

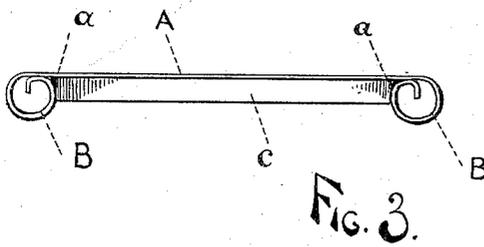
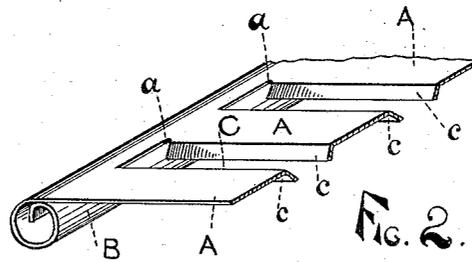
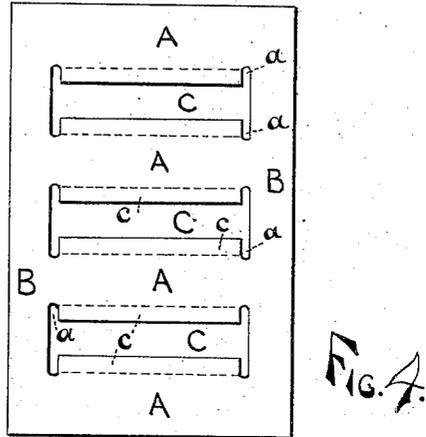
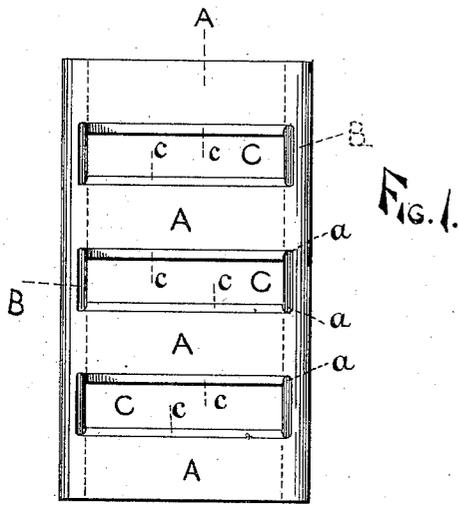
(No Model.)

C. H. LEONARD & C. G. GRAY.

REFRIGERATOR SHELF.

No. 335,136.

Patented Feb. 2, 1886.



WITNESSES  
Fred W. Stevens  
R. W. Powers

INVENTORS  
Charles H. Leonard  
Charles G. Gray  
By their Attorney  
Edmund Tappan

# UNITED STATES PATENT OFFICE.

CHARLES H. LEONARD AND CHARLES G. GRAY, OF GRAND RAPIDS,  
MICHIGAN; SAID GRAY ASSIGNOR TO SAID LEONARD.

## REFRIGERATOR-SHELF.

SPECIFICATION forming part of Letters Patent No. 335,136, dated February 2, 1886.

Application filed September 4, 1885. Serial No. 176,184. (No model.)

*To all whom it may concern:*

Be it known that we, CHARLES H. LEONARD and CHARLES G. GRAY, both citizens of the United States, and residing at the city of Grand Rapids, in the county of Kent and State of Michigan, have jointly invented a new and useful Refrigerator-Shelf, of which the following is a specification.

Our invention relates to a metallic shelf to be used in ordinary refrigerators; and its object is to construct of a single piece of sheet metal a strong, cheap, and durable shelf. This object we accomplish by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of our refrigerator-shelf. Fig. 2 is a perspective view of the same with one side removed in order to show its construction. Fig. 3 is an end view of the same. Fig. 4 is a plan view of the blank from which our shelf is formed up.

Similar letters refer to similar parts throughout the several views.

To construct our shelf, we take a rectangular piece of galvanized iron or other suitable sheet metal, and cut the slots C C C, as shown in the drawings, so as to leave between them the cross-bars A A A.

On one or both sides of the bar A, at the point where it joins the side piece, B, we broaden the slot C by an enlargement or cross-slit, as shown, so as to permit the edge of the

bar A to be bent down and form the flange *c*. The form of these flanges *c c c* is fully shown in Fig. 2. The sides of the sheet metal we roll under, as shown in the drawings by B B in Fig. 2, so as to make strong side pieces to the shelf. These side rolls, B B, are in contact with and rest against the flanges *c c c* at the points *a a a*, so that the flanges and side pieces, B B, mutually support and strengthen each other.

By the above-described method of constructing the shelf we avoid the necessity of welding, soldering, or riveting, and we provide a superior shelf from a single piece of metal, cheaply made, strong, and durable.

Having thus described our invention, what we claim to have invented, and desire to secure by Letters Patent, is—

The refrigerator-shelf formed from a single piece of sheet metal, having the flanges *c c c* formed on the edges of the cross-pieces A A A, and having the side pieces, B B, rolled under and brought in contact with the flanges at the points *a a a*, the flanges and side pieces mutually supporting and strengthening each other, substantially as and for the purposes described.

CHARLES H. LEONARD.  
CHARLES G. GRAY.

Witnesses:

FRED W. STEVENS,  
EDWARD TAGGART.