

(No Model.)

W. EDGE.  
HOLLOW SHEET METAL WARE.

No. 492,463.

Patented Feb. 28, 1893.

Fig. 1.

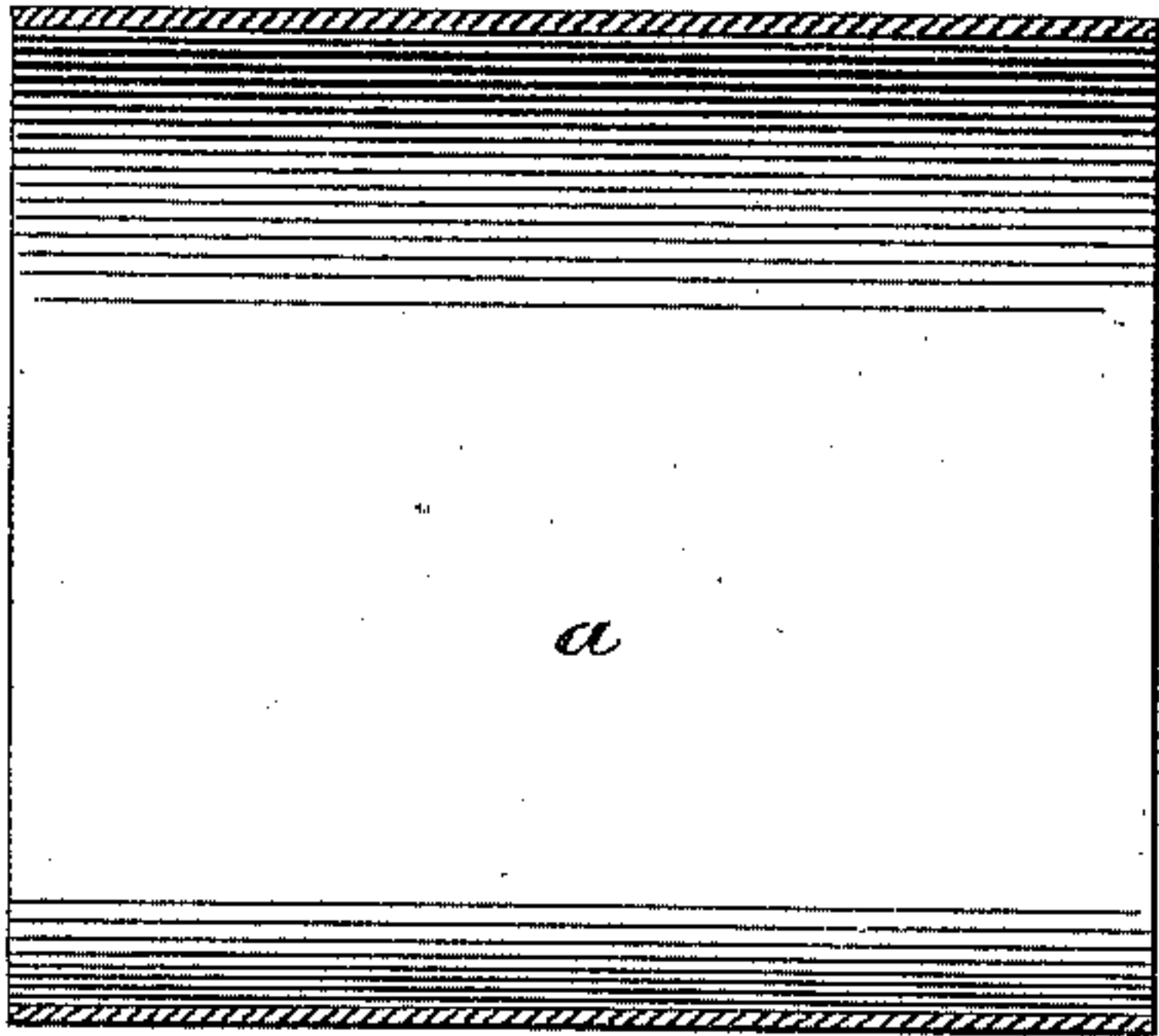


Fig. 2.

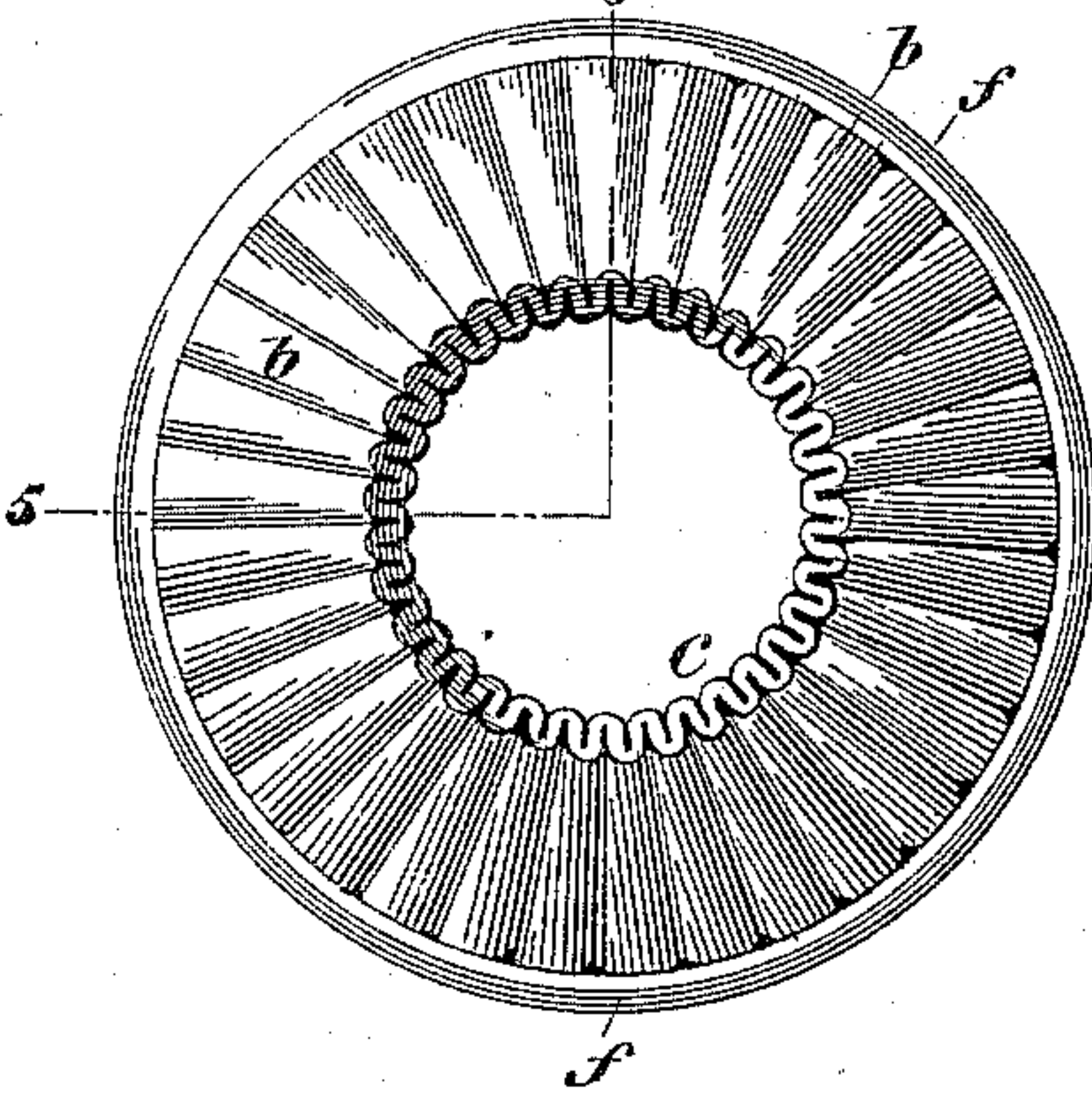


Fig. 3.

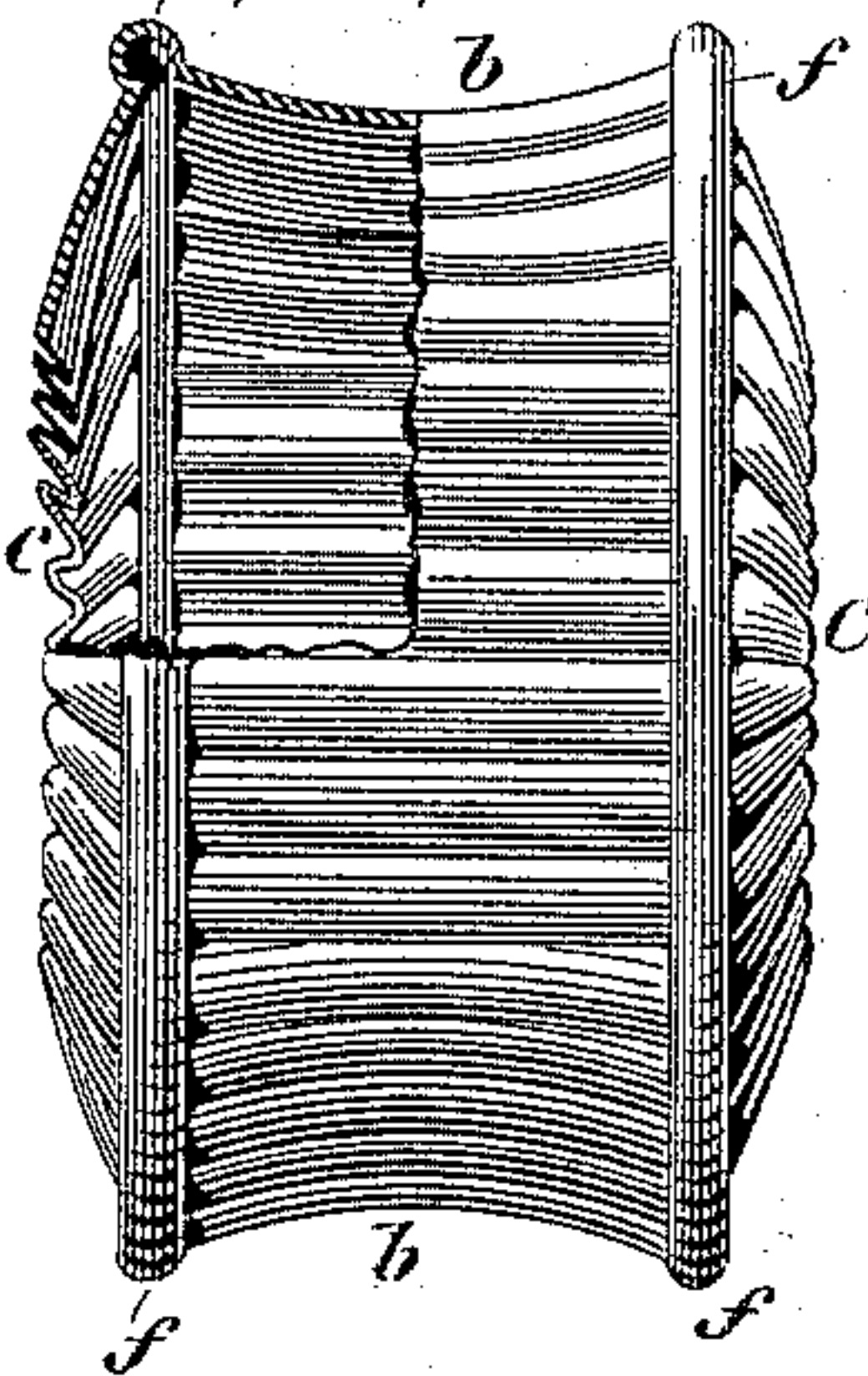


Fig. 4.

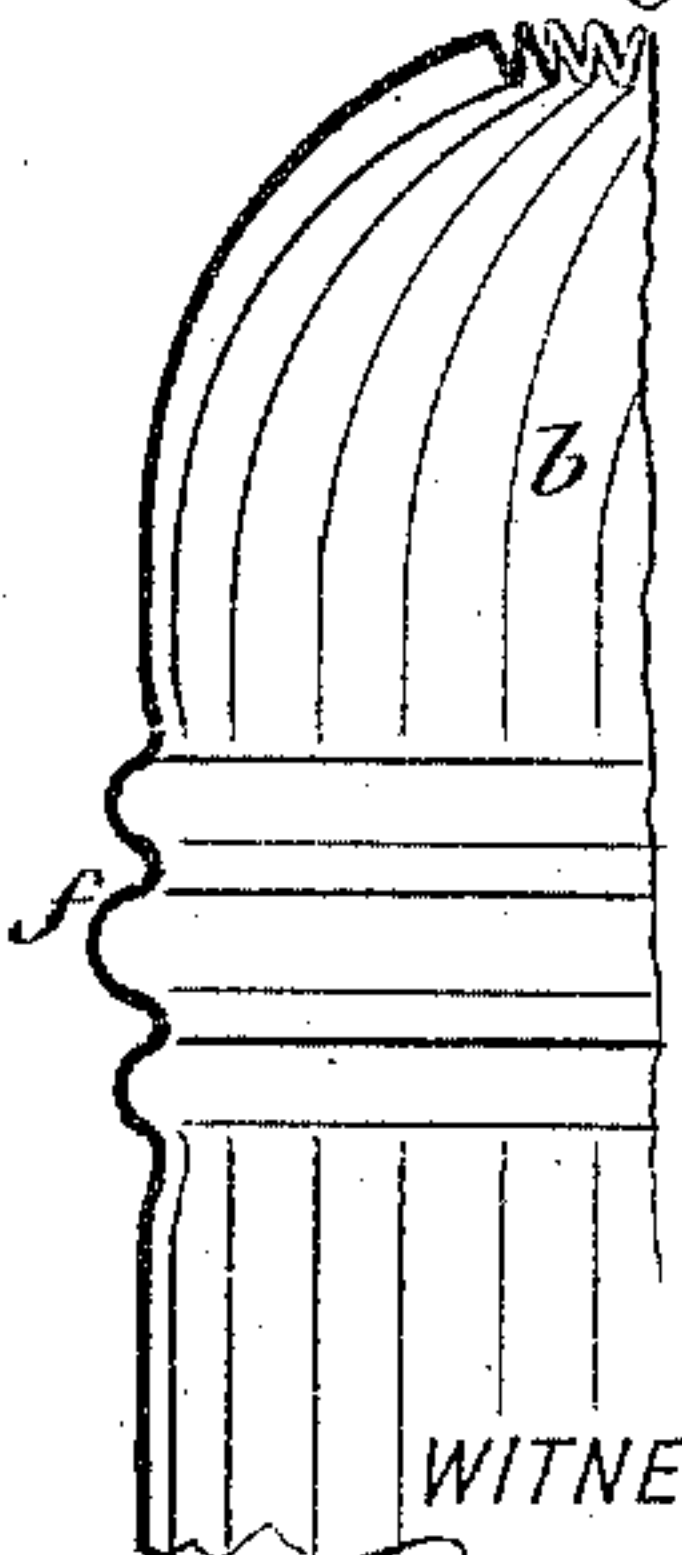


Fig. 5.

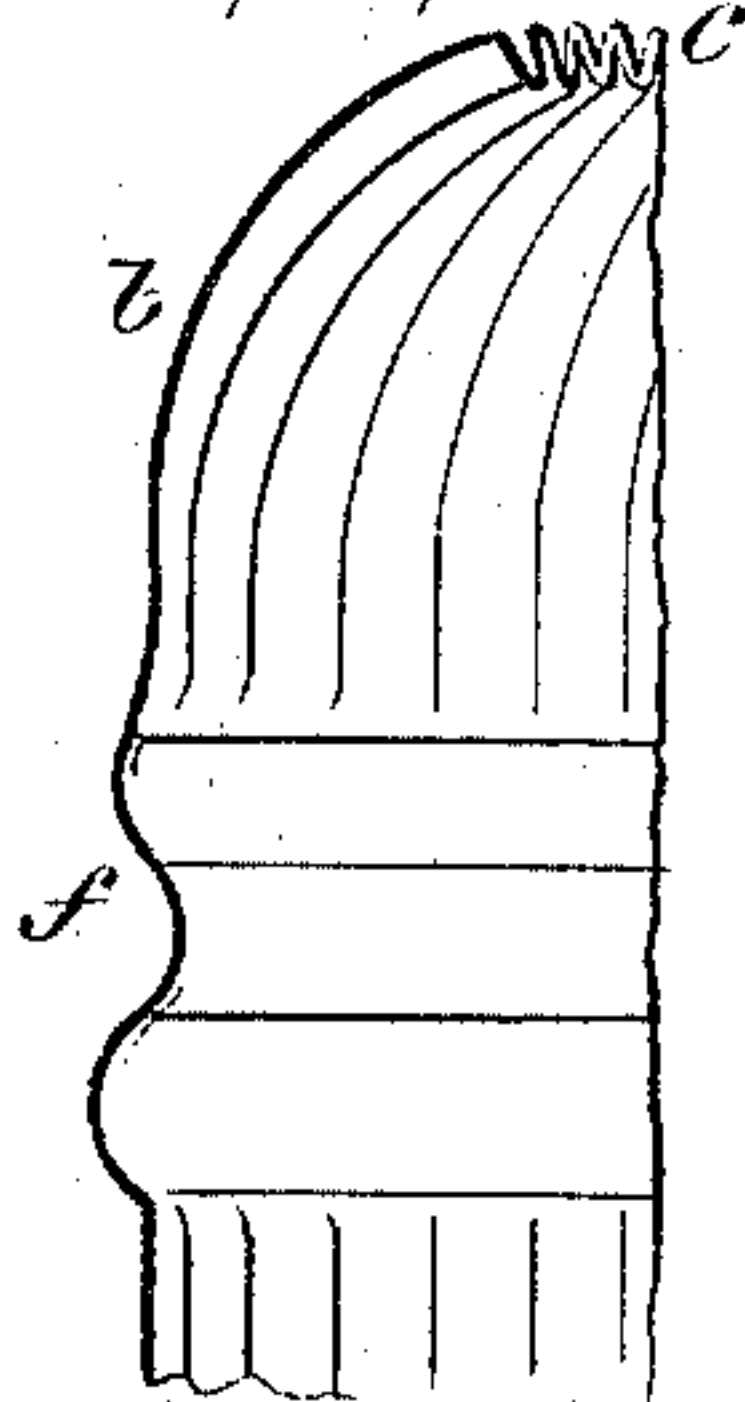


Fig. 6.

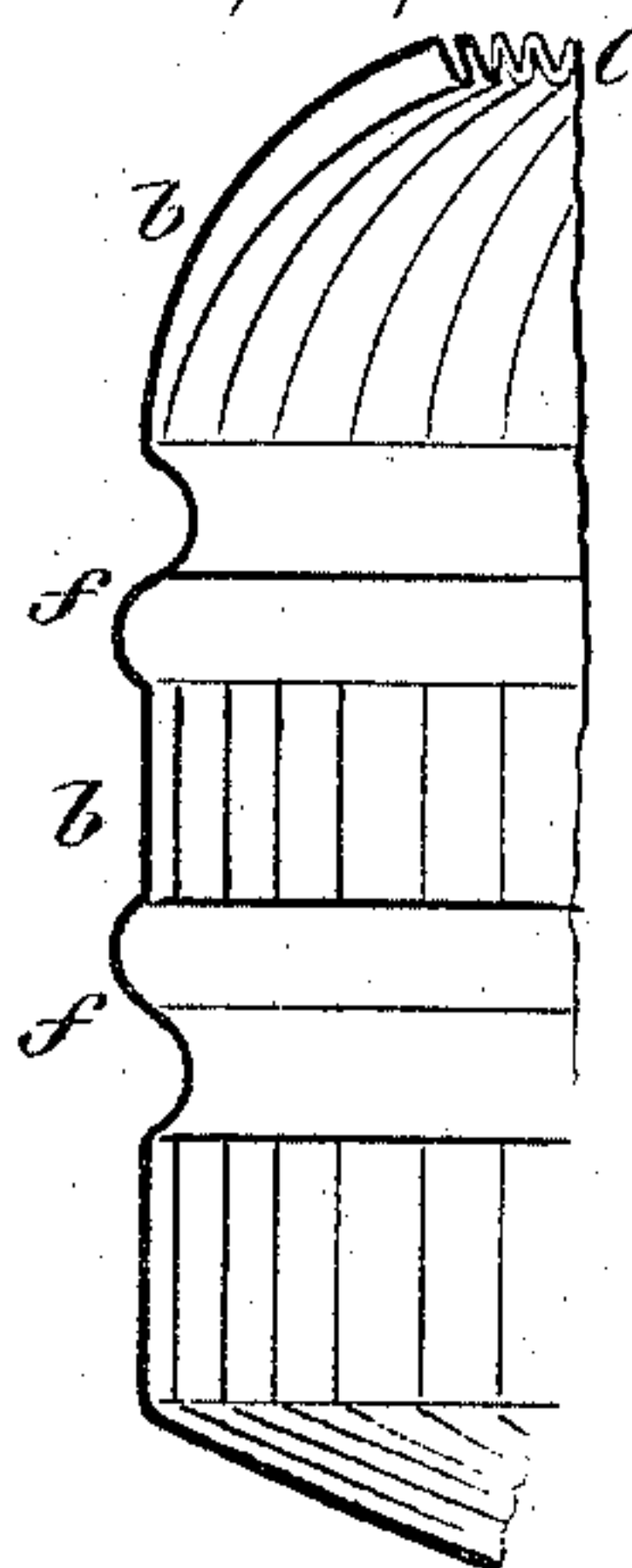
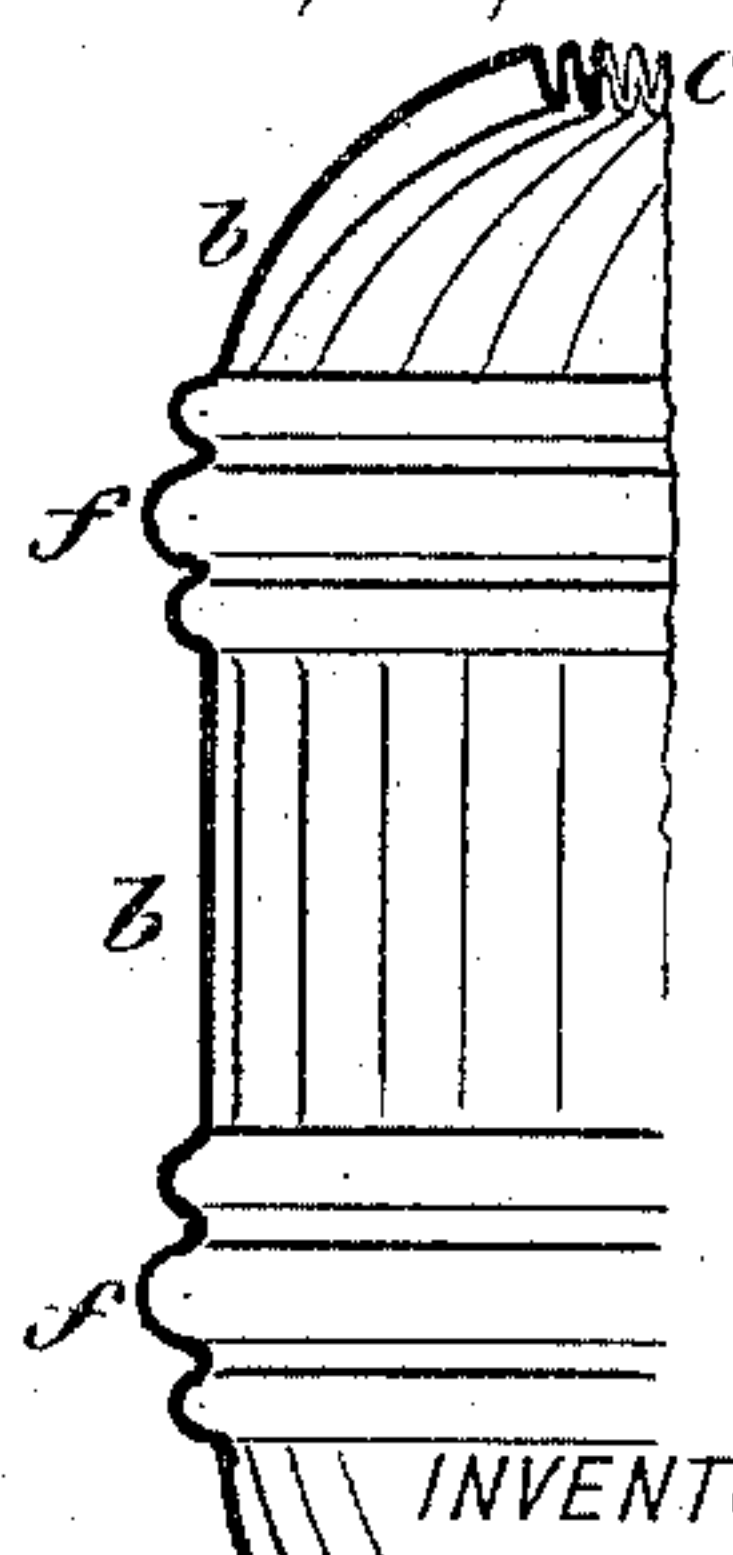


Fig. 7.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM EDGE, OF BROOKLYN, NEW YORK.

## HOLLOW SHEET-METAL WARE.

SPECIFICATION forming part of Letters Patent No. 492,463, dated February 28, 1893.

Application filed April 7, 1892. Serial No. 428,132. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM EDGE, of Brooklyn, Kings county, in the State of New York, have invented certain new and useful  
5 Improvements in Hollow Sheet-Metal Ware and Vessels; and I do hereby declare that the following is a full, clear, and exact description of the invention.

The object of my invention is, the produc-  
10 tion of hollow sheet metal vessels, having longitudinal corrugations or flutings and contracted ends with transverse ribs or beads.

The invention consists in the new and im-  
15 proved fluted or corrugated metal vessels, having contracted ends and tapering corrugations, and in the combination and arrangement of the various parts thereof, substantially as hereinafter described and claimed.

Referring to the accompanying drawings,  
20 in which like letters of reference indicate corresponding parts: Figure 1 is a central, longitudinal section of a piece of copper or brass tube. Fig. 2 is an end view of the vessel shown in Fig. 3 embodying my invention.  
25 Fig. 3 is a side elevation of a vessel embodying my invention, a portion of it being in section on a line 5—5 of Fig. 2. Figs. 4, 5, 6, and 7, are detail views, showing the tapering corrugations on the sides with various forms of  
30 transverse beads or ribs.

I have heretofore made application for Letters Patent for a process of manufacturing the shells or vessels, as herein shown, and I shall make no claim in this application for  
35 any such process, or the machine employed therefor, but shall simply refer to the same as explaining the finished product. This application was filed November 16, 1891, and has the Serial No. 412,012.

40 In the drawings, *a* represents a section of a tube made of copper, brass or any similar material, and of such length and diameter, as may be required to produce the article proposed. This piece of tube is formed by proper  
45 machinery with longitudinal corrugations or flutings *b* upon the outside, the ends of the corrugated tube being afterward drawn inward or contracted, as shown at *c*, and form-

ing when viewed from the end, a perfect series of tapering corrugations or flutings.

When desired, the article can be formed  
50 with plain beads or ribs *f*, extending transversely across the shell and can be made in pairs, if desired, as shown in Fig. 3, or a single central one can be used, as will be understood.

In forming a shell like that shown in Fig. 3, the corrugations extend from the contracted  
55 ends toward the nearest bead or rib *f* and from one bead *f* to the other. The body of the corrugated vessel between the beads can be concave, as shown in Fig. 3, or may be made convex, or parallel with the axis of  
60 the shell, as may be preferred. The beading and the longitudinal end corrugations are all formed in the proper machine from the same exterior surface of the tube, and they are all  
65 homogeneous, as shown in the sectional part of Fig. 3. These transverse ribs or beads can be formed of various shapes in cross section, as shown in Figs. 3, 4, 5, 6, and 7. The use  
70 of these transverse ribs or beads not only adds beauty to the general appearance, but also materially strengthens the shell, as will be understood.

Shells or vessels, when made as above de-  
75 scribed, are very light, and combine therein, great strength, and can be easily applied when desired for ornamentation with open ends in the manner shown. Or with the ends  
80 sealed, they form a complete, convenient and strong reservoir keg or barrel, much lighter than wood, and with greater strength.

What I claim as my invention is—

As a new article of manufacture, a hollow  
85 sheet metal body, provided with longitudinal tapering corrugations said corrugations extending from end to end, and said metal body being narrowed at both ends to a diameter less than that of the center, and also pro-  
90 vided with one or more transverse ribs or beads *f*, substantially as described and set forth.

WILLIAM EDGE.

Witnesses:

E. L. SHERMAN,

L. M. WACHSCHLAGER.