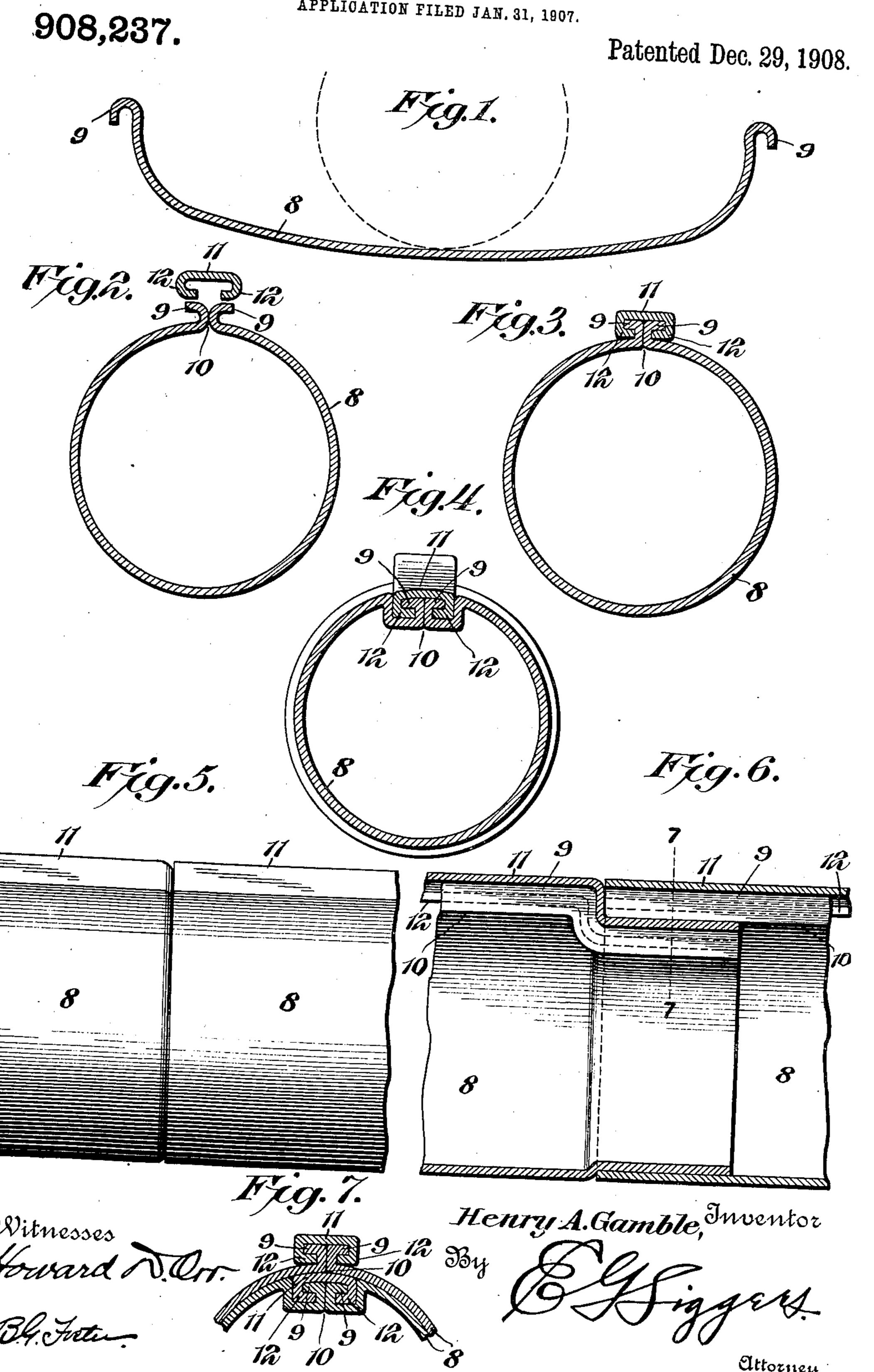
H. A. GAMBLE.

PIPE.

APPLICATION FILED JAN. 31, 1907.



TTED STATES PATENT OFFICE.

HENRY ARTHUR GAMBLE, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF ONE-HALF TO EUGENE WIET, OF SAN FRANCISCO, CALIFORNIA.

PIPE.

No. 908,237.

Specification of Letters Patent.

Patented Dec. 29, 1908.

Application filed January 31, 1907. Serial No. 355,178.

To all whom it may concern:

Be it known that I, HENRY A. GAMBLE, a citizen of the United States, residing at San Francisco, in the county of San Fran-5 cisco and State of California, have invented a new and useful Pipe, of which the following is a specification.

This invention relates more particularly to

sheet metal pipes.

One of the principal objects is to produce a strong sheet metal pipe that can be employed for conveying steam, water or other material, the method of construction being such that said pipes may be provided with coacting 15 ends respectively having smooth exterior and interior faces, the construction moreover contracting portions of the pipe so that the contracted portion of one pipe may be fitted into another pipe.

20 Referring to the accompanying drawings:—Figure 1 is a sectional view through a body blank of a sheet metal pipe. Fig. 2 shows said blank bent to tubular form, and illustrates the form of keeper employed. Fig. 25 3 is a similar view but showing the keeper in-

terlocked with the body. Fig. 4 is a sectional view through the contracted end of a completed pipe. Fig. 5 is a side elevation of the end portions of two interfitted pipes. Fig. 6 30 is a longitudinal sectional view through the same. Fig. 7 is a detail cross sectional view on the line 7—7 of Fig. 6.

Similar reference numerals designate corresponding parts in all the figures of the

35 drawings.

In carrying out the invention, a metal sheet 8 is employed, and oppositely disposed outstanding hooks 9 are formed at its opposite side margins. The sheet is then bent to 40 tubular form so that the hooks are in abut- | tially smooth interior face, the former being ting relation and produce a longitudinal joint 10 between them.

A keeper strip 11 bridges the joint, and has oppositely extending marginal hooks 12 that 45 are interlocked with the hooks 9, as clearly shown in Fig. 3. Thus a pipe or pipe section is produced having a longitudinally disposed raised seam. In the form of construction shown, one end portion of this seam is forced 50 into the body so that the outer face of the corresponding portion of the strip 11 is substantially flush with the outer face of the

tubular body, while the interlocked hooks are inset within the body. This results in the contraction of the end portion of the 55 pipe, as will be evident by reference to Figs. 4 and 6. Moreover, it results in a pipe having one full sized end with a substantially smooth interior face, and a contracted end with a substantially smooth exterior face. The 60 contracted end is such that it can be fitted snugly within the full sized end of an adjacent pipe, as shown in Figs. 5 and 6.

In order to thoroughly seal the joints and prevent the rusting of the pipes, after their 65 construction, the same may be galvanized if desired, thereby soldering or sealing all the

ioints.

Having thus fully described my invention, what I claim as new, and desire to secure by 70

Letters Patent, is:—

1. As an article of manufacture, a pipe comprising a sheet metal body having a joint, and a keeper strip bridging the joint and interlocked with the margins of the body on 75 opposite sides of the joint, forming a seam, one end portion of the seam outstanding from the body a distance equal to the combined thickness of the interlocked hooks and strips, leaving one end with a smooth inte- 80 rior face and the other end portion being inset within the body a distance equal to the combined thickness of the hooks and strip, leaving a smooth exterior face.

2. As an article of manufacture, a pipe com- 85 prising a sheet metal body having a seam, one end portion of said seam outstanding from the body, and the other end portion being inset within the body, one end of said pipe having a substantially smooth exterior 90 face, and the other end having a substanof less diameter than the latter by the contraction of said end due to the insetting of the seam.

3. As an article of manufacture, a pipe comprising a sheet metal body having a joint, and outstanding marginal hooks on opposite sides thereof, and a keeper strip bridging the joint and having marginal hooks interlocked 100 with the hooks of the body, the portions of the said interlocked hooks at one end of the body being inset into the pipe a distance equal to the combined thickness of the interlocked hooks and strips, with the corresponding end of the keeper strip having its outer face flush with the outer face of the body to provide a contracted end having a smooth 5 exterior face that will fit into the full sized end of a corresponding pipe.

In testimony, that I claim the foregoing as

my own, I have hereto affixed my signature in the presence of two witnesses.

HENRY ARTHUR GAMBLE.

Witnesses:

E. PAYNE, CHAS. McDonnell.