J. M. HOTHERSALL.

FOLDED CORNER CAN OR VESSEL.

APPLICATION FILED APR. 20, 1908.

927,538.

Patented July 13, 1909.

2 SHEETS—SHEET 1.

Fig. 1

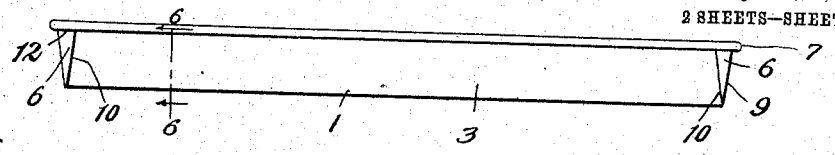


Fig. 2

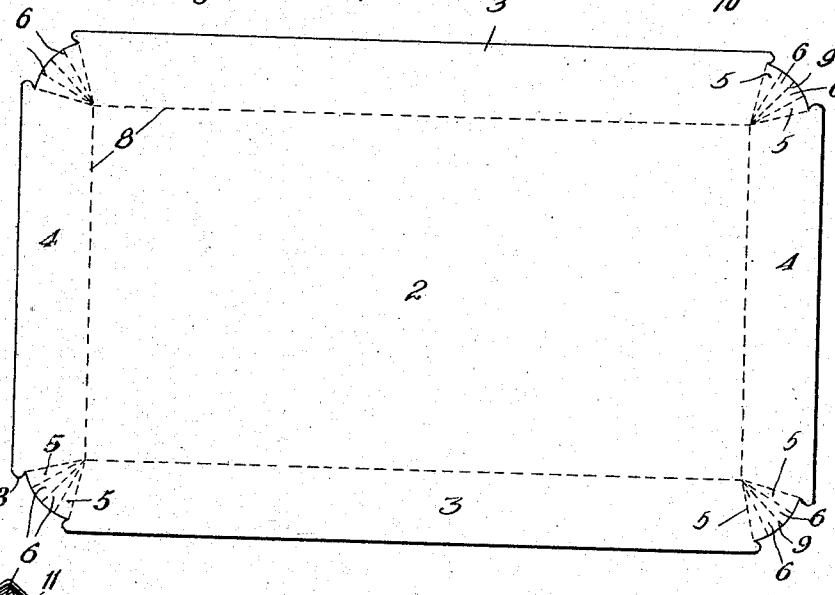


Fig. 3

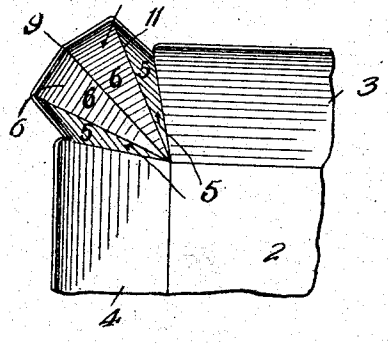


Fig. 4

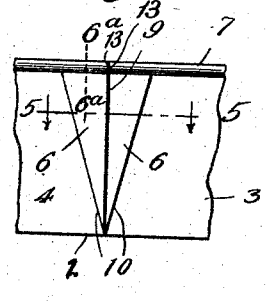


Fig. 6a

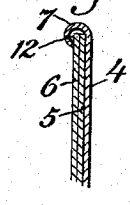


Fig 6

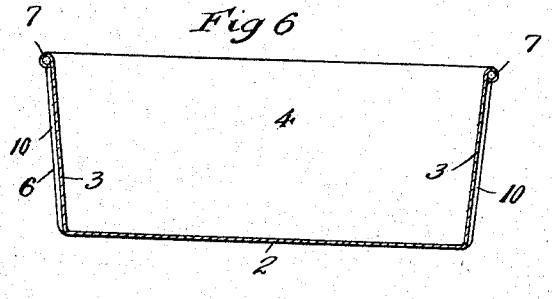
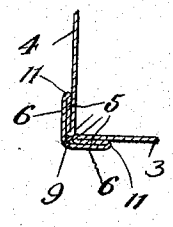


Fig. 5



Witnesses:

Wm. Geiger

H. M. Munday

Inventor:
John M. Hothersall

By Munday Evarts Adcock & Clark.

Attorneys

ANDREW. B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

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2 SHEETS—SHEET 2.

Fig. 7

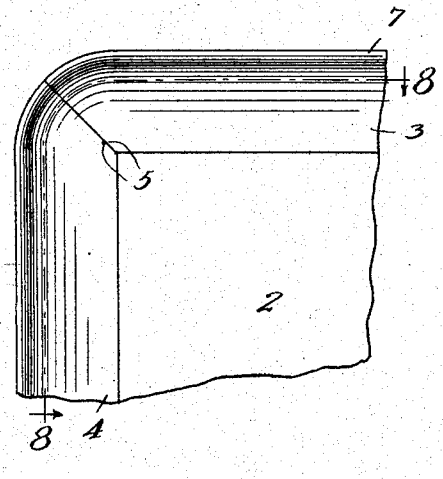


Fig. 8

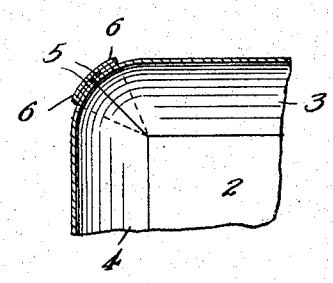


Fig. 9

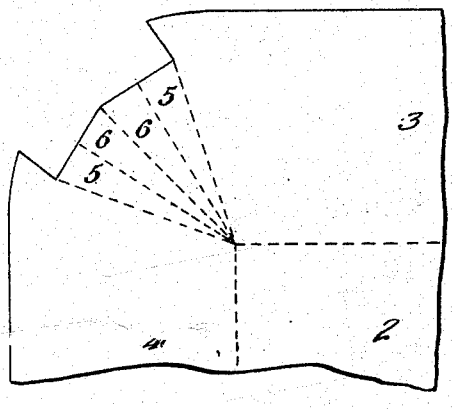


Fig. 10

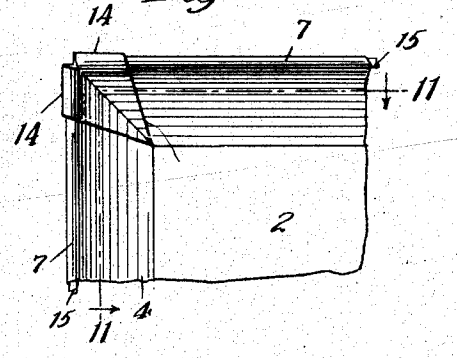


Fig. 11

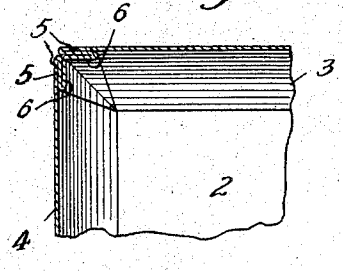
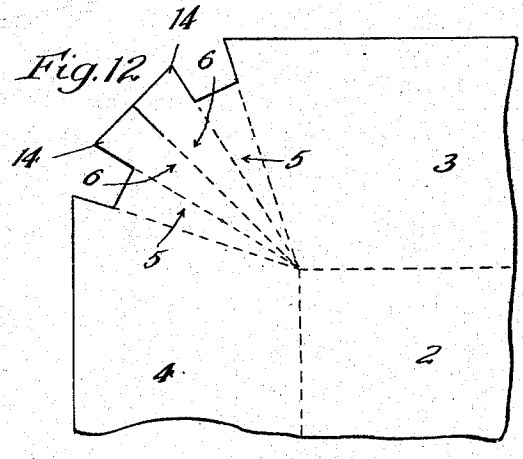


Fig. 12



Witnesses:

Wm. Geiger

A. W. Munday.

Inventor

John M. Hothersall

By Munday, Evarts, Adcock & Clarke.

Attorneys

ANDREW. B. GRAHAM CO., PHOTO-LITHOGRAPHERS, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN M. HOTHERSALL, OF NEW YORK, N. Y., ASSIGNOR TO AMERICAN CAN COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

FOLDED-CORNER CAN OR VESSEL.

No. 927,538. Specification of Letters Patent. Patented July 13, 1909.

Application filed April 20, 1908. Serial No. 427,963.

To all whom it may concern:

Be it known that I, JOHN M. HOTHERSALL, a citizen of the United States, residing in New York, in the county of New York and State of New York, have invented a new and useful Improvement in Folded-Corner Cans or Vessels, of which the following is a specification.

My invention relates to improvements in the construction of one-piece sheet metal pans or vessels having folded corners.

The object of my invention is to provide a folded corner pan or vessel of a strong, efficient, neat and durable construction, and my invention consists in the novel construction herein shown and described and by which this object is practically accomplished.

In the accompanying drawing, forming part of this specification, Figure 1 is a side elevation of a folded corner sheet metal vessel embodying my invention; Fig. 2 is a plan view of the blank from which it is formed; Fig. 3 is a detail plan view showing one corner of the blank partially folded; Fig. 4 is a detail elevation looking at one corner of the vessel; Fig. 5 is a section on line 5—5 of Fig. 4; Fig. 6 is a detail section on line 6—6 of Fig. 1; Fig. 6^a is an enlarged detail section on lines 6^a—6^a of Fig. 4; Fig. 7 is a detail plan view showing one corner of the pan as of a slightly modified construction, in which one corner of the pan is rounded; Fig. 8 is a section on line 8—8 of Fig. 7; and Fig. 9 is a detail view showing the form of blank employed in making the construction shown in Figs. 7 and 8. Figs. 10, 11 and 12 are views similar to Figs. 7, 8 and 9, illustrating a further modification in which the double angle folds at the corner of the vessel are upon the inside instead of upon the outside, as in Figs. 1 to 9.

In the drawing the pan or vessel 1 comprises an integral bottom 2, upright or slightly flaring sides 3, and upright or flaring ends 4, and double angle folds 5, 6, and an integral marginal cross wire or outwardly turned roll 7.

The integral sides 3 and ends 4 of the pan or vessel are formed by bends 8 at the side and end edges of the bottom 2, and by inclined bends 9, 9 at the substantially upright or inclined corners of the pan or vessel and where the side 3 unites with the adjacent end 4. The surplus stock in the blank at the corner of the pan or vessel produces the double angle folds 5, 6 and 5, 6. The innermost fold 5, 5 fitting, one flat against the side 3 and the other flat against the end 4, and the two outermost folds 6, 6, the one embracing the side and the other the end, and the two outermost folds 6, 6, having a smooth rounded corner bend 10. The angle folds 5, 6 are integrally united by the fold bend 11, the edge of which is substantially upright, thus giving a neat appearance to the finished pan or vessel. The false wire or roll 7 at the upper edge of the sides 3 and ends 4 embraces the upper edges 12, 12 of the angle folds 5, 6, 5, 6, and thus firmly locks the angle folds in position snugly against the upright or flaring sides and ends 3, 4 of the vessel, which effectually prevents any possibility of the folded corner of the vessel unfolding.

The upper edges of the angle folds 5, 6 at the corner of the vessel are struck on such curve or inclination, as illustrated in the drawing, as to bring these upper edges all substantially horizontal when the angle folds are pressed flat against the upright sides and ends of the vessel. The false wire or roll 7 at the upper edges of the sides and ends of the vessel have inclined or curved or mitered ends 13 adapted to abut directly together or miter with each other at each corner of the vessel.

In the modification illustrated in Figs. 7, 8 and 9 the vessel has rounded corners, and this somewhat diminishes the width of the angle folds and thereby further increases the strength of the vessel, as the shorter the angle folds the less leverage and liability for them to unfold or spring apart under strains or blows to which the vessel may be subjected. In this modification the inclination or mitering of the roll or false wire at the upper edge of the sides and ends is formed on a different line or angle, as will be readily understood from Figs. 7, 8 and 9.

In the modification illustrated in Figs. 10, 11 and 12, the angle folds are formed upon the inside instead of upon the outside of the vessel, and in this construction the angle folds 6, 6 are furnished with integral lips 14 at their upper ends or edges, which are bent or clenched around the false wire or roll 7 on the sides and ends 3, 4, to

lock or hold the angle folds snugly in place. To further strengthen and stiffen the pan or vessel at the top and aid in locking or holding the angle folds in place, the false wire or roll 7 may embrace a wire 15.

I claim:

1. A one-piece pan or vessel having integral bottom, sides and ends, and integral double angle folds at the corners, one pair of said angle folds embracing at each corner a side and the other pair an end, said sides and ends having at their upper edges integral rolls extending across and embracing the double angle folds at the corners of the vessel, substantially as specified.

2. A one-piece pan or vessel having integral bottom, sides and ends, and integral double angle folds at the corners, one pair of said angle folds embracing at each corner a side and the other pair an end, said sides and ends having at their upper edges integral rolls extending across and embracing the double angle folds at the corners of the vessel, said integral rolls on the sides and ends mitering and abutting directly together at their corners, substantially as specified.

3. A one-piece pan or vessel having integral bottom, sides and ends, and integral double angle folds at the corners, said sides and ends having at their upper edges integral rolls extending across and coöperating with the angle folds to lock or hold them in position, substantially as specified.

4. A one-piece pan or vessel having integral bottom, sides and ends, and integral double angle folds at the corners, one pair of said angle folds embracing at each corner a side and the other pair an end, said sides and ends having at their upper edges integral rolls extending across and embracing the double angle folds at the corners of the vessel, the fold bends uniting the inner and outer angle folds of each pair being substantially upright, substantially as specified.

JOHN M. HOTHERSALL.

Witnesses:
LOUIS C. TISSOT,
GEO. F. MILLER.