

C. E. STAATS.
EGG FILLER.

(Application filed Nov. 14, 1901.)

(No Model.)

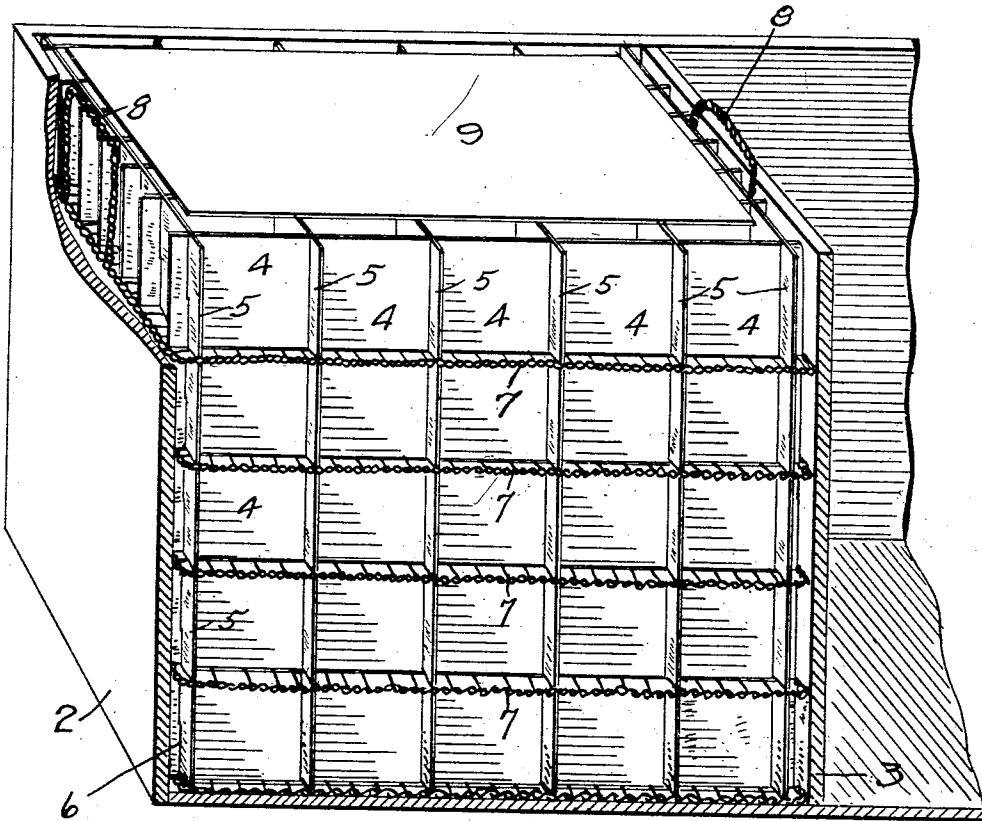


FIG. 1.

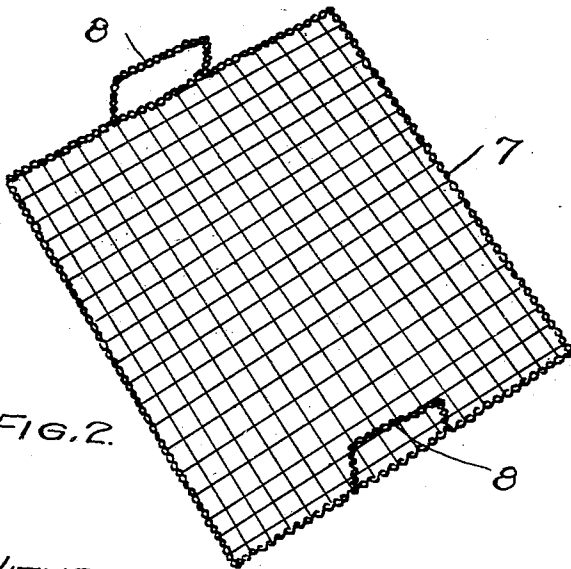


FIG. 2.

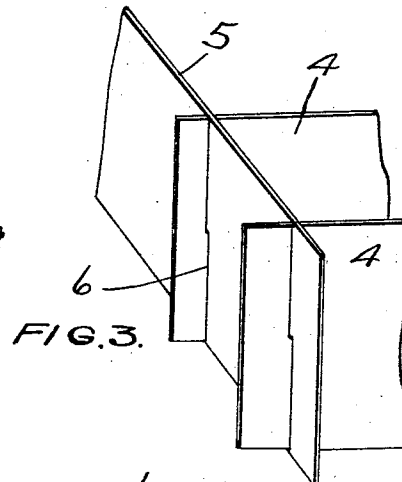


FIG. 3.

WITNESSES
E. J. Staude
M. C. Norman

INVENTOR
CORNELIUS E. STAATS
BY *Paul & Paul*
HIS ATTORNEYS

UNITED STATES PATENT OFFICE.

CORNELIUS E. STAATS, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF ONE-THIRD TO WILLIAM H. STAATS, OF MINNEAPOLIS, MINNESOTA.

EGG-FILLER.

SPECIFICATION forming part of Letters Patent No. 713,355, dated November 11, 1902.

Application filed November 14, 1901. Serial No. 82,195. (No model.)

To all whom it may concern:

Be it known that I, CORNELIUS E. STAATS, of Minneapolis, Hennepin county, Minnesota, have invented certain new and useful improvements in Egg-Fillers, of which the following is a specification.

Egg-fillers are usually made of strawboard or pasteboard and are placed in the egg-case alternating with a flat plate of the same material as the filler. This filler material is porous and very susceptible to moisture and bad odors when the case is left in the open air or placed in cold storage and will soon have a deteriorating effect on the eggs that are packed in the case. I have also found that where an egg-filler has been wet and comes in contact with the eggs it will cause the egg-shells to become spotted or mottled and frequently render them unsalable. It has also been customary heretofore in removing the eggs from a case to lift up the filler and then pick up the eggs as they lie on the plate or mat beneath.

The object of my invention is to provide an improved filler which will not absorb moisture or bad odors and will at all times keep the eggs perfectly dry and sweet.

A further object is to provide a filler that will have the effect of keeping the eggs fresh for a much longer time than is possible in an egg-filler as ordinarily constructed.

A further object is to provide means whereby a filler and all the eggs contained therein may be lifted out of the case at once.

Other objects will appear from the following detailed description.

The invention consists generally in a filler composed of alternate interlocking strips of copper and zinc.

Further, the invention consists in providing a perforate tray or mat between the fillers.

Further, the invention consists in various constructions and combinations, all as hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective of one end of an egg-case with the wall broken away, showing the fillers arranged therein. Fig. 2 is a perspective of the mat or tray, and Fig. 3 is a detail showing the man-

ner of fastening the strips composing the filler together.

In the drawings, 2 represents an egg-case of the ordinary construction provided with a central partition 3, dividing the interior of the case into two compartments. Within these compartments are arranged a series of fillers, one above the other, there being usually five in each compartment and each filler adapted to contain three dozen eggs, though the number of fillers used and their size may be varied according to the dimensions of the egg-case. Each filler is composed of a series of flat strips of copper and zinc, the zinc strips 4 running parallel with each other and the copper strips 5 being arranged at right angles to the zinc strips and each strip having slots or notches 6 to interlock with corresponding notches in the strips running at right angles thereto. These slots or notches are made of sufficient size so that there will be lost motion or play between the strips to allow them to be collapsed and lie flatwise and when so folded to be packed in very small compass for shipping purposes, as when the egg-case is being returned empty. This manner of collapsing the filler renders it particularly adapted for folding egg-cases. At the bottom of the case between each of the fillers above the same I provide a wire mat or tray 7, having handles 8, that extend up beside the filler in position to be grasped to lift the filler and the eggs therein out of the case. Instead of using the wire mat I may employ a perforate plate with suitable handles thereon. This form of mat allows the air to circulate through the case from one filler to another and aids in keeping the eggs fresh. On the top of the upper filler I arrange a plate 9, of tin or other suitable metal, which will hold the eggs in place when the case is inverted. The eggs are placed in the filler resting upon the metal tray and against the adjacent zinc and copper strips, between which a galvanic current of electricity is established through the egg and the metal tray beneath. This current is sufficient to keep the egg-germ alive, revive and quicken the albumen and yolk, and prevent their deterioration and decay.

In place of using copper and zinc strips alternately arranged I may employ other dissimilar metals, between which a galvanic current is established by the presence of an exciting agent, a return-circuit being made through the metal tray, as above described.

Heretofore it has been customary to lift out the paper filler and then pick the eggs up separately. By providing means for lifting an entire filler and its contents together I am able to greatly facilitate the operation of "candling" eggs.

I claim as my invention—

1. An egg-filler composed of a series of interlocking copper and zinc strips, a wire mat whereon said filler rests, and handles provided on said mat, for the purpose specified.

2. The combination, with an egg-case, of a series of fillers provided therein one above the other, each filler being composed of a series of parallel copper strips interlocking with a series of zinc strips running at right angles to said copper strips, a wire mat provided beneath the bottom filler in the case and between each of the fillers above the bottom, suitable handles provided on said mats,

and a metal plate fitting over the upper filler of the series, substantially as described.

3. An egg-filler composed of a series of interlocking strips of dissimilar metals capable of producing a galvanic current when connected by an exciting agent, and a metal tray or plate whereon said filler is supported and with which it has contact.

4. An egg-filler composed of a series of interlocking strips of copper and zinc alternately arranged with which the egg is in contact when placed in the filler, and a metal tray provided beneath said copper and zinc strips and with which they are in contact.

5. An egg-filler, composed of a series of interlocking strips of dissimilar metal capable of producing a galvanic current when connected by an exciting agent, and a metallic connection for said strips.

In witness whereof I have hereunto set my hand this 9th day of November, 1901.

CORNELIUS E. STAATS.

In presence of—

RICHARD PAUL,
M. C. NOONAN.