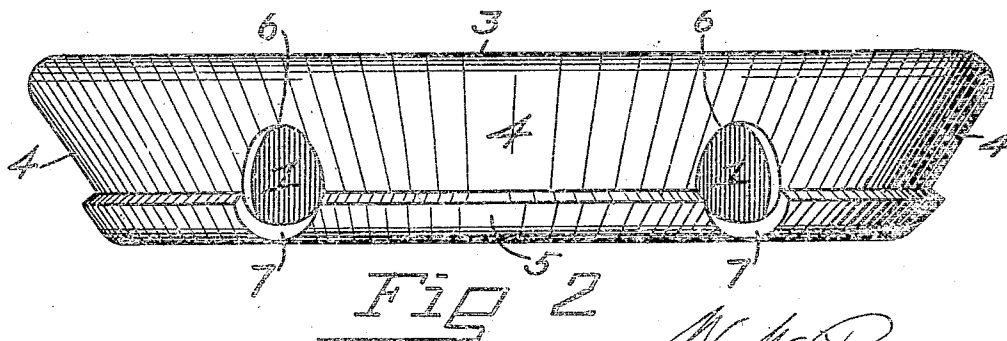
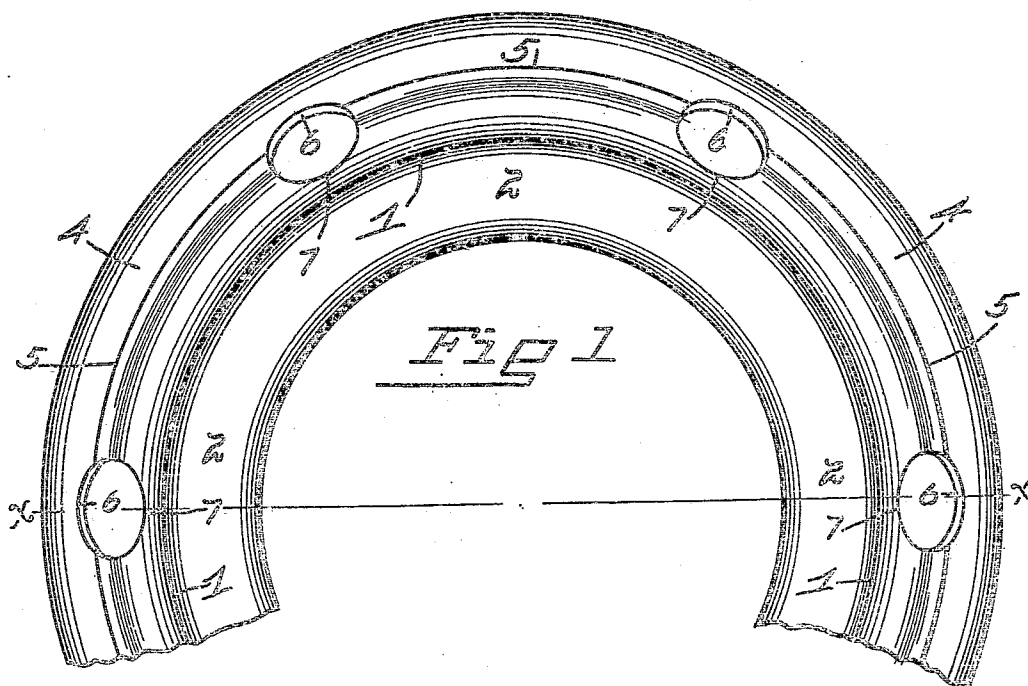




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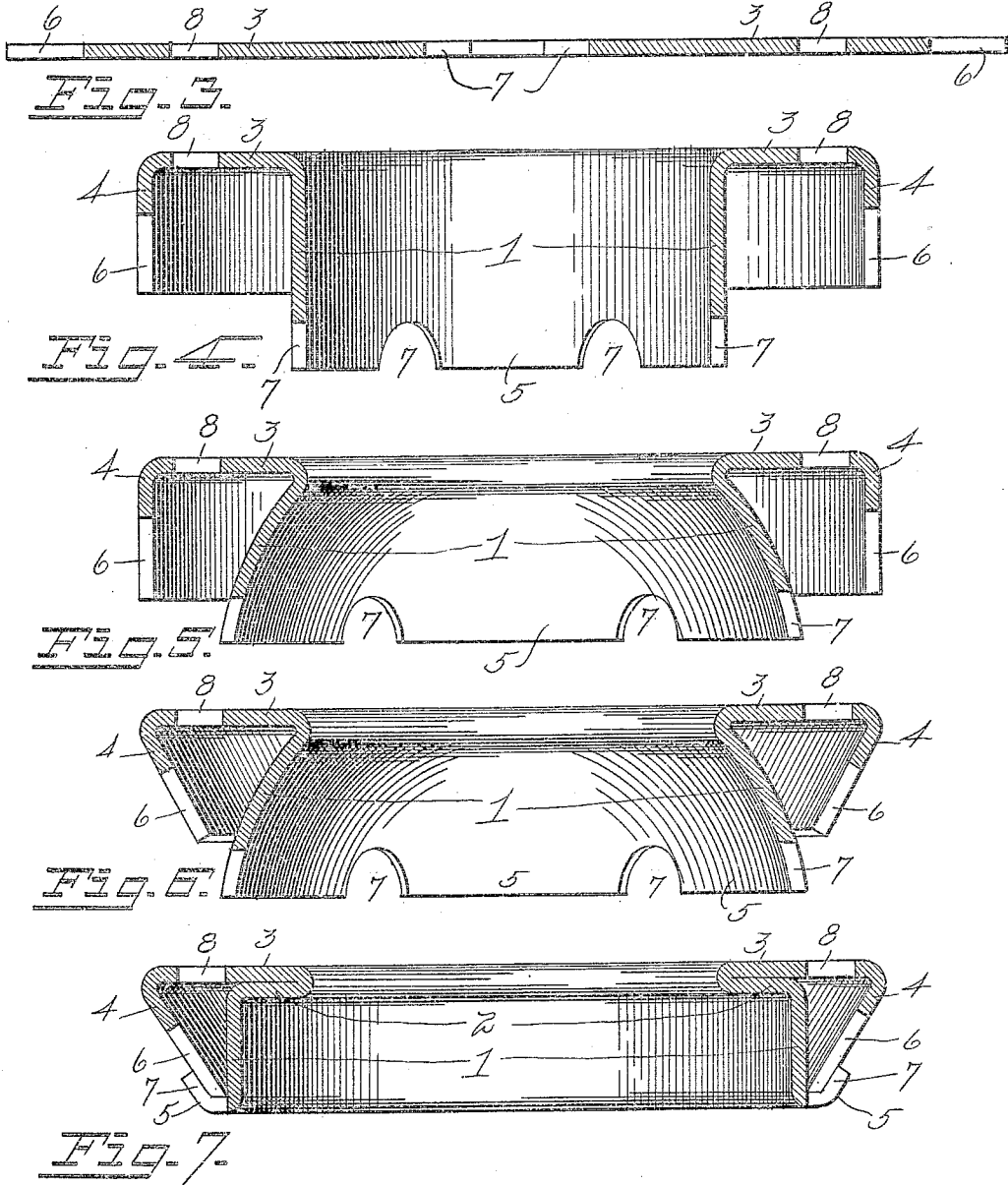
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W. W. PRICE.
CLAMPING RING FOR PIPE COUPLINGS.
APPLICATION FILED JUNE 28, 1906.

953,799.

Patented Apr. 5, 1910.

2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

WILLIAM W. PRICE, OF DAYTON, OHIO.

CLAMPING-RING FOR PIPE-COUPPLINGS.

953,799.

Specification of Letters Patent.

Patented Apr. 5, 1910.

Application filed June 28, 1906. Serial No. 323,928.

To all whom it may concern:

Be it known that I, WILLIAM W. PRICE, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Clamping-Rings for Pipe-Couplings; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in clamping-rings for couplings used on underground pipe joints.

The invention consists in the construction of a clamping ring having the structural characteristics hereinafter described and claimed. The clamping ring is formed of a single blank of sheet-metal, such for example as boiler-plate, which is acted upon by suitable coöperating dies to provide a clamping ring having a maximum amount of strength, and the manufacture of which is reduced in cost and labor to a minimum.

My improved clamping-ring is illustrated in the accompanying drawings, in which—

Figure 1 is a bottom plan view of the completed ring, a portion of which is broken away. Fig. 2 is an elevation of the clamping-ring completed. Fig. 3 is a cross-sectional view of the blank used in forming the ring. Fig. 4 is a view showing the first operation of bending the blank. Fig. 5 illustrates the second operation; Fig. 6 the third operation; Fig. 7 the fourth and last operation, which shows the completed ring and which is a cross-sectional view on the line $x-x$ of Fig. 1.

In the specification and drawings similar reference characters indicate corresponding parts.

The clamping-ring is constructed from a single blank of sheet-steel or boiler-plate of suitable uniform thickness. The blank is first punched to provide the necessary dimensions and bolt holes for the finished product. The said blank when thus punched, consists of a flat ring as shown in Fig. 3, the inner circumference of which is provided with bolt-recesses 7, the outer circumference of which is provided with a series of bolt-recesses 6, and the intermediate

portions with a series of holes 3. When the blank is formed by the engagement of suitable dies, the recesses 6 and 7, and the holes 3 register with each other and provide a series of bolt holes through which bolts may pass when the ring is in position on the pipe. When the blank is subjected to the first operation, the outer and inner edges thereof are bent at right angles as shown in Fig. 4, which operation forms an outer wall 4 and an inner wall 1. In the second operation the inner wall 1 is given a curvature, as shown in Fig. 5. In the third operation the outer wall 4 is bent at an angle, as shown in Fig. 5. In the fourth operation, which is the last to which the blank is subjected, the inner wall 1 is bent at a right angle to form a flange 2, the outer wall 4 is bent inwardly to engage the wall 1, and the lower edge 5 of the wall 1 is bent around the lower edge of the outer wall 4, as shown in Fig. 7.

The blank thus formed consists of an annular wall or flange 1 one edge of which extends inwardly to form a flange 2 which reduces the inner opening of the ring through which the pipe passes. The flange 2 is joined to a flange 3 which extends outwardly beyond the body or wall 1 where it is provided with bolt holes 8. Attached to the outer edges of the flange 3 is the annular wall 4 which is bent inwardly and the free edge of which engages the inner wall 1. The wall 4 forms a brace for the flange 3. The free edge of the wall 1 is provided with a flange 5 which encircles the free edge of the wall 4 and clamps the same. When the blank is thus given its form the resulting ring consists of a most rigid and strong structure.

I claim:

1. A clamping ring for pipe couplings formed from a single blank of sheet-metal and consisting in its entirety of an inner annular wall, and an outer annular wall, the said walls being integrally joined at one end by a laterally disposed intervening flange having a multiplicity of bolt holes, and locked at the other end by an abutting annular overlapping flange which extends from that end of the inner wall.

2. A clamping ring formed of sheet-metal bent to provide an inner annular wall and an outer annular wall intersecting said inner annular wall at one end and locked by an out-turned flange projecting from

said inner wall, the other end of said outer
annular wall being integrally joined to that
end of the inner wall by a laterally extend-
ing annular flange, said laterally extending
5 annular flange overlapping an in-turned por-
tion of the inner wall and reducing the pipe
opening at one end of the ring.

In testimony whereof I affix my signature,
in presence of two witnesses.

WILLIAM W. PRICE.

Witnesses:

R. J. McCARTY,
C. M. THEOBALD.