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J. C. OLSEN

METHOD OF MAKING PIPE ELBOWS

Filed May 21, 1927

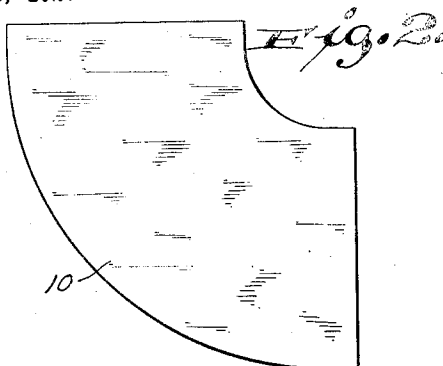
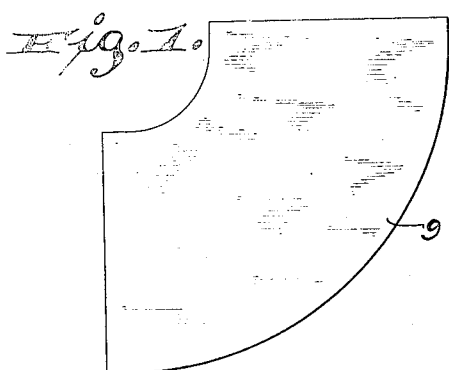


Fig. 3.

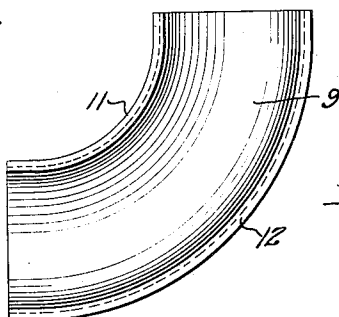


Fig. 4.

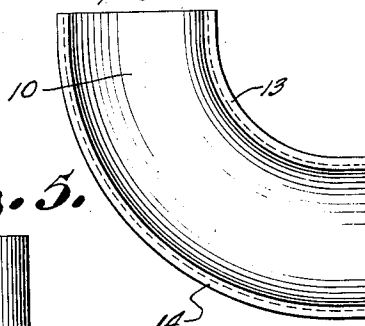


Fig. 5.

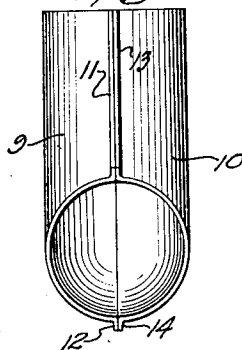


Fig. 6.

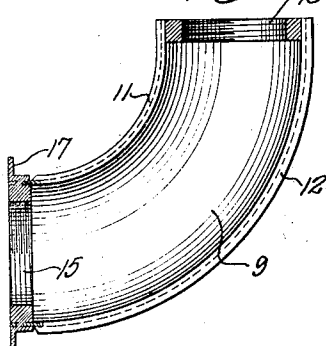
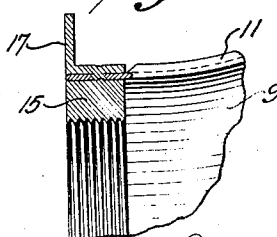


Fig. 7.



INVENTOR.

BY *Julius C. Olsen.*

Morsell, Koeny & Morsell,
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JULIUS C. OLSEN, OF RACINE, WISCONSIN, ASSIGNOR TO WESTERN METAL SPECIALTY CO., OF MILWAUKEE, WISCONSIN, A CORPORATION OF WISCONSIN.

METHOD OF MAKING PIPE ELBOWS.

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This invention relates to improvements in the method of making elbows.

It is the primary object of the present invention to provide a simple and effective method of constructing elbows of sheet metal.

A further object of the invention is to provide a method of constructing elbows in which the elbows so produced are well suited for use with plumbing fixtures and the like.

A further object of the invention is to provide a method of constructing elbows in which the necessity of casting the body portion of the elbow is eliminated.

A further object of the invention is to provide a method of constructing elbows in which the elbows so produced may have an ordinary threaded engagement with pipes or may be readily attached to bell-end drain pipes.

A further object of the invention is to provide a method of constructing elbows which may be carried out in a very inexpensive manner, resulting in a durable sheet-metal elbow.

With the above and other objects in view the invention consists of the improved method of constructing elbows, and the parts and combinations as set forth in the claims, and all equivalents thereof.

In the accompanying drawing in which the same reference characters indicate the same parts in all of the views:

Fig. 1 is a plan view of a sheet-metal blank for one half of the elbow body portion;

Fig. 2 is a similar view of the blank for the other half of the elbow body portion;

Fig. 3 is a view of the portion shown in Fig. 1 after being shaped;

Fig. 4 is a similar view of the portion shown in Fig. 2;

Fig. 5 is an end view of the elbow sections connected;

Fig. 6 is a longitudinal sectional view of the completed elbow with the end castings secured therein; and

Fig. 7 is an enlarged fragmentary sectional view of one end portion of the elbow.

In carrying out the improved method of making elbows a pair of complementary blanks 9 and 10, of curved shape, are cut from sheet metal, as shown in Figs. 1 and 2. The members or blanks 9 and 10 are then pressed or shaped in a semicircular form in cross-section, as shown in Figs. 3 and 4, with outwardly flanged edges 11, 12, 13, and 14.

The complementary shaped sections 9 and 10 are then positioned together with the adjacent flanges in juxtaposition, as shown in Fig. 5, and the sections are welded or seamed together along the adjacent flanges, forming a unitary elbow portion of circular form in cross-section.

To finish the elbow a ring-like casting, internally threaded, is welded within each end portion of the elbow, as at 15 and 16. Also one end portion of the elbow has welded thereabout exteriorly of the ring a circular cast flanged or angled member 17.

The elbow as thus constructed may be used with pipes of all characters, and ordinary pipes are connected by being threaded into the ring-like castings 15 and 16; while if it is desired to connect one end portion of the elbow with a drain pipe having a bell end, the end carrying the circular flanged member 17 is inserted into the bell end and the member 17 is cemented therein.

It will thus be seen that the improved method provides for the provision of a very simple and inexpensive elbow which may be used for connection either with iron pipes or vitrified drain tiles.

What is claimed as the invention is:

1. The method of making elbows which consists of shaping a pair of curved complementary sheet-metal blanks into semicircular form in cross-section, uniting said shaped members with their adjacent edges overlapped and welded to form a unitary curved tubular member, securing threaded cast ring members within both end portions of the tubular member, and securing a cast flanged ring member externally to one end portion of the tubular member.

2. The method of making elbows which consists of cutting a pair of complementary

sheet-metal blanks in curved shapes, pressing said blanks into semicircular shapes in cross-section to form elbow sections, flanging the side edge portions of said sections, 5 uniting said sections with their flanged edges adjacent each other and welded to form a unitary curved tubular member,

welding internally threaded ring castings within both end portions of the tubular member, and welding a circular flanged casting to the exterior of one end portion of the tubular member. 10

In testimony whereof, I affix my signature.

JULIUS C. OLSEN.