

No. 775,781.

PATENTED NOV. 22, 1904.

H. G. SCHRAMM.

GAS HEATING ATTACHMENT FOR RANGE BOILERS.

APPLICATION FILED APR. 7, 1903.

NO MODEL.

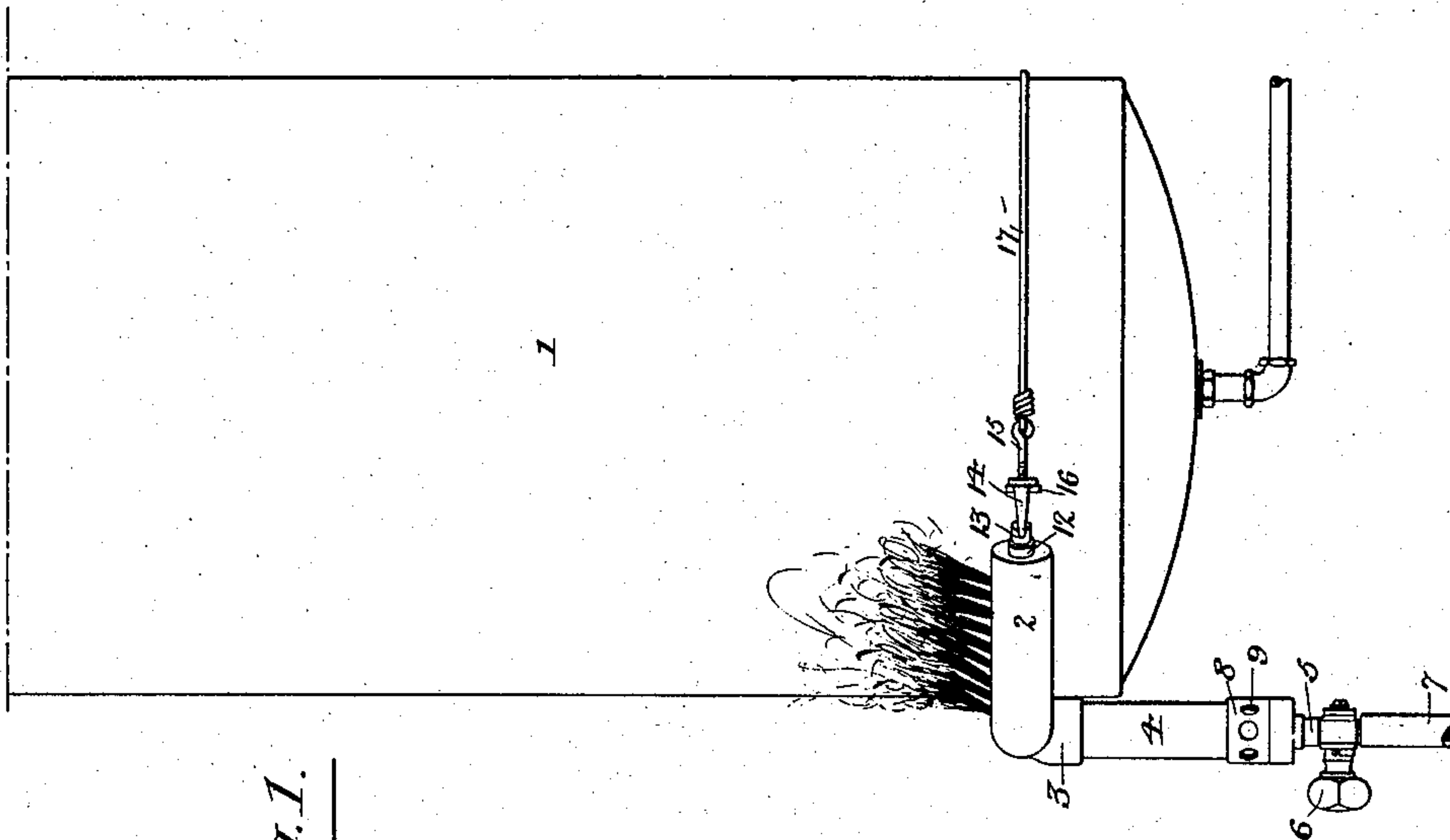


Fig. 1.

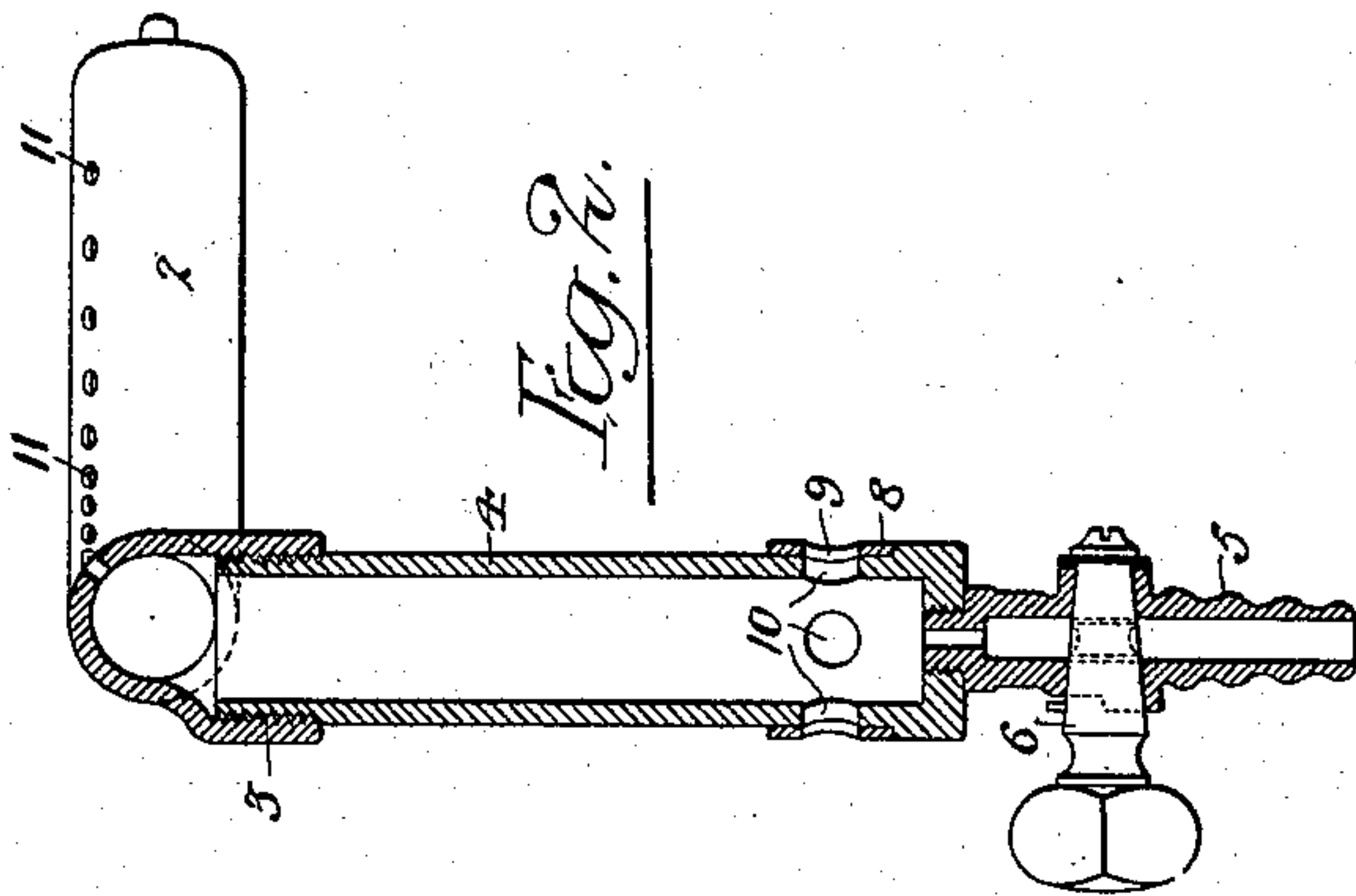


Fig. 2.

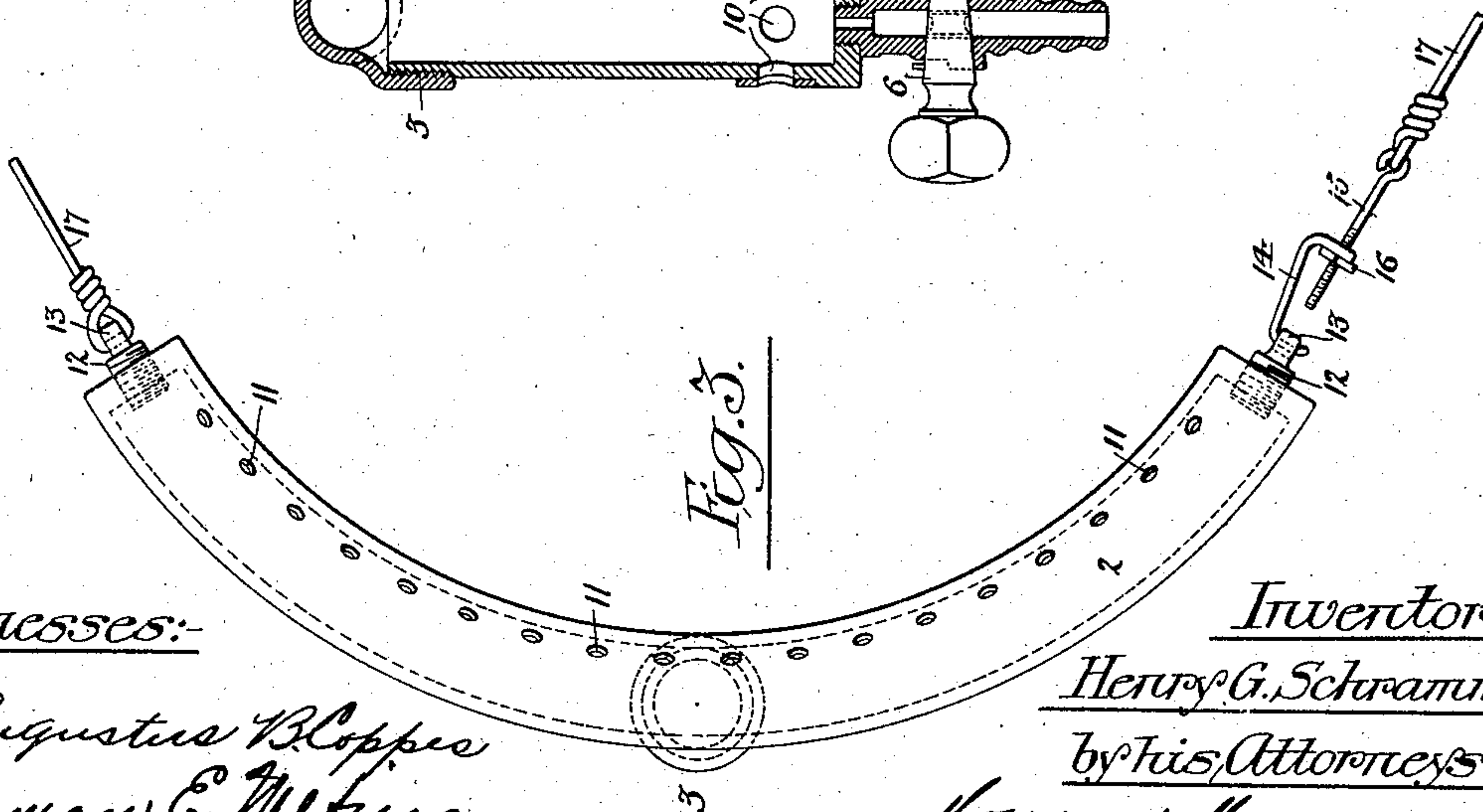


Fig. 3.

Witnesses:

*Augustus Blopper
Herman E. Metrus.*

Inventor:

Henry G. Schramm

by his Attorneys;

Howson & Howson

UNITED STATES PATENT OFFICE.

HENRY G. SCHRAMM, OF CAMDEN, NEW JERSEY.

GAS-HEATING ATTACHMENT FOR RANGE-BOILERS.

SPECIFICATION forming part of Letters Patent No. 775,781, dated November 22, 1904.

Application filed April 7, 1903. Serial No. 151,484. (No model.)

To all whom it may concern:

Be it known that I, HENRY G. SCHRAMM, a citizen of the United States, residing in Camden, New Jersey, have invented certain Improvements in Gas-Heating Attachments for Range-Boilers, of which the following is a specification.

The object of my invention is to provide a simple, cheap, and efficient form of gas-heating attachment for range-boilers, an object which I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of part of a vertical range-boiler with my improved gas-heating attachment applied thereto. Fig. 2 is an enlarged vertical section of said attachment, and Fig. 3 is a plan view of the same.

In Fig. 1 of the drawings, 1 represents the lower portion of a vertical range-boiler, and 2 a pipe curved to conform to the boiler-shell, said pipe 2 having a projecting and internally-threaded boss 3, into which is screwed the upper threaded end of a depending vertical tube 4, having at its lower end a projecting nipple 5, which is provided with a cock or valve 6, whereby flow of gas through the same may be regulated, this nipple being intended to be connected, by means of a flexible pipe 7, with any adjacent gas-burner. The lower end of the tube 4 is shouldered for the support of a valve-ring 8, having therein openings 9, which can be caused to register with openings 10 in the tube 4 or can be moved more or less out of register therewith, so as to regulate the amount of air entering the tube 4 for combination with the jet of gas which is projected into the lower portion of said tube from the upper end of the nipple 5, the mixture of air and gas ascending in the tube 4 entering the curved tube 2 and escaping therefrom through openings 11, so as to impinge upon the shell of the boiler 1, as shown in Fig. 1. Each end of the pipe 2 has screwed into it a plug 12 with eye 13, and the eye of one of these plugs receives a link 14, to which is connected a hooked rod 15, said rod being threaded for the reception of a nut 16, which presses upon the head of the link, so that the rod 15 can be adjusted longitudinally in respect to said link.

The burner is secured to the shell of the boiler 1 by means of a wire 17, which passes round the boiler and has one end secured to the hooked rod 15 and the other end to the eye 13 of the plug 12 at the opposite end of the burner-tube 2, the adjustability of the rod 15 permitting this wire to be drawn tight, so as to firmly retain the burner in its proper position upon the boiler-shell.

The device described constitutes a cheap and effective form of burner for direct application to a range-boiler, the simplicity of the attachments whereby it is secured in place upon the boiler rendering it unnecessary to employ any skilled labor in setting the burner.

The burner-pipe 2 may comprise any desired segment of a circle, depending upon the amount of heat which it is desired to apply to the boiler.

By reason of the ready adjustability of the burner upon the boiler it may be applied to the same at any desired point in its length, so that any desired fractional portion of the total volume of water in the boiler may be heated—as, for instance, when it is desired to heat a small body of water, in which case the burner can be adjusted as nearly as necessary to the top of the boiler, so as to heat only a limited volume of water at and near the top, the remaining body of water not being affected.

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

1. The within-described gas-heating attachment for range-boilers, the same consisting of a perforated segmental burner-tube, and a wire adapted to pass around the boiler and connected to the ends of said burner-tube, substantially as specified.

2. The within-described gas-heating attachment for range-boilers, the same consisting of a perforated segmental burner-tube with a wire adapted to pass around the boiler and connected to the opposite end of said burner-tube, one of said connections being longitudinally adjustable, substantially as specified.

3. A gas-heating attachment for range-boilers, the same consisting of a perforated segmental burner-tube, a wire adapted to pass around the boiler and connected to the burner-tube at its opposite ends, one of said connections comprising a hooked and threaded rod

connected to the wire, a link connected to the burner-tube, and a nut adapted to the threaded rod and bearing upon said link, substantially as specified.

- 5 4. The within-described gas-heating attachment for range-boilers, the same consisting of a burner having a clamping device adapted to be applied to any part of the length of the boiler-shell, whereby it may be readily and de-
10 tachably secured to the boiler at any desired

point in the length of the same, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY G. SCHRAMM.

Witnesses:

F. E. BECHTOLD,
JOS. H. KLEIN.