

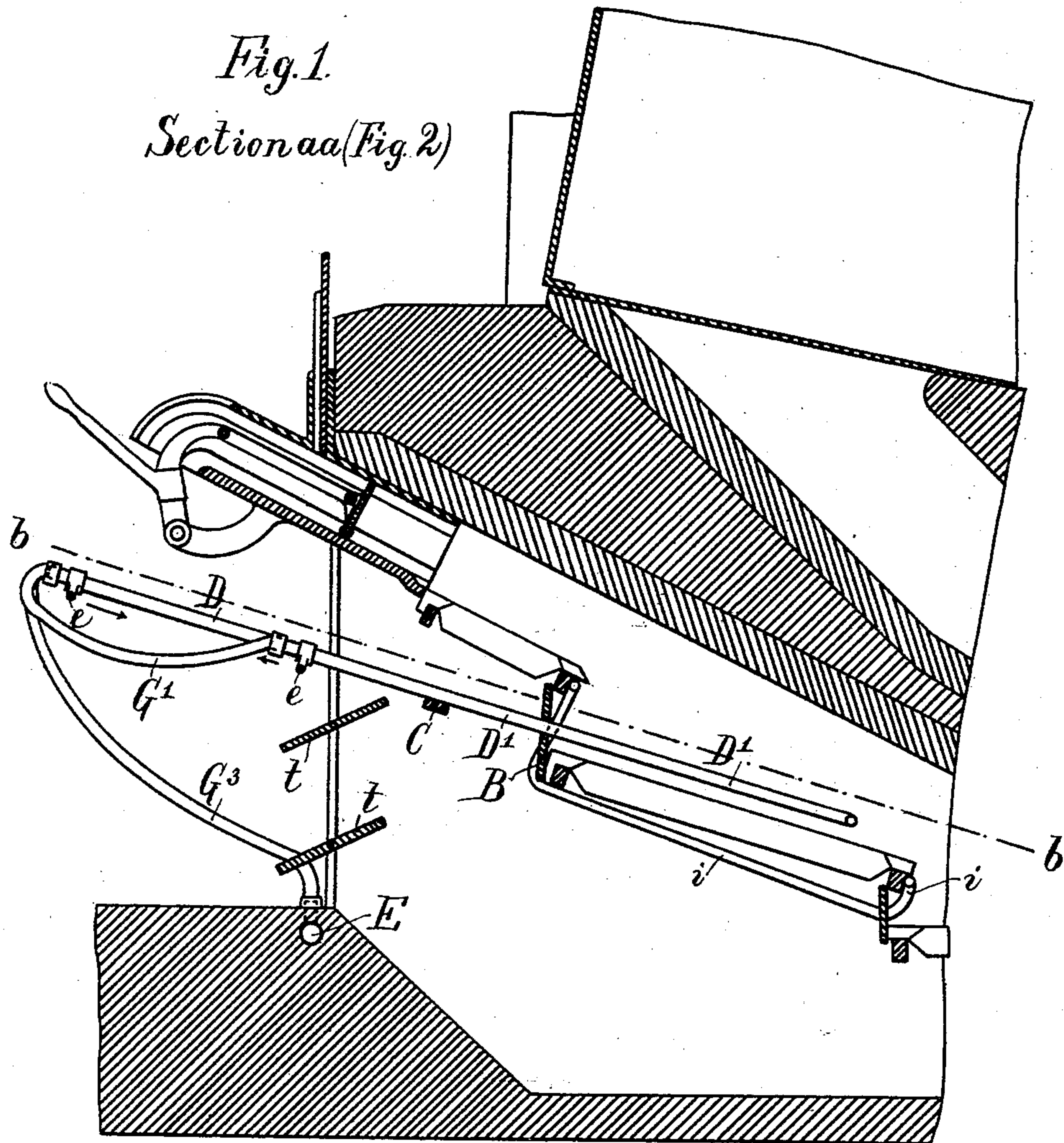
No. 632,770.

Patented Sept. 12, 1899.

J. WEZEL.
STOKER'S FIRE IRON.
(Application filed Feb. 23, 1899.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:

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Inventor:

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2 Sheets—Sheet 2.

Fig. 2.

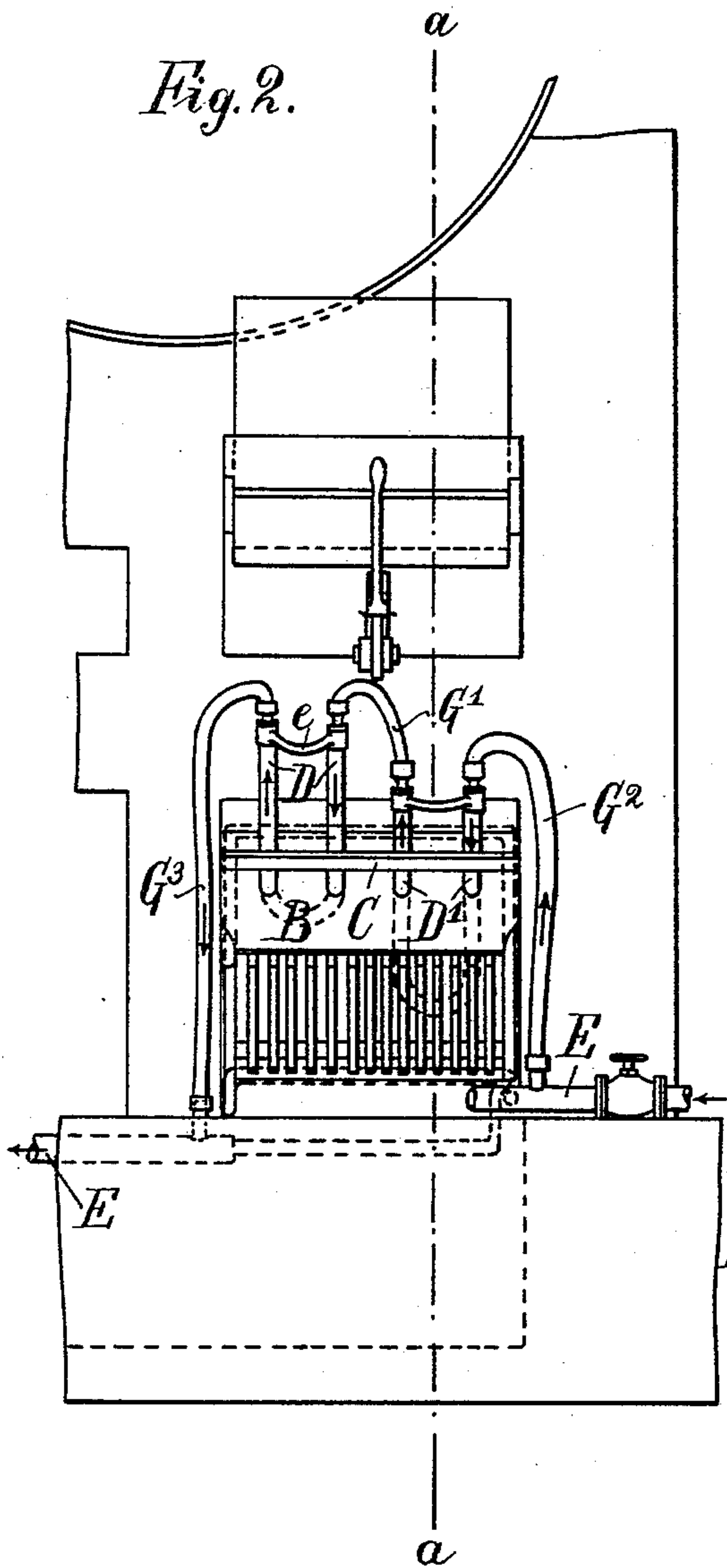
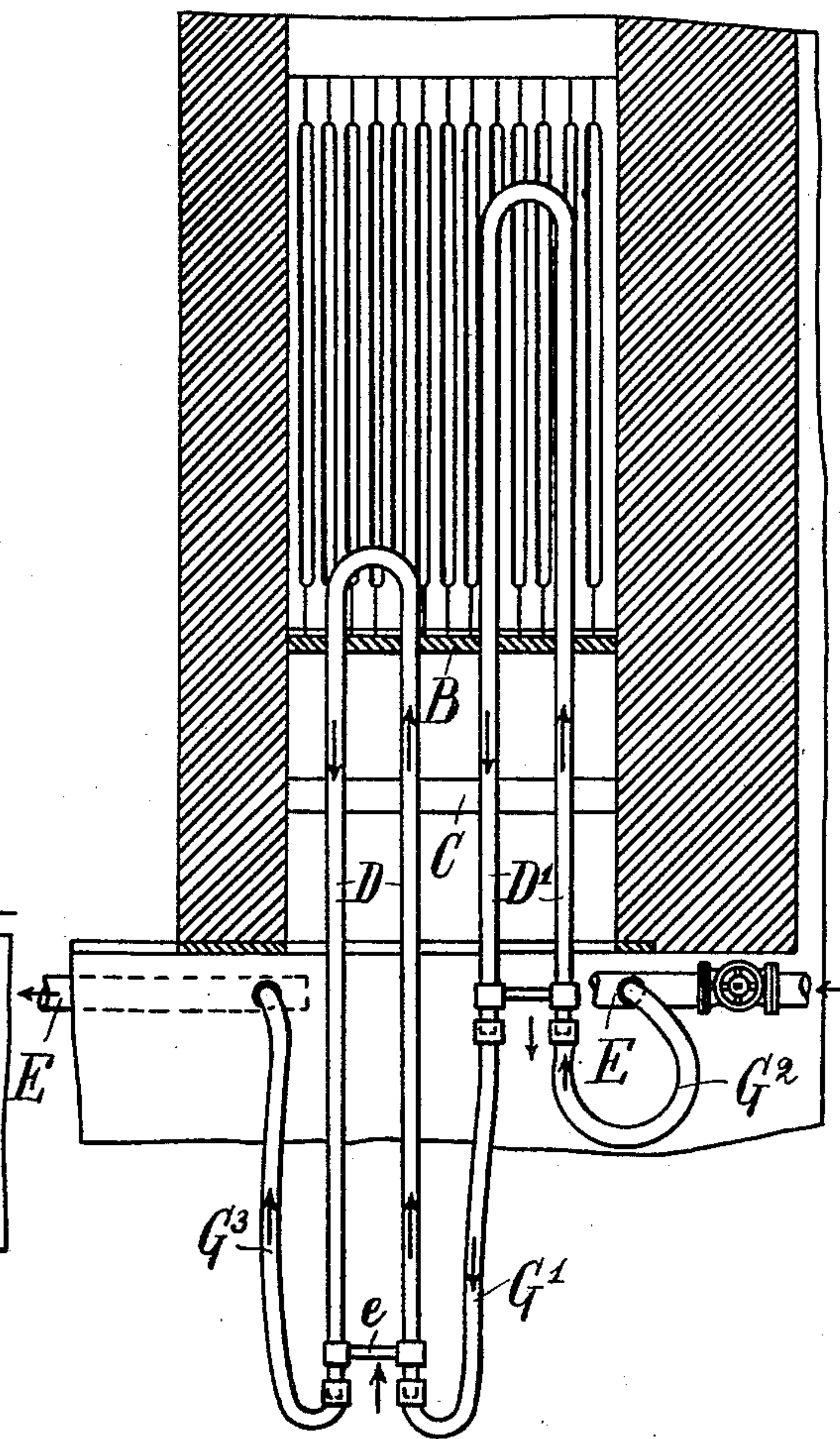


Fig. 3.
Section bb (Fig. 1)



Witnesses:
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UNITED STATES PATENT OFFICE.

JULIUS WEZEL, OF LEIPSIC, GERMANY.

STOKER'S FIRE-IRON.

SPECIFICATION forming part of Letters Patent No. 632,770, dated September 12, 1899.

Application filed February 23, 1899. Serial No. 706,625. (No model.)

To all whom it may concern:

Be it known that I, JULIUS WEZEL, a subject of the Emperor of Germany, and a resident of Leipsic, Saxony, Germany, have invented certain new and useful Improvements in Stokers' Fire-Irons, of which the following is a full, clear, and exact description.

The present invention consists of improvements in stokers' fire-irons and of the details of construction hereinafter set forth and particularly pointed out in the claims; and in order to render the present specification more easily intelligible reference is had to the accompanying drawings, in which similar letters of reference denote similar parts throughout the several views.

Figure 1 is a vertical section on the line *a a*, Fig. 2, through a boiler-furnace provided with the present improvement; Fig. 2, a front elevation of the same, and Fig. 3 a sectional plan on the line *b b*, Fig. 1.

The object of the present invention is to enable the stoker to properly attend to and stoke the fire without opening the fire-doors.

The fire-box of the boiler is closed against the outer air by means of the plate B, and through this plate the stoking-irons are passed. The irons are advantageously formed of a piece of tube bent around double, as at D D', the shanks of said irons being passed through suitable orifices in the plate B and further supported outside the latter on a fixed bar C. The free outer ends of the said irons are connected by means of flexible tubes G' G² G³ to a cold-water pipe system E, so that cold water may flow through the whole of the irons. The same cold-water-supply pipe may be provided with a branch pipe *i*, extending around the ends of the fire-bars for the purpose of keeping the same cool. Under air may be admitted to the fire-box through the dampers *t t*.

Each iron D D' is provided with a cross-bar *e*, connecting its shanks at their outer ends, said cross-bar serving as a handle by means of which the irons may be manipulated.

From the above description it will be evident that the irons may be manipulated and the fuel evenly distributed over the grate without opening the fire-doors.

The work of the stokers is greatly facilitated by means of the present invention, the heat in the stoke-room being very considerably reduced.

I claim as my invention—

1. In combination with a boiler-furnace having a fire-box-closing plate B, stoke-irons D D' mounted side by side so as to be capable of traversing the surface of the grate-bars, said irons consisting of bent tubes, having parallel shanks, orifices in the said plate to receive the said shanks and cross-bars connecting the shanks of each iron outside the said plate, said cross-bars serving as handles for the purpose substantially as described.

2. In combination with a furnace having a fire-box-closing plate, stoke-irons D D' consisting of pieces of tubes bent around and having parallel shanks, said shanks being connected by means of cross-bars outside the said plate, orifices in the plate in which the said shanks may slide and a cold-water pipe system mounted in proximity to said outer stoke-iron ends and flexible pipe connections from the said pipe system to the open ends of the tubular irons and back to the said supply-pipe substantially as described and for the purpose specified.

In witness whereof I have hereunto set my hand in presence of two witnesses.

JULIUS WEZEL.

Witnesses:

RUDOLPH FRICKE,
B. H. WARNER, Jr.