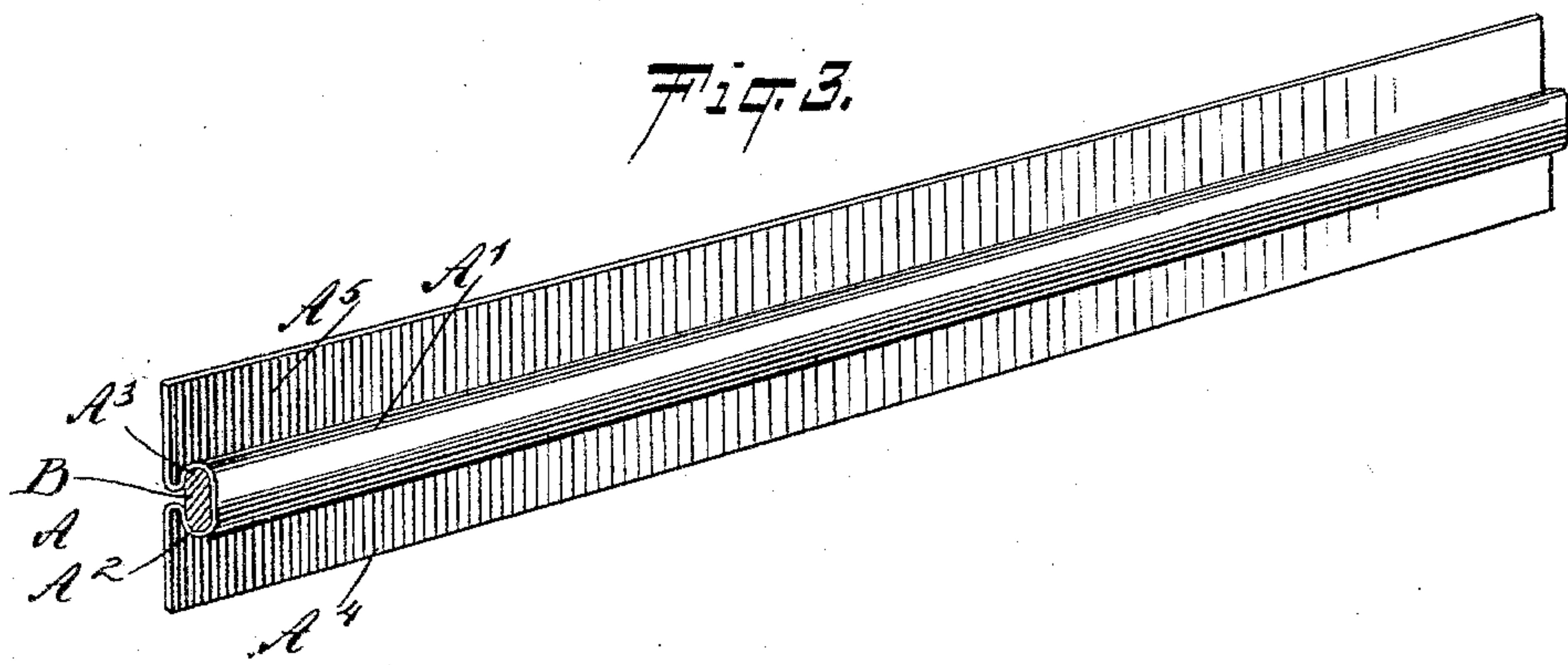
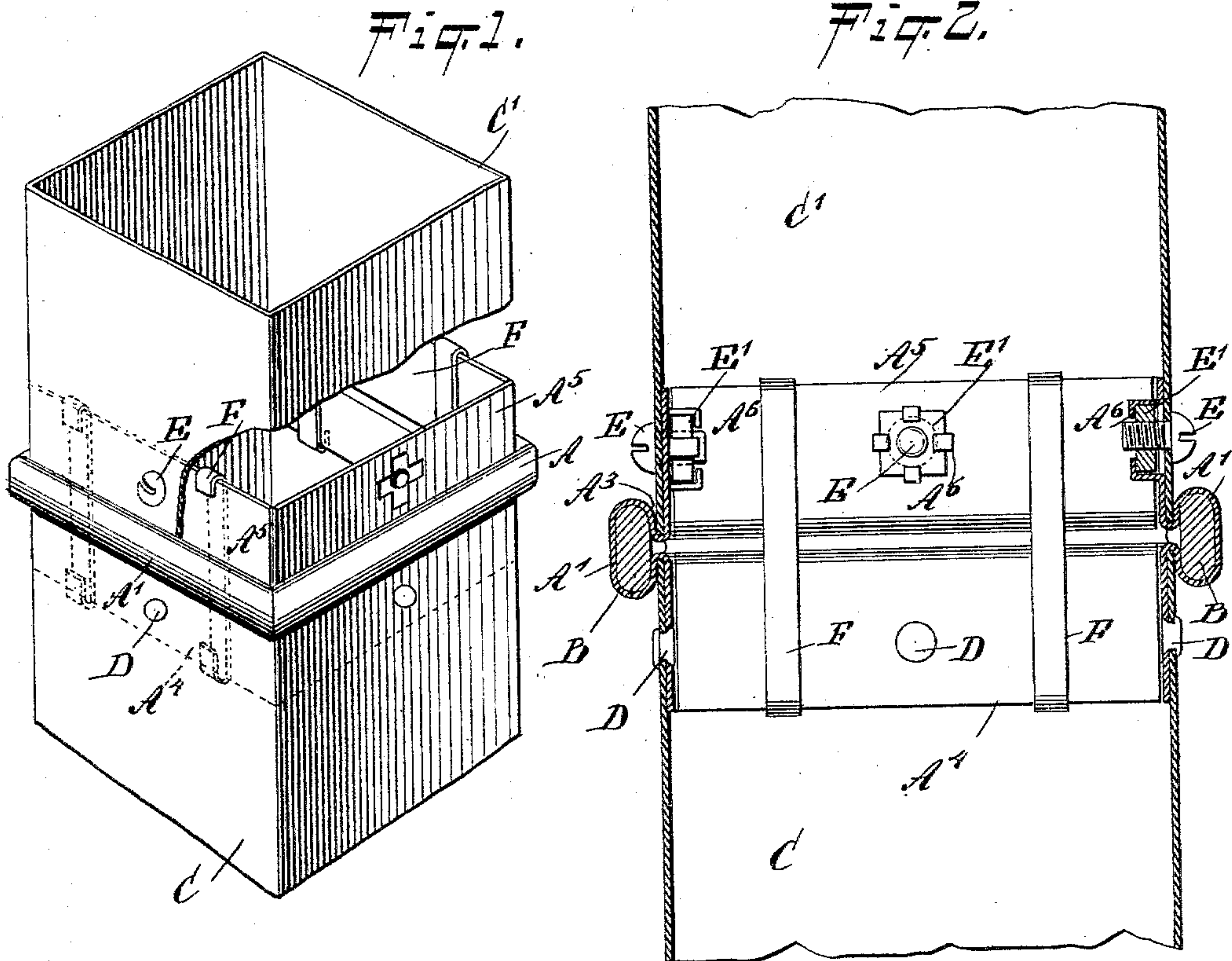


(No Model.)

E. J. MALLEN.
PIPE COUPLING.

No. 596,817.

Patented Jan. 4, 1898.



WITNESSES:

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EDWARD J. MALLIN, OF NEW YORK, N. Y.

PIPE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 596,817, dated January 4, 1898.

Application filed September 14, 1897. Serial No. 651,614. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. MALLIN, of New York city, in the county and State of New York, have invented a new and Improved Pipe-Coupling, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved pipe-coupling more especially designed for pipes having flat sides, the coupling being arranged to firmly connect the ends of the pipe-sections with each other to form a stiff air-tight joint and to give an ornamental appearance to the pipe.

The invention consists principally of a strip of sheet metal formed at or near its middle with a pocket for the reception of a filling, preferably of wood, the ends of the strip being adapted to be engaged by the sides of the pipe and the inner sides of the pockets, forming with the ends of the strip receiving-grooves for the ends of the pipe sides to be jointed.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improvement as applied and with parts broken out. Fig. 2 is an enlarged sectional side elevation of the same, and Fig. 3 is a sectional perspective view of the blank for forming the coupling.

In order to form the coupling, I construct a blank of suitable length to be cut into pieces according to the width of the side of the pipe or duct on which the coupling is to be used. This blank is provided with a strip A, preferably of sheet metal, and of a suitable length, with the middle portion bent over a filling B, preferably in the form of a stick of wood, so that the bent-over portion forms a pocket A' for the said filling and the inner sides A² A³ of the pocket form longitudinal receiving-grooves with the ends A⁴ A⁵, respectively, of the strip of sheet metal, as plainly indicated in the drawings. The blank thus formed in certain lengths, say of eight or nine feet, is cut in a miter-box into pieces

of a length corresponding to the sides of the pipe or duct, the sections C C' of which are to be jointed. Each piece thus cut from a blank is inserted with its end A⁴ into the pipe-section C and fastened by a rivet D to the side of the said section, with the upper end of the side in engagement with the groove formed between the pocket side A² and the end A⁴. The other section C' to be jointed is passed over the end A⁵ to engage with the ends of its sides the several grooves between the pocket side A³ and the end A⁵. A bolt E is now passed through registering apertures in the sides of the sections C C' and the ends A⁵ for fastening the parts in place and completing the pipe-joint.

Now it is evident that by the arrangement described the ends of the sides of the pipe-sections C C' engage the oppositely-arranged grooves in the coupling-pieces, so that an airtight stiff joint is obtained.

The nut E' of each bolt E is preferably contained in a nut-lock A⁶, formed by lugs struck out of the ends A⁵ and bent over at their inner ends upon the inner face of the nut to securely hold the same in place, as will be readily understood by reference to Fig. 2. By this arrangement the bolt E can be readily passed through the registering apertures of the section sides and ends A⁴ A⁵ to screw in the nuts held stationary in the nut-locks.

I do not limit myself to the nut-lock described, as it is evident that other nut-locks may be employed for the same purpose.

For very large pipes or ducts I prefer to employ locking-strips F, having their ends bent over to engage the top and bottom of the ends A⁵ A⁴, respectively, to prevent the coupling-pieces from undue spreading apart upon heating the duct or pipe.

As the ends A⁴ A⁵ of the coupling-strips extend on the opposite sides of the pipe-sections and only the raised pocket A' is visible on the outside of the pipe or duct, it is evident that a very fine appearance is given to the pipe, as the ends of the pipe-sections are completely hidden from view.

The filling B is not absolutely necessary, but is especially serviceable for couplings used on large pipes and ducts to prevent the coupling from sagging and to insure a stiff and air-tight joint.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A pipe-coupling provided with a strip of sheet metal, formed at or near its middle with a pocket for the ends of the strip to be engaged by the sides of the pipe or duct, and with the inner sides of the pockets forming with the said ends, receiving-grooves for the ends of the pipe sides, substantially as shown and described.

2. A pipe-coupling, comprising a strip of sheet metal for each side of the pipe or duct on which the coupling is to be made, each strip being formed at or near its middle with an outwardly-extending pocket, for receiving a filling, the inner sides of the pockets forming with the ends of the strips, receiving-grooves for the ends of the sides of the pipe-sections to be jointed, with the ends of the strip opposite the pipe-sections, substantially as shown and described.

3. A pipe-coupling, comprising a strip of sheet metal for each side of the pipe or duct on which the coupling is to be made, each strip being formed at or near its middle with an outwardly-extending pocket for receiving a filling, the inner sides of the pockets forming with the ends of the strips receiving-grooves for the ends of the sides of the pipe-

sections to be jointed with the ends of the strip opposite the pipe-sections, means for permanently connecting one end of each strip to the corresponding side of the pipe-section, and means for removably connecting the other end to the corresponding side of the other pipe-section, as set forth.

4. A pipe-coupling, comprising a strip of sheet metal for each side of the pipe or duct on which the coupling is to be made, each strip being formed at or near its middle with an outwardly-extending pocket for receiving a filling, the inner sides of the pockets forming with the ends of the strips, receiving-grooves for the ends of the sides of the pipe-sections to be jointed, with the ends of the strip opposite the pipe-sections, means for permanently connecting one end of each strip to the corresponding side of the pipe-section, means for removably connecting the other end to the corresponding side of the other pipe-section, and locking-strips for engaging the ends of each strip to the top and bottom edges, to prevent undue expansion thereof, substantially as shown and described.

EDWARD J. MALLIN.

Witnesses:

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