting it indirectly by means of a bath, as was done heretofore. By this object I accomplish a saving of time and fuel. Second, to provide means for preventing a waste or loss of heat; third, to provide means for warming the bottle evenly; fourth, to provide means for attaining a certain temperature alternately, and, fifth, to provide means for warming the bottle gradually. I attain these objects by the apparatus illustrated in the accompanying drawings, in which—

Figure 1 is a central vertical section, and Fig. 2 an elevation of the entire apparatus and a bottle set in it.

A, Fig. 1, is a jacket surrounding the bottle B of milk C which is to be warmed.

D is a lining in the socket or carrier M, on which the bottle B rests.

E is a shield or diffusing-plate placed between the socket M and flame F of the burner or lamp G.

H H' are a frame carrying and holding in their respective places the sockets M, shield E, and lamp G.

I I' are feet on the frame H H'. These feet rest on a plate J, which has an air-space K under it.

The jacket A is made of a shape and length to surround the bottle B about as high as it is filled with milk and to reach down below the bottom of the bottle and below the shield E. This jacket may be of sheet metal, but is most economical if made of a non-heat-conducting material or lined with such material on the inside. The size of the jacket A is such as to leave a space L L' all around the bottle B.

The socket or carrier M D is made a little larger than the outer edge of the bottom of the bottle B, and shaped so as to hold the bottle straight in the middle of the jacket A. It is lined with non-heat-conducting material, preferably with asbestos, felt, or millboard, but as such materials are not very strong this is underlaid and supported by a metal shell M.

The shield E is a metal plate against which the heat of the flame F strikes and is distributed all around through the space or openings N N', past the socket M into the space L L' all around the bottle B. This action of the shield E, together with the non-heat-conducting lining D in the socket M, keeps the bottom of the bottle B from getting much warmer than the body of it, and not only prevents cracking of the bottle but also obviates handling the bottle at the top only, as would have to be done if the bottom got too hot to handle.

The frame H H' may be varied in form or design or made part of a jacket A by extending the jacket down to the plate J and providing holes for air and for putting in the lamp or burner G.

The burner G shown is a small metal cup made to hold only enough alcohol to warm the bottle of milk C to the desired temperature when all the alcohol is burned. When the bottle C is not full of milk, or in case a smaller bottleful is to be warmed, the cup is filled with alcohol in proportion only and may be marked or graded to show quantity of alcohol required for different quantities of milk.

The base J, with the air-space K, may be varied in shape or even omitted and the feet I I' extended instead, but the plate and air-space are a safeguard to keep the heat from damaging the furniture on which the warmer may set and to catch any liquid which may be spilled.

To use the warmer, set the bottle B into the jacket A onto the carrier D M. Take out the cup G and pour in as much alcohol as a test has shown to be required to warm the milk. Light the alcohol and set the cup into its place at once. The flame will be small at first and gradually grow larger as the cup gets warmer. For this reason, together with the action of the shield E and lined carrier D M, the bot-

tle will not crack, but become warmed gradually, and it will warm quickly because the jacket A conducts all the heat around and along the entire length of the bottle and prevents the heat from escaping in any other direction.

If a number of bottles are to be warmed successively, a lamp with an adjustable burner may be used in place of the cup G and the desired temperature attained by timing, or if a steam-heater, stove-top, or other source of heat is at hand the base J, feet I I', burner G, and frame H H' will not be required. If gas is at hand, a holder fitting the gas-burner may be provided in place of the frame H H' and feet I I', and the gas-flame used instead of the burner G.

Having fully described my invention and pointed out the several useful features thereof, I claim as new and desire to secure by Letters Patent—

1. In a warming apparatus, the combination of a socket or carrier, a diffusing-plate under this carrier, an air-space surrounding these two parts, a jacket or flue inclosing this air-space, arms or holders extending inward from the jacket and holding the diffusing-plate and socket, a lamp-holder and base attached to the lower end of the jacket, and a lamp or heater fitted thereto, substantially as described.

2. In a warming apparatus, the combination of an open-cup burner, a holder for this burner attached to a jacket or flue provided with internal arms or brackets carrying a diffusing plate or shield above the burner and a carrier or socket above this plate, substantially as described.

ARTHUR LANGERFELD.

Witnesses:

HARRY C. BAGGOTT,  
GEORGE STRAHM.