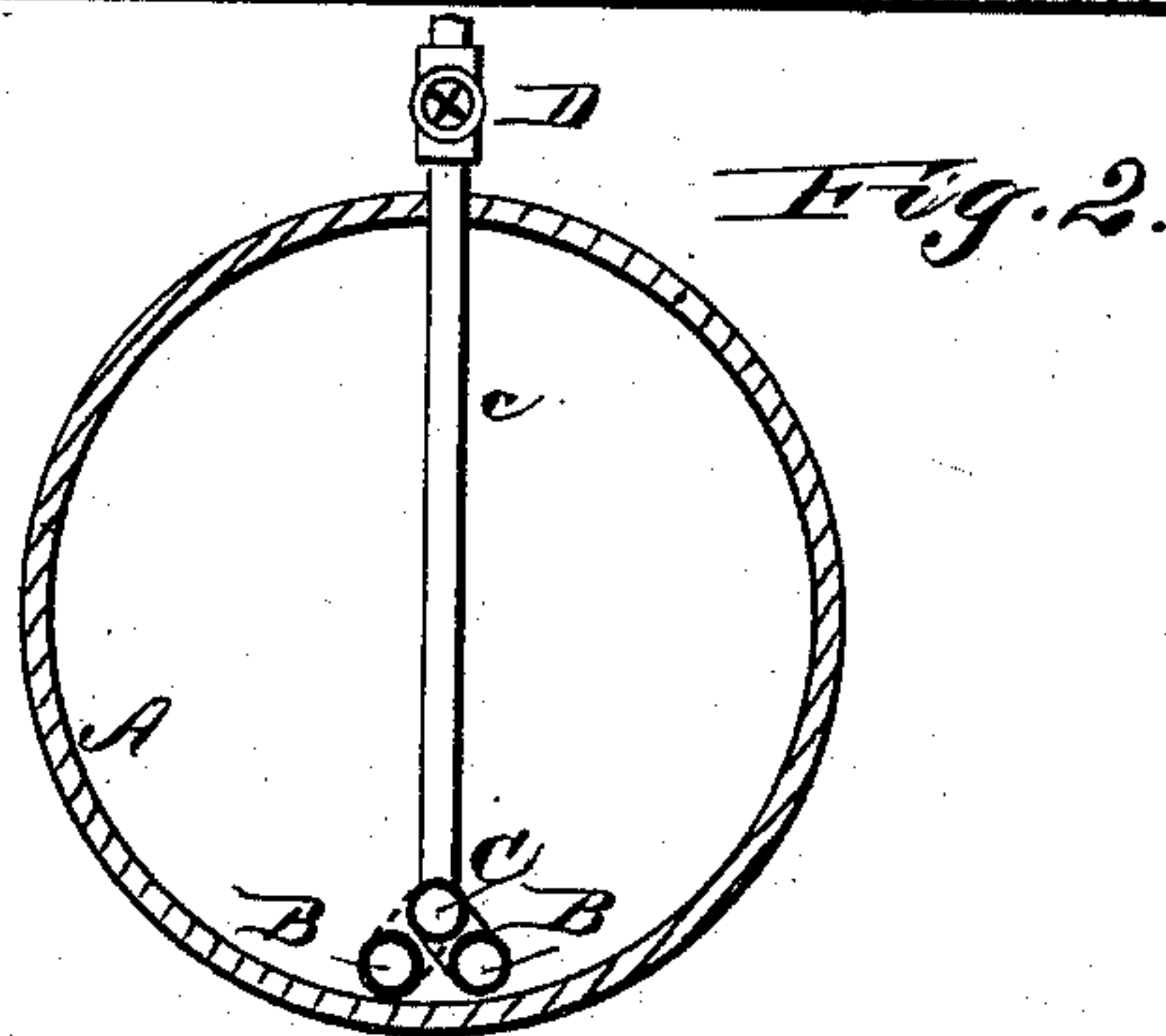
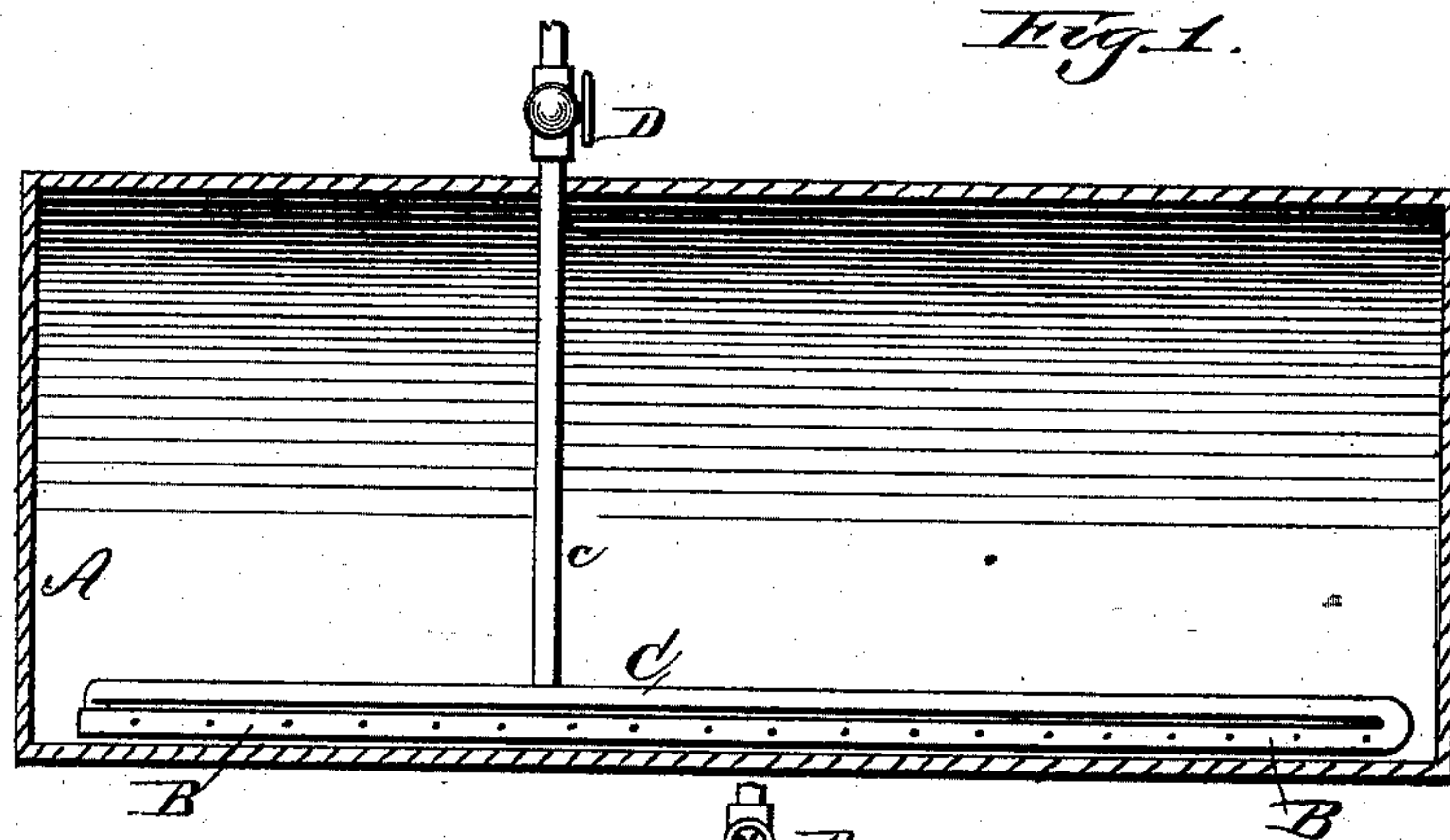


(No Model.)

A. ROGERS.
BOILER CLEANER.

No. 254,698.

Patented Mar. 7, 1882.



WITNESSES
H. C. McArthur
W. R. Keyworth

By his Attorney

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Arthur Rogers
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UNITED STATES PATENT OFFICE.

ARTHUR ROGERS, OF BARNESVILLE, OHIO.

BOILER-CLEANER.

SPECIFICATION forming part of Letters Patent No. 254,698, dated March 7, 1882.

Application filed January 4, 1882. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR ROGERS, of Barnesville, in the county of Belmont and State of Ohio, have invented certain new and useful
5 Improvements in Boiler - Cleaners; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form
15 part of this specification.

Prior to my invention a perforated blow-off pipe for steam-boilers has been arranged in the bottom of the boiler, with its discharge end extended out through the wall of the boiler and
15 provided with a cock, so that the sediment can be occasionally driven from the boiler. I have found, however, that this pipe cleans the boiler best at its end next to the discharge, the efficacy of such blow-off pipe diminishing as the
20 distance from the discharge increases by reason of the obstruction within the pipe.

It is the object of my present invention to remedy such defect and to effectively clean the boiler along its entire length. This object I
25 attain by means of one or more perforate pipes opening at opposite ends into a third discharge imperforated pipe, so that while one pipe will thoroughly carry off the sediment from one part of the boiler the remaining pipe will carry off
30 all of the sediment which the first pipe may have failed to carry off from the other part of the boiler, as hereinafter described, and shown in the drawings, in which—

Figure 1 is a longitudinal section of a steam-boiler with my invention applied thereto. Fig.
35 2 is a transverse section of the same.

A indicates the steam-boiler, and B B two perforated pipes arranged along the bottom of the same.

C is the third unperforated pipe, which connects with a pipe, c, passing through the wall of the boiler, and provided with the cock D for opening or closing the same. The perforated pipes connect by short pipes with this third pipe C at opposite ends—that is to say,
40 one perforated pipe connects at one end with one end of the third pipe, and the remaining perforated pipe connects at its end with the other end of the third pipe. Hence those parts of the boiler not cleaned by one pipe will be
45 effectively cleaned by the other.

To clean the boiler the cock is opened, so that the steam will force the water into the perforated pipes, carrying with it the sediment.

I am aware that it is not new in steam-boiler
55 cleaners to employ perforated pipes arranged on the bottom of the boiler in combination with a blow-off pipe and a cock.

What I claim is—

The combination, within the shell of a steam-boiler, of the imperforated pipe C, one or more
60 perforated pipes running parallel thereto and communicating therewith, a blow-off pipe, and a cock applied to this pipe, substantially as described.
65

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ARTHUR ROGERS.

Witnesses:

ALONZO HICKS,
JOHN M. GARDNER.