

C. B. & C. D. McDONALD.
THREE COMPARTMENT RECEPTACLE.
APPLICATION FILED OCT. 16, 1909.

1,019,010.

Patented Feb. 27, 1912.

2 SHEETS—SHEET 1.

Fig. 1.

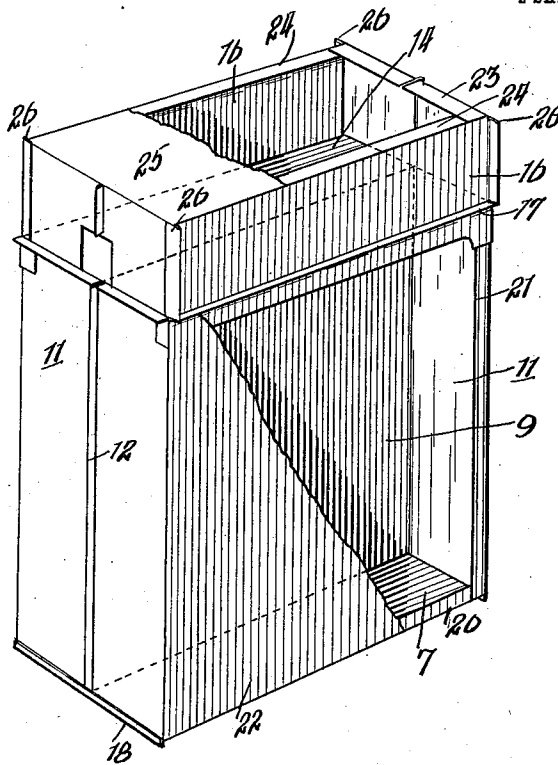
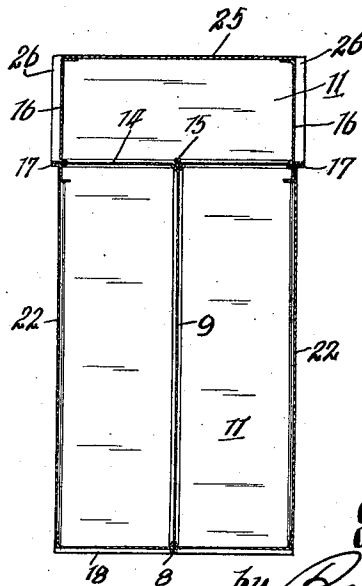


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

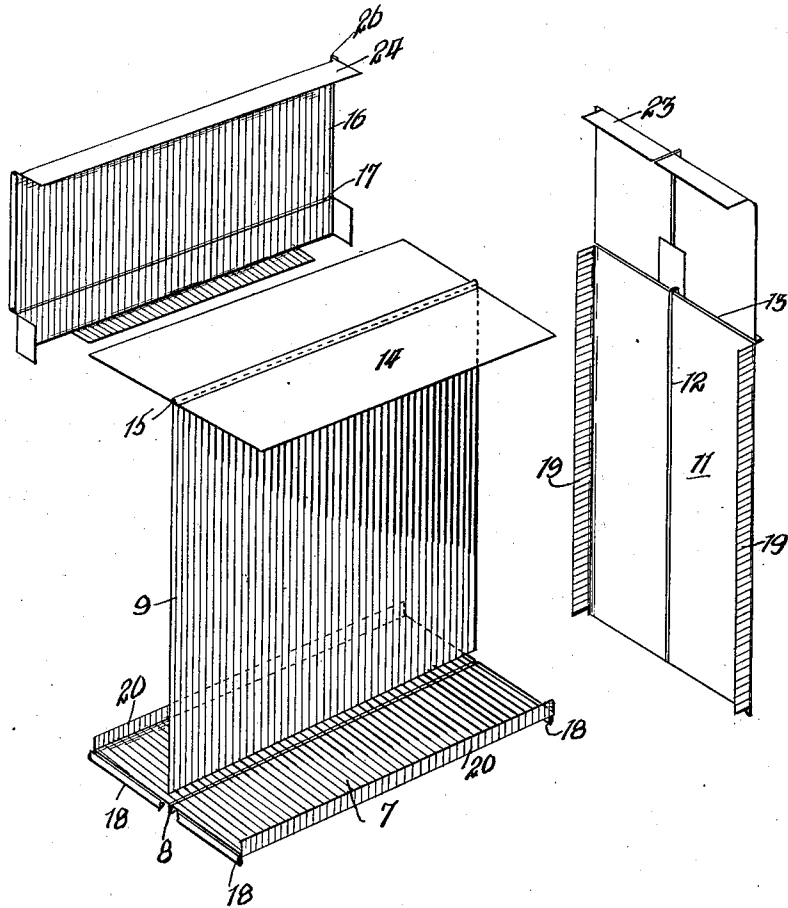


Fig. 4.



Fig. 5.

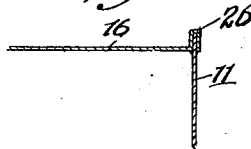
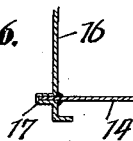


Fig. 6.



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UNITED STATES PATENT OFFICE.

CHARLES B. McDONALD AND CHARLES D. McDONALD, OF CHICAGO, ILLINOIS.

THREE-COMPARTMENT RECEPTACLE.

1,019,010.

Specification of Letters Patent.

Patented Feb. 27, 1912.

Application filed October 16, 1909. Serial No. 522,997.

To all whom it may concern:

Be it known that we, CHARLES B. McDONALD and CHARLES D. McDONALD, both citizens of the United States, and both residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Three-Compartment Receptacles, of which the following is a specification.

The invention relates to a three compartment receptacle especially adapted for use as a receptacle for gas meters although obviously it can be used for other purposes without departing from the spirit of the invention.

The objects of the present invention are, to construct a casing which will be strong and rigid; which will be air tight; whose parts will be formed and assembled almost entirely by machinery, enabling such operation to be performed with great speed; and in which the ordinary course of assembling will render the joints air tight, where so desired.

The invention consists in the features of construction and combination of parts hereinafter described and claimed.

In the drawings, Figure 1 is a perspective of the assembled device, showing the outer side and top plates partly broken away; Fig. 2 a vertical section of the completed device; Fig. 3 a perspective of some of the parts detached and in position for assembling; Fig. 4 a sectional detail showing the manner in which the solder is applied to the edges of the parts; Fig. 5 a sectional detail showing the manner of joining the edges of the side and end walls; and Fig. 6 a sectional detail showing how the horizontal partition is entered into the grooves formed in the side walls of the casing.

The device consists of a base 7 which has formed in its center and running longitudinally thereof a groove 8 into which is entered the lower edge of a plate 9 which forms a vertically extending partition.

The end walls of the casing are composed of companion plates 11 having formed in their centers vertically extending grooves or channels 12 adapted, when the casing is assembled, to register with the groove 8 in the base plate and receive the side edges of the partition plates 9. The end plates 11 have formed at the points where the vertically extending grooves terminate horizontally extending grooves 13 which receive one

edge of a horizontally extending plate 14 which forms the horizontally extending partition of the device. The plate 14 has formed in its center and extending longitudinally thereof a groove or channel 15 which extends in alinement with the groove or channel 8 when the device is assembled, and receives the upper edge of the plate 9, thus the grooves 8, 12 and 15 form, when the casing is assembled, a continuous groove in which the plate 9 forming the vertical partition rests.

The side walls of the casing are formed of companion plates 16 which terminate at a point slightly below the horizontal partition and have formed therein horizontally extending grooves 17 which register, when the casing is assembled, with the horizontally extending groove 13 in the end plates, and the grooves 17 are adapted to receive the longitudinally extending edges of the horizontal partition 14. It will thus be seen that when the casing is assembled the grooves 13 and 17 will form a continuously extending horizontal groove into which the horizontal partition plate is seated.

The edges of the base plate, lying adjacent to the end plates, are bent to form grooved flanges 18 which receive the lower edges of the end plates and are soldered or otherwise secured thereto; and the longitudinally extending edges of the end plates are bent to form flanges 19 which act in conjunction with flanges 20 on the base plate and with the lower edges of the side plates to form an open frame 21, to which are secured outer side plates 22. The upper edges of the end plates are bent to form flanges 23 which act in conjunction with flanges 24 formed on the side faces to form an open frame around the top portion of the casing, to which is attached a top plate 25.

The edges of the plates forming the side walls which lie adjacent to the edges of the plates formed in the end walls are bent back to form grooved flanges 26 into which are entered and clenched the edges of the side pieces.

In preparing the metal for assembling, the edges which are to be fastened are dipped in solder and the solder is permitted to run down their surfaces and form a bead 27. When the casing is assembled, it is then subjected to a heating process known as sweating, which causes the bead of solder to melt and run, forming, at the point where the

two surfaces come together, a seal, rendering the connection air tight. A drop of solder is then placed at the points where the various flanges meet, and the ends thereof
5 secured together, completing the formation of the device.

The method of assembling the device will be understood from the foregoing, but briefly is as follows: The base plate is first
10 positioned and the vertical partition plate 9 seated in the longitudinal groove 8, the edges entering the grooves being first dipped in solder. The horizontal partition 14 is then placed in position, the upper edge of
15 the vertical partition entering the groove 15 of the horizontal partition. The end pieces 11 are next positioned, with the vertical and horizontal grooves therein engaging the adjacent edges of the vertical and horizontal
20 partition plates. The side pieces 16 will then be seated in position, the grooves in said side pieces engaging the edges of the horizontal partition. All seams are then pressed or clenched together, after which
25 the device is ready to be put through the sweating process. After this has been done the ends of the flanges are attached together by a drop of solder and the casing is assembled.

30 It will be clearly seen from the foregoing that the method of forming and assembling the various parts of the casing is almost entirely mechanical, rendering the device very cheap and quick of construction.

35 It will also be seen that when the device is subjected to the sweating operation the bead of solder will run into and congeal along the edges of the continuously extending grooves into which the horizontal partition and the vertical partition are entered,
40 thus making the joints at these points of an air tight nature, and this is accomplished by the same operation that joins the various

parts of the casing together, thus eliminating a second handling of the article to make
45 such seals, which results in a further saving of time and labor in producing a finished article.

We claim:

A three compartment gas meter casing 50 comprising a longitudinally extending partition plate, a transversely extending partition plate, said plates dividing the interior of the casing into two elongated vertically
55 extending chambers and one transversely extending chamber, a base plate, said base and transverse partition plates being provided with grooves to receive the upper and lower edges of said longitudinally extending
60 partition plate, end plates having grooves adapted to receive the side edges of said longitudinal partition plate, and having grooves adapted to receive the side edges of the transverse partition plate, front and
65 rear plates having grooves adapted to receive the front and rear edges of the transversely extending partition plate, said front and rear plates terminating slightly below the transverse partition, and front and rear
70 closure plates, said front, rear, end and base plates being provided with flanges forming a frame work to which said closure plates are secured, and the edges of said partition plates being dipped in solder prior to their
assemblage, substantially as described.

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