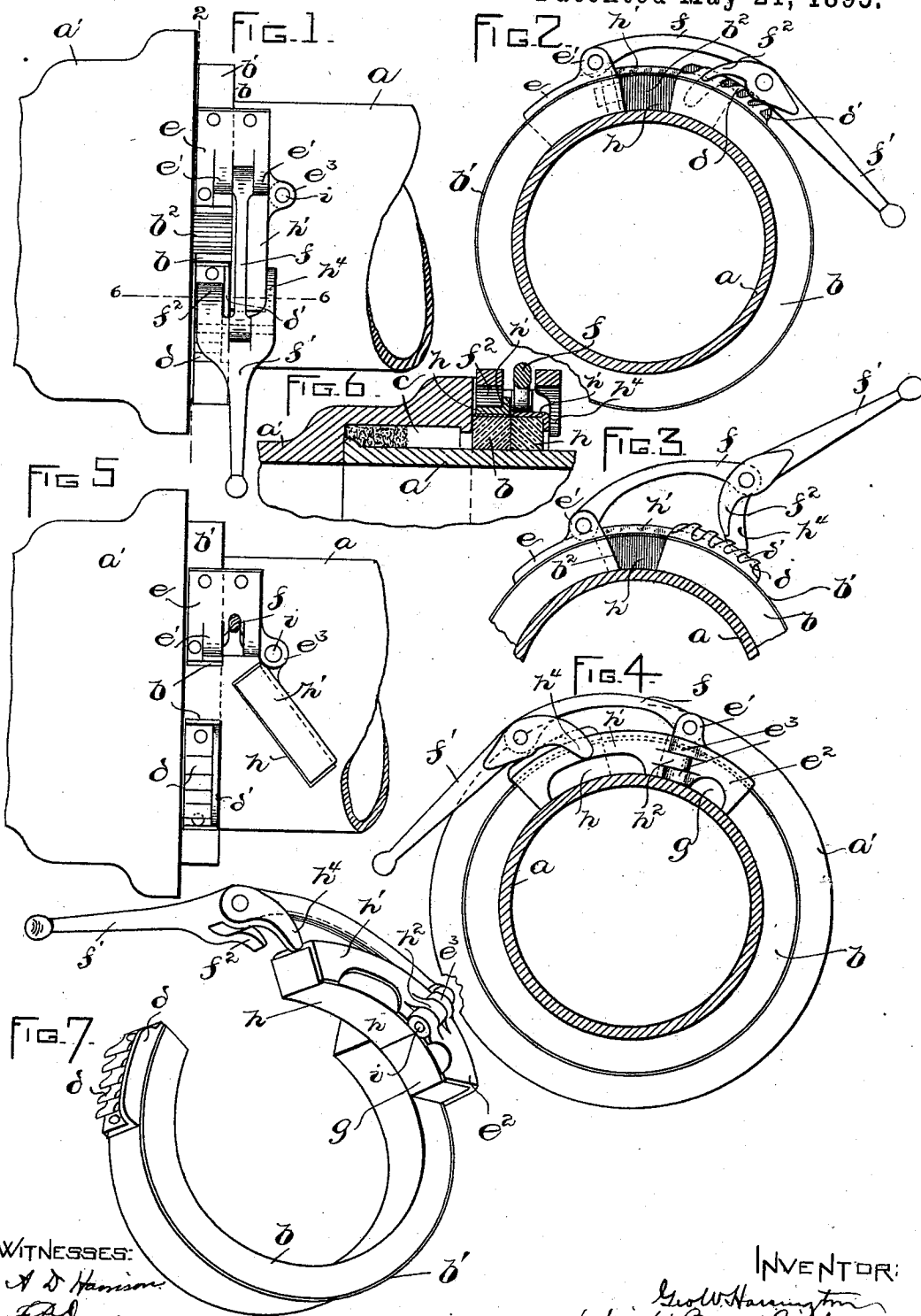


(No Model.)

G. W. HARRINGTON.
PIPE JOINTER.

No. 539,617.

Patented May 21, 1895.



WITNESSES:
A D Harrison.
F. Davis.

INVENTOR:
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UNITED STATES PATENT OFFICE.

GEORGE W. HARRINGTON, OF WAKEFIELD, MASSACHUSETTS, ASSIGNOR TO
THE LEAD LINED IRON PIPE COMPANY, OF MAINE.

PIPE-JOINTER.

SPECIFICATION forming part of Letters Patent No. 539,617, dated May 21, 1895.

Application filed November 22, 1894. Serial No. 529,614. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. HARRINGTON, of Wakefield, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Pipe-Jointers, of which the following is a specification.

The present invention relates to that class of devices known as pipe-jointers which are employed in filling the joints of metal pipes at places where the spigot end of the pipe is entered in the bell-end of a pipe. Pipe-jointers as commonly employed consist in a clip formed of a thick band of rubber which is clamped around the pipe by suitable means, leaving a space between its ends for the insertion of the molten lead which is used in the joint. A gate or dam overlaps the ends of the rubber clip on the outer side and is fastened at one end to the said clip, this gate or dam closing the opening between the ends of the clip on the outside. The gate or dam is an important element of the device and necessary to its successful operation. It has been found heretofore that this gate or dam becomes burned out on the inner side by reason of the molten lead entering between the gate and the outer side of the clip. It is the purpose of my invention to overcome this difficulty by an improved construction of gate or dam and means for holding the same closely against the outer side of the clip.

To this end the invention consists in the novel constructions and combinations of parts recited in the appended claims.

In the accompanying drawings, which illustrate an embodiment of the invention, Figure 1 shows the pipe-jointer and the ends of the two pipes in top plan. Fig. 2 shows the pipe-jointer in side elevation, with the spigot-pipe in section, the view being taken on the line 2 2 of Fig. 1 and the jointer being shown as locked. Fig. 3 shows a similar view to Fig. 2 with the pipe-jointer unlocked. Fig. 4 shows the pipe-jointer in front elevation or as viewed from the side opposite that seen in Fig. 2. Fig. 5 shows a view somewhat similar to Fig. 1, with the gate or dam thrown open and the compound clamping-lever broken away. Fig.

6 shows a section on the line 6 6 of Fig. 1. Fig. 7 shows a perspective view of the improved pipe-jointer represented as open.

The letter, *a*, designates the spigot end of a pipe, and *a'*, the bell-end of another pipe, which two pipes are to be jointed by the use of my improved device of the following description.

A thick band, *b*, of rubber or other suitable material, bound on the outer side, as usual, with a metal strip, *b'*, is adapted to embrace the pipe, *a*, leaving a space, *b²*, between the end, into which space the molten lead is poured and from which space the molten lead finds its way into the annular cavity, *c*, between the pipes. A ratchet rack, *d*, is fastened on the outer side of the clip, *b*, at one end of the same and the base casting of said rack is formed with a guard flange, *d'*, along the teeth for the purpose of preventing disengagement from said teeth of a dog or pawl, presently to be described, by a lateral movement of said dog or pawl. A casting, *e*, is secured on the outer side of the clip at the opposite end and is formed with joint-ears, *e'*, between which there is pivoted one end of one member, *f*, of a compound clamping lever, the other member, *f'*, of which constitutes a hand-lever and is formed with a tooth or dog, *f²*, for engagement with the rack, *d*. It will be seen that by throwing up the hand-lever, *f'*, as shown in Fig. 3, and engaging it with a tooth of the rack, *d*, and then pressing said lever inward, the clip, *b*, will be drawn tightly around the pipe, *a*, and so locked.

Fastened on the outer side of the clip, *b*, a short distance back from the end thereof having the casting, *e*, there is a block, *g*, and the said casting is extended laterally so as to cover said block, and is also formed with an angular part, *e²*, which covers the front of the block and is formed with joint-ears, *e³*, forming part of a hinge, as will presently appear.

The letter, *h*, designates the gate or dam which is designed to fit closely against the block, *g*, at one end, overlapping the outer side of the clip, *b*, at this end. An angular casting, *h'*, covers the upper and outer sides of said gate or dam, and on the outer side of

said casting there is formed a joint-ear, h^2 , which fits between the joint-ears, e^3 . A pin-
 5 tle i , extends through the said joint-ears and completes the hinge. When the device is ap-
 plied to the pipe, the gate, h , overlaps the op-
 10 posite end of the clip, b , also, as shown, and closes the outer side of the opening, b^2 . The following construction is employed to hold
 said gate closely against the clip. The hand-
 15 lever, f' , is formed with a lip, h^4 , which takes over the outer side of the gate, and by bearing against the casting, h' , holds the said gate closely against the clip. Thus entrance of
 the molten lead between the gate and the
 20 outer side of the clip is obviated. By throwing the hand-lever, f' , up, as shown in Fig. 3, and lifting the compound lever, the gate is released and can then be thrown open, as shown in Fig. 5.

20 What I claim as my invention is as follows:

1. A pipe-jointer comprising a clip to embrace the pipe, a pivotal gate or dam on said clip and arranged to overlap the ends of the same, and clamping means for tightening the

clip and holding the gate closed against the 25 clip.

2. A pipe-jointer comprising a clip to embrace the pipe, a gate or dam overlapping the ends of the clip, and a clip-clamping-lever having an extension to bear against the outer 30 side of the gate and hold it closed.

3. A pipe-jointer comprising a clip to embrace the pipe, a gate or dam hinged to the clip and arranged to overlap both ends of the same, a bearing on one end of the clip, a rack 35 on the other end and a compound clamping-lever having one member hinged to the afore-said bearing and the other formed with a dog to engage the rack and with a lip to take over the outer side of the gate. 40

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 19th day of November, A. D. 1894.

GEORGE W. HARRINGTON.

Witnesses:

A. D. HARRISON,
 ROLLIN ABELL.