

(No Model.)

H. STRATER.  
DRAINER PLATE.

No. 481,981.

Patented Sept. 6, 1892.

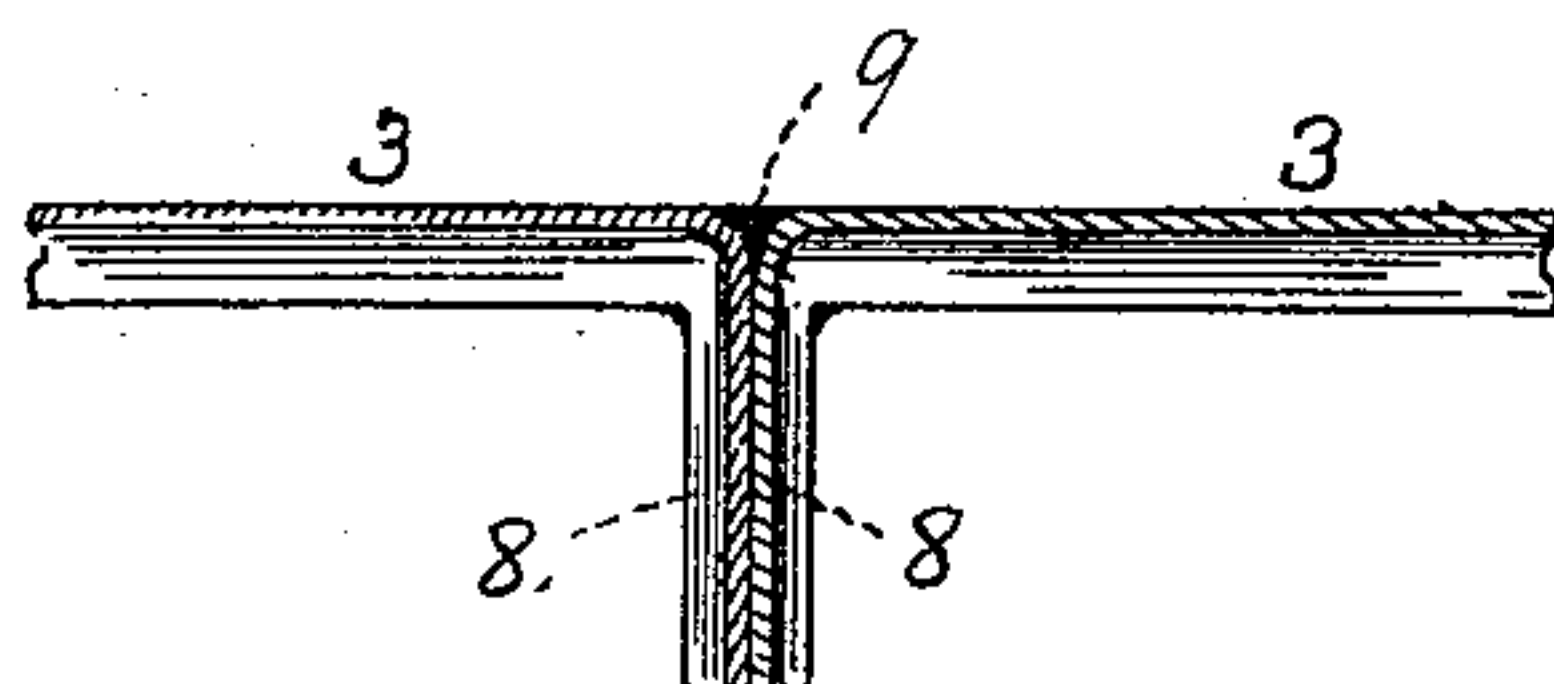
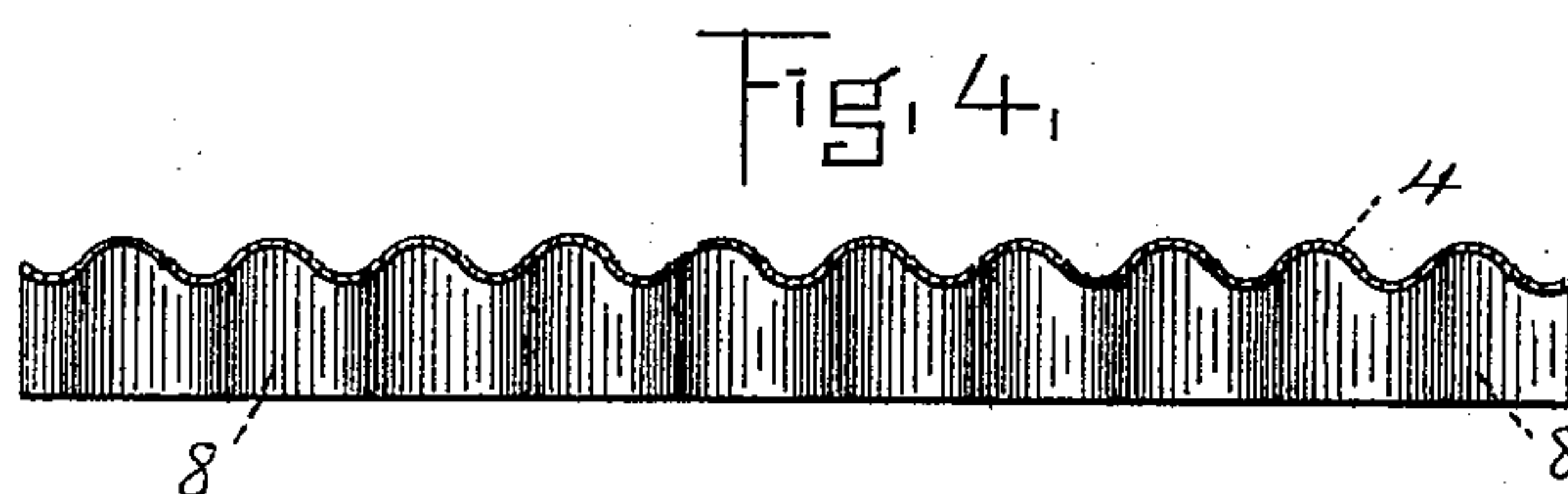
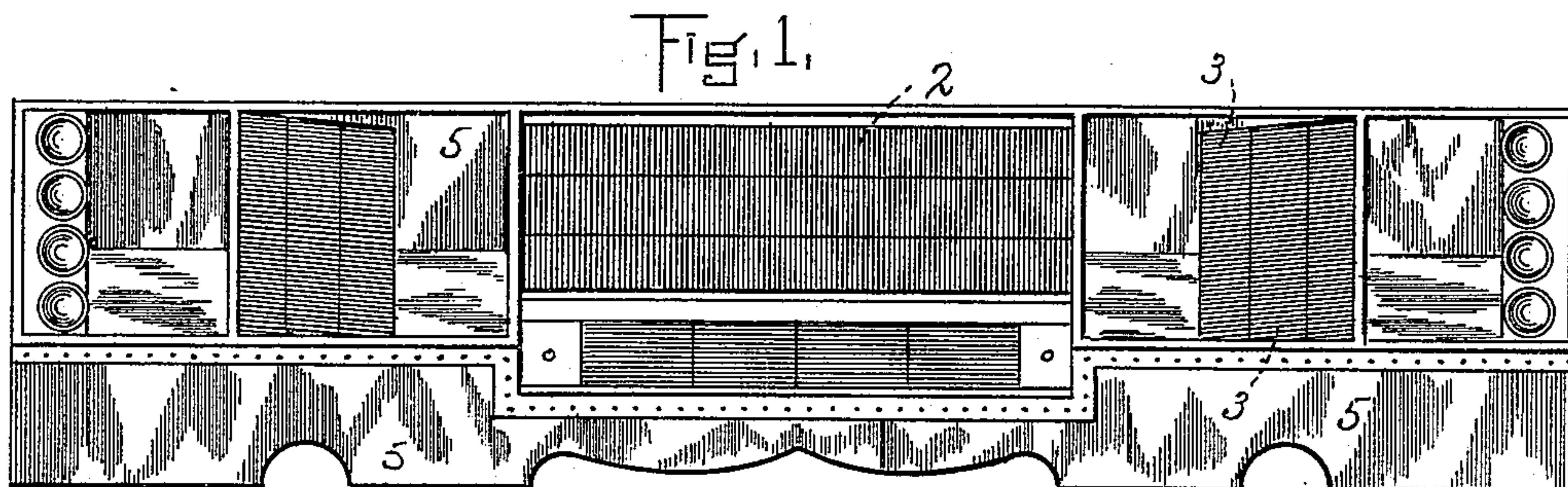
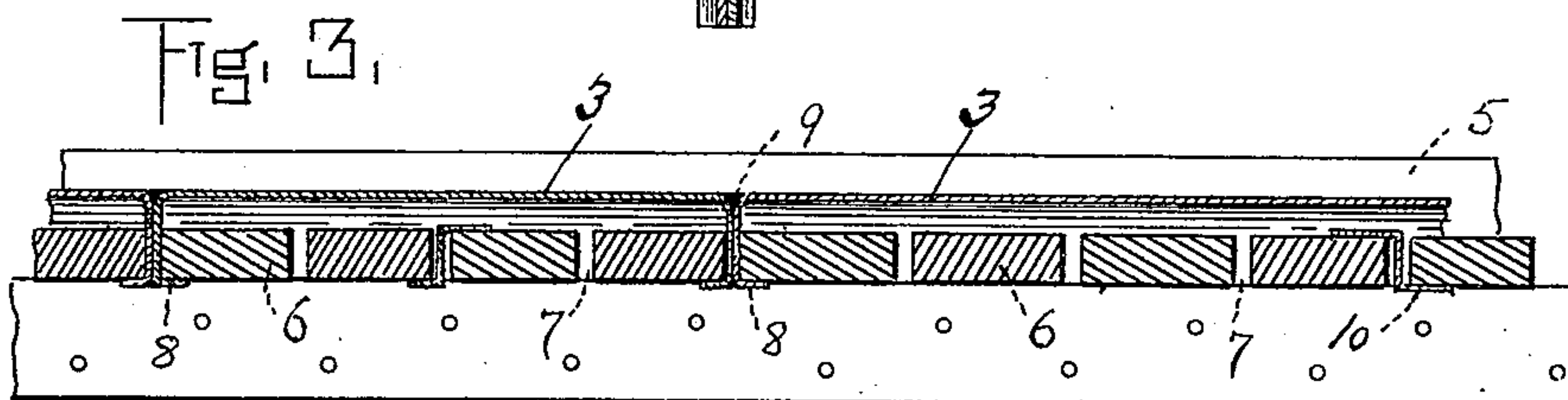


Fig. 5.



Witnesses.  
E. K. Bayliss  
Francis C. Stanwood

Inventor.  
Herman Strater.  
by H. C. Lodge Atty.



# UNITED STATES PATENT OFFICE.

HERMAN STRATER, OF BOSTON, MASSACHUSETTS.

## DRAINER-PLATE.

SPECIFICATION forming part of Letters Patent No. 481,981, dated September 6, 1892.

Application filed April 5, 1892. Serial No. 427,854. (No model.)

*To all whom it may concern:*

Be it known that I, HERMAN STRATER, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Drainer-Plates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

This invention relates to drainers for draft apparatus; and it consists particularly in the peculiar construction of the corrugated plates which constitute the drainer-surface proper, whereby the several sections are united as an integral sheet, and, further, in the methods adopted to prevent the drainer-plates from buckling and to maintain the corrugations in their integrity and overcome the disturbing effects of expansion and contraction.

The drawings herewith presented represent, in Figure 1, a plan; Fig. 2, a cross-section of a drainer-plate embodying my invention. Fig. 3 is a vertical section of a drainer-plate longitudinally of the corrugations. Fig. 4 is a section transversely of the corrugations, showing the end lip. Fig. 5 shows the butt-joint and contiguous bent end portions.

In draft apparatus for aerated beverages, as likewise beer, drainers are generally provided for the several purposes of enabling the glasses to be washed and drained, as likewise to catch the drip from the draft-faucets, and thus keep the floor dry at the place where the beverages are dispensed. The upper surfaces of these drainers are composed in general of a corrugated surface 2, made up of several sections 3 3, preferably sheet metal, as copper tinned. These sheets are corrugated at 4, and when in position these corrugations are to extend lengthwise, according to the drainage. Since these drainers are made from six to twelve feet in length and because the corrugating-machines are limited in their capacity as to the width of the sheet to be operated upon, it becomes necessary to join several sheets in order to produce the amount of drainer-surface required.

One feature in my invention consists in the

manner of joining these several drainer-plates or sections. Hitherto they have been lap-jointed; but this is objectionable, since the overlapping portion forms a shoulder or rise and is apt to upset the glass in case the latter is pushed over the surface. To obviate this objection, I propose to unite the several sheets with a butt-joint, to be subsequently described.

The drainer-box is composed of a rectangular frame 5, in which are secured transverse slats 6, with intervening spaces 7 to allow for expansion of the wood composing them should moisture reach them. My mode of procedure is thus: The corrugated sheet-metal plates are provided with a right-angled lip or downwardly-turned portion 8 at each end. In order to unite two of these plates, the two ends to be united are brought into close contact and the lips are thrust within a space 7, the top surface of the two plates being adjusted to cause the several corrugations to come in alignment with each other, while the surfaces of the plates are to lie in the same plane. Solder 9 is then poured in between the lips. In this way a butt-joint is produced with great strength, and no shoulders or projections occur on the upper surface, while the corrugations extend continuously the entire length of the drainer.

A further feature in my invention is embodied in the construction of the drainer-plate, whereby the relative positions of the corrugations shall remain constant; further, to obviate the resilient action of the drainer, and, lastly, to give the drainer-surface rigidity and keep it in one and the same plane. This I effect by first corrugating each section or sheet, and then after turning it bottom side up I proceed to pour on solder or other metal until all the depressions are filled. In this way the under side is made a plane surface, while the corrugations still exist on the upper side. Moreover, this metal so added gives strength and rigidity to the drainer-plate. As before mentioned, the resilient action which frequently occurs upon removal of a weight from the drainer as now constructed is entirely obviated, since the drainer is rendered stiff and rigid.

In order to fasten the drainer-plates to the drainer-box without the agency of screws or



similar fastenings, I secure at suitable distances transversely of the corrugations and upon the under side thereof pendent strips 10. These latter are intended not only to stiffen the drainer-plates, but act as fastenings, since they are located on the drainer-plates so as to coincide with the several spaces 7. Hence they are thrust therein and given a turn to cause them to rest against the under side of the slats 6. The same duty may be performed by the end lips 8 of each section, as shown in the drawings.

By means of the above construction a continuous corrugated surface is created as an integral body from a series of separate sheets or plates. This surface is stiffened to provide against the disturbance of the corrugations by expansion, contraction, or by long-continued service, while to prevent resilient action a series of transverse pendent strips is attached to the under side, and further serve to fasten the drainer to the drainer-box. In this way thin sheet metal may be used, readily corrugated, and then stiffened, so as to afford equal strength with very heavy metal.

With ordinary thin metal corrugated the putting down of the glasses gradually flattens the corrugations in parts, and the excess of metal thereby created causes the plate to spring up and buckle, making the surface uneven, when a new plate must be substituted.

What I claim is—

1. As a new article of manufacture, a drainer-plate having a corrugated or fluted upper side and a smooth underside and com-

posed of sheet metal corrugated, combined with a metallic substance which enters the depressions on the under side, substantially as and for purposes explained.

2. A drainer-plate composed of a series of corrugated sheets having their ends turned at right angles to form transverse lips, combined with a metallic substance, as solder, which unites said contiguous lips to form a butt-jointed continuous integral sheet, the corrugations being in alignment in the several sheets and the latter located in one and the same plane, substantially as stated and set forth.

3. In combination with a drainer-box and its non-contiguous slats, a drainer composed of a series of corrugated plates, as an integral sheet, and a series of transverse pendent fastening-strips adapted to pass between the slats and be bent thereagainst, substantially as described.

4. A drainer-plate composed of a series of corrugated sheets with downwardly-turned ends, said ends being integrally united to form stiffening-ribs on the under side, combined with the slats of a drainer-box, said ends being adapted to be bent against or fastened to the slats to hold the plate in position, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HERMAN STRATER.

Witnesses:

H. E. LODGE,  
FRANCIS C. STANWOOD.