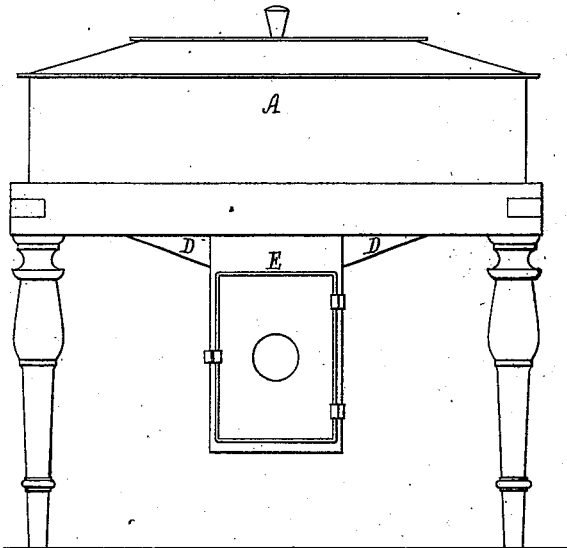


F. A. BOWDOIN.  
Peanut-Warmer.

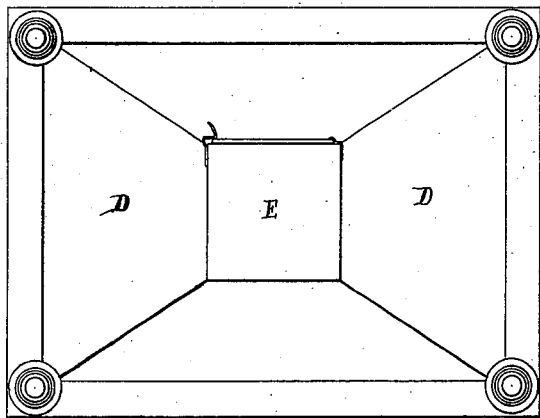
No. 204,190.

Patented May 28, 1878.

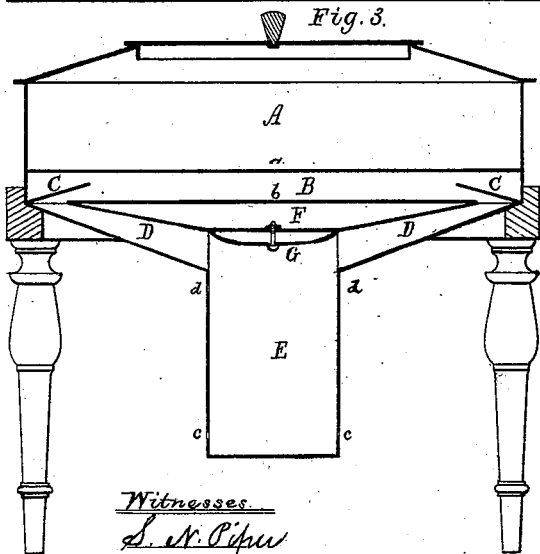
*Fig. 1.*



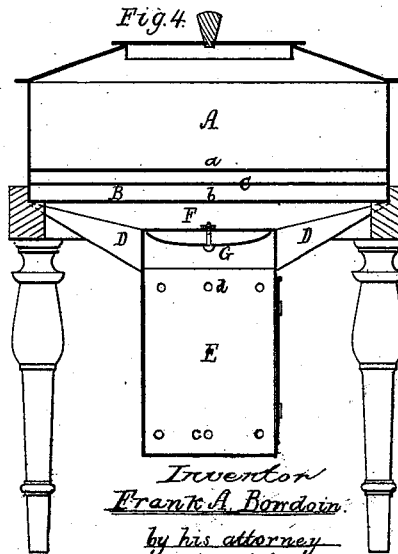
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses

*S. N. Piper*  
*John R. Brown*

*Inventor*  
*Frank A. Bowdoin*

*by his attorney*  
*R. H. S. J.*

# UNITED STATES PATENT OFFICE.

FRANK A. BOWDOIN, OF LEWISTON, MAINE.

## IMPROVEMENT IN PEA-NUT WARMERS.

Specification forming part of Letters Patent No. **204,190**, dated May 28, 1878; application filed May 13, 1878.

*To all whom it may concern:*

Be it known that I, FRANK A. BOWDOIN, of Lewiston, of the county of Androscoggin and State of Maine, have invented a new and useful Improvement in Pea-Nut or Pop-Corn Warmers or Preservers; and do hereby declare the same to be described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a front elevation, Fig. 2 an under-side view, Fig. 3 a longitudinal section, and Fig. 4 a transverse section, of an apparatus of my improved kind, which is for the purpose of maintaining at a moderate and uniform temperature, and in a crispy and palatable state, pea-nuts, pop-corn, or other edibles of like nature.

In the drawings, the pan or receptacle A, for holding the nuts, has beneath and extending entirely across its bottom *a*, both lengthwise and widthwise thereof, a heating space or chamber, B. There are within and going transversely across such space two inclined deflectors or plates, C C. They project from the ends and bottom of the heating-space B nearly up to the bottom *a* of the receiver A. Opening into the space B at its ends and through its bottom *b* are two flaring conduits, D D, that lead out of the upper part of a lamp-closet, E. Between the top of such closet and the bottom *b* of the space B there is an open air-space, F, which also extends over the upper sides of the flaring conduits, or between them and the said bottom *b*. In the upper part of the lamp-closet I generally place a bell-shaped or concavo-convex deflector, G, to receive the heat directly from the lamp-chimney and protect the top of the closet therefrom, or from being injured thereby. The lamp-closet should have openings *c d* in its sides to admit air into it, and also for the escape of the waste volatile products of combustion.

The open air-space F effectually prevents concentration of the heat of the lamp against the bottom of the heating-chamber B, and as each of the conduits D D increases in width as it rises from the lamp-closet to the opening of such pipe into the chamber B, it operates to deliver the heat equally across the said chamber and to the deflector over the said

conduit. This deflector prevents the heat from immediately rushing into contact with the bottom of the receptacle A, as such heat may pass out of the conduit.

By the deflectors the heat is equally distributed against the bottom *a*, and thus operates to evenly warm a mass of nuts when in the chamber A.

I do not claim a pea-nut-warmer consisting of a pan or vessel, an air-heating chamber below such, a lamp-closet, and other devices arranged as shown in the United States Patent No. 128,710.

In carrying out my invention I have combined with the pea-nut pan or receptacle and the heating-chamber and lamp-closet thereof two flaring conduits and pipes leading from the lamp-closet into the heating-chamber, at or near its ends, so that there may be an open air-space, F, under the bottom of the heating-chamber, to insulate such bottom from the top of the lamp-closet and the upper sides of the pipes, and I have combined with the pea-nut receptacle and its heating-chamber and the pipes leading into the latter two inclined deflectors, arranged in the heating-chamber and over the eduction ends of the pipes, as set forth, all of which operate as described, and serve to convey heat to and diffuse it equally within the heating-chamber, in order that a mass of nuts, when in the receptacle A, may be evenly warmed and so maintained. Therefore,

What I claim as my invention is as follows, viz:

1. The arrangement and combination, as described, of the lamp-closet E and the flaring pipes D D with the receptacle A and its heating-chamber, whereby there is formed between such heating-chamber and the lamp-closet and the conduits D D an open air-space, F, as and for the purpose specified.

2. The arrangement and combination of the receptacle A, heating-chamber B, two deflectors, C C, flaring pipes D D, and lamp-closet E, all being essentially as shown and described.

FRANK A. BOWDOIN.

Witnesses:

C. H. ADAMS,  
G. S. PERHAM.