

No. 840,739.

PATENTED JAN. 8, 1907.

J. W. BATISTE.  
SELF CLEANING OIL BURNER.  
APPLICATION FILED AUG. 15, 1906.

Fig. 1.

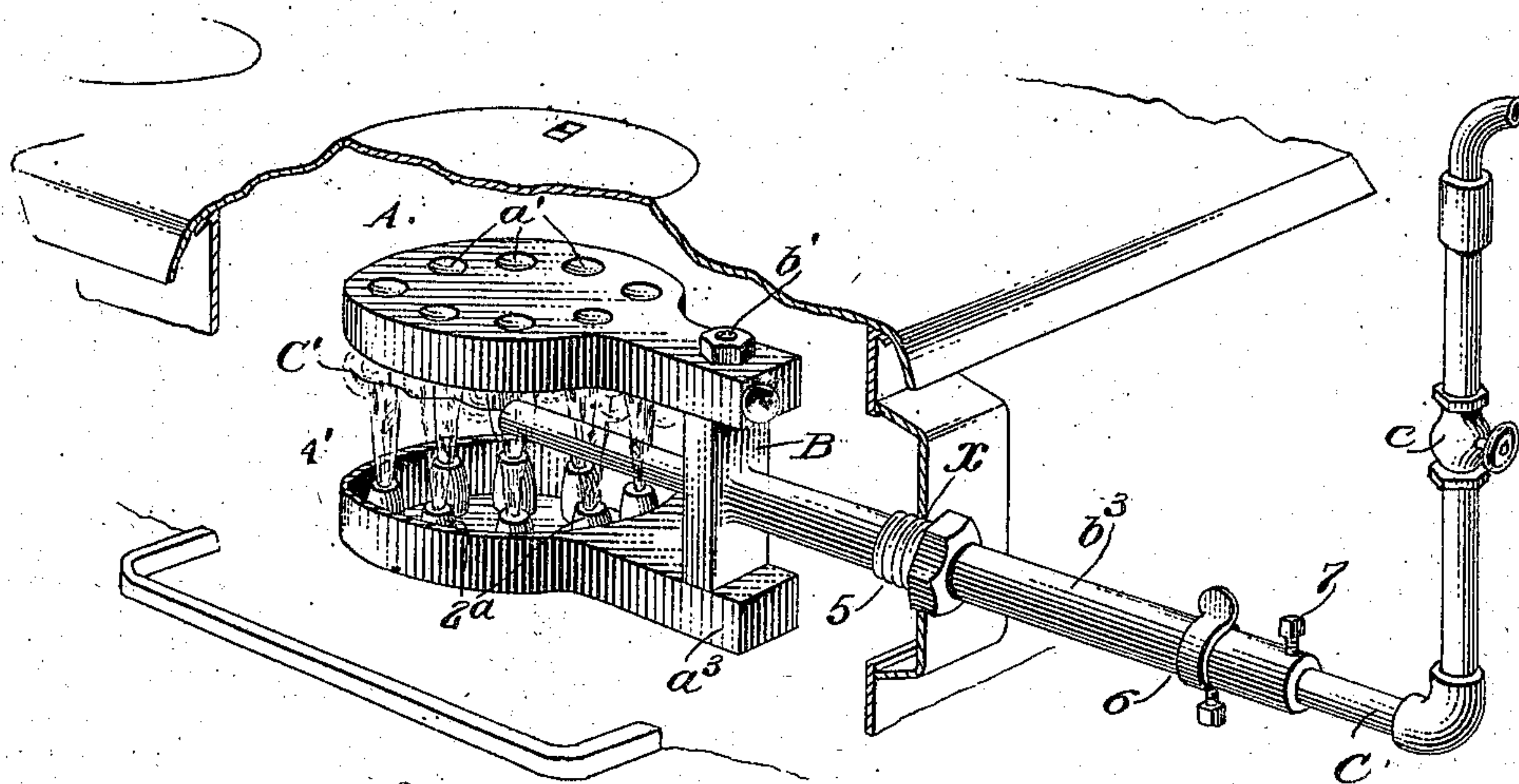


Fig. 2.

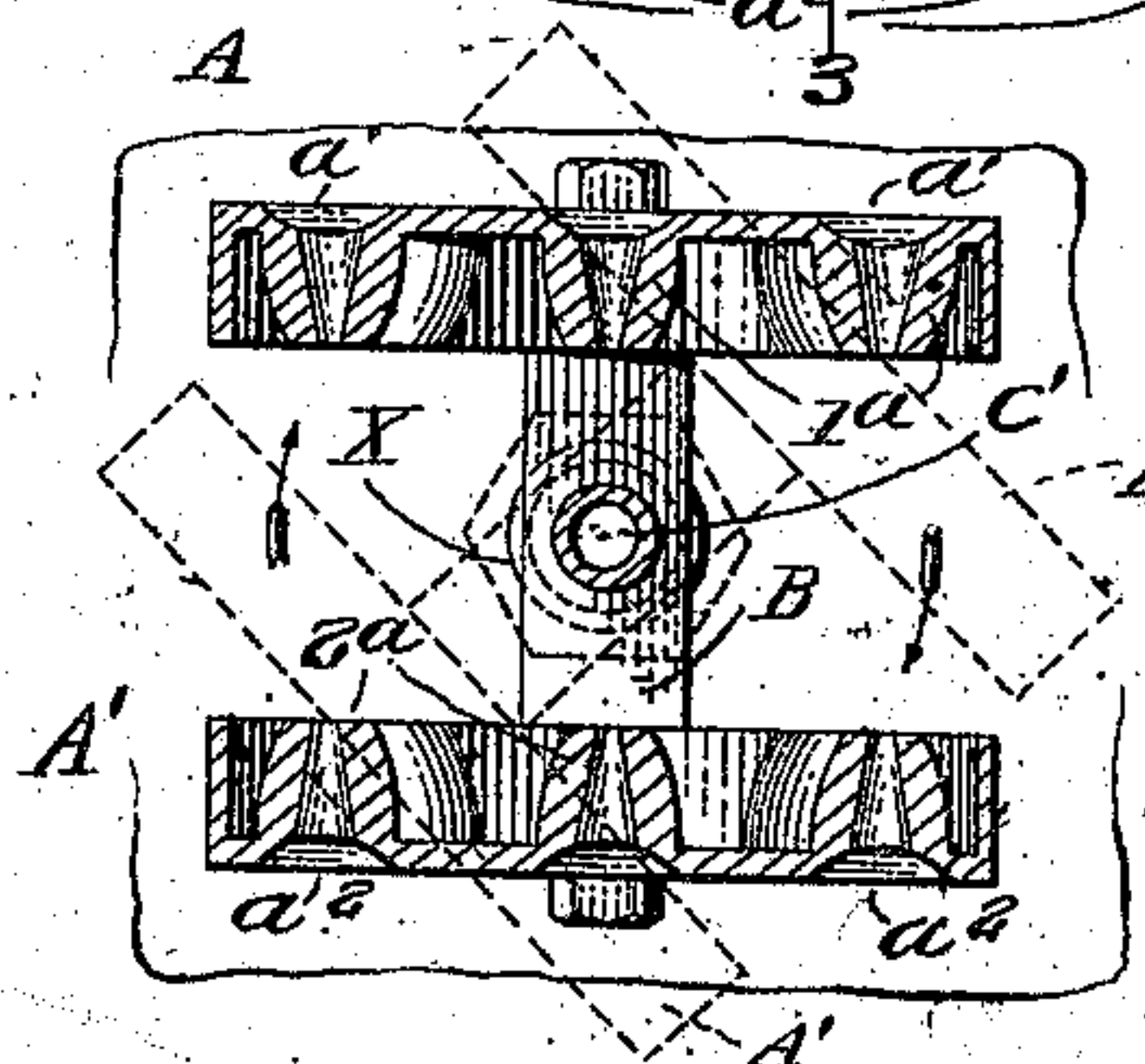
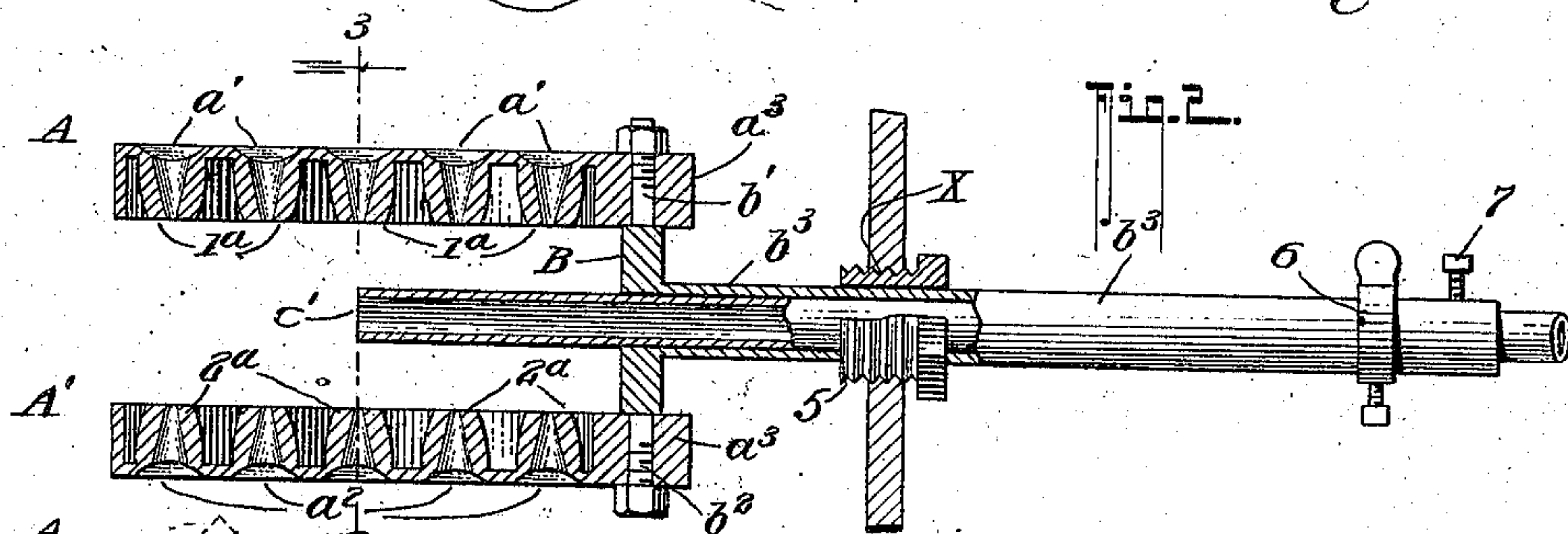


Fig. 3.

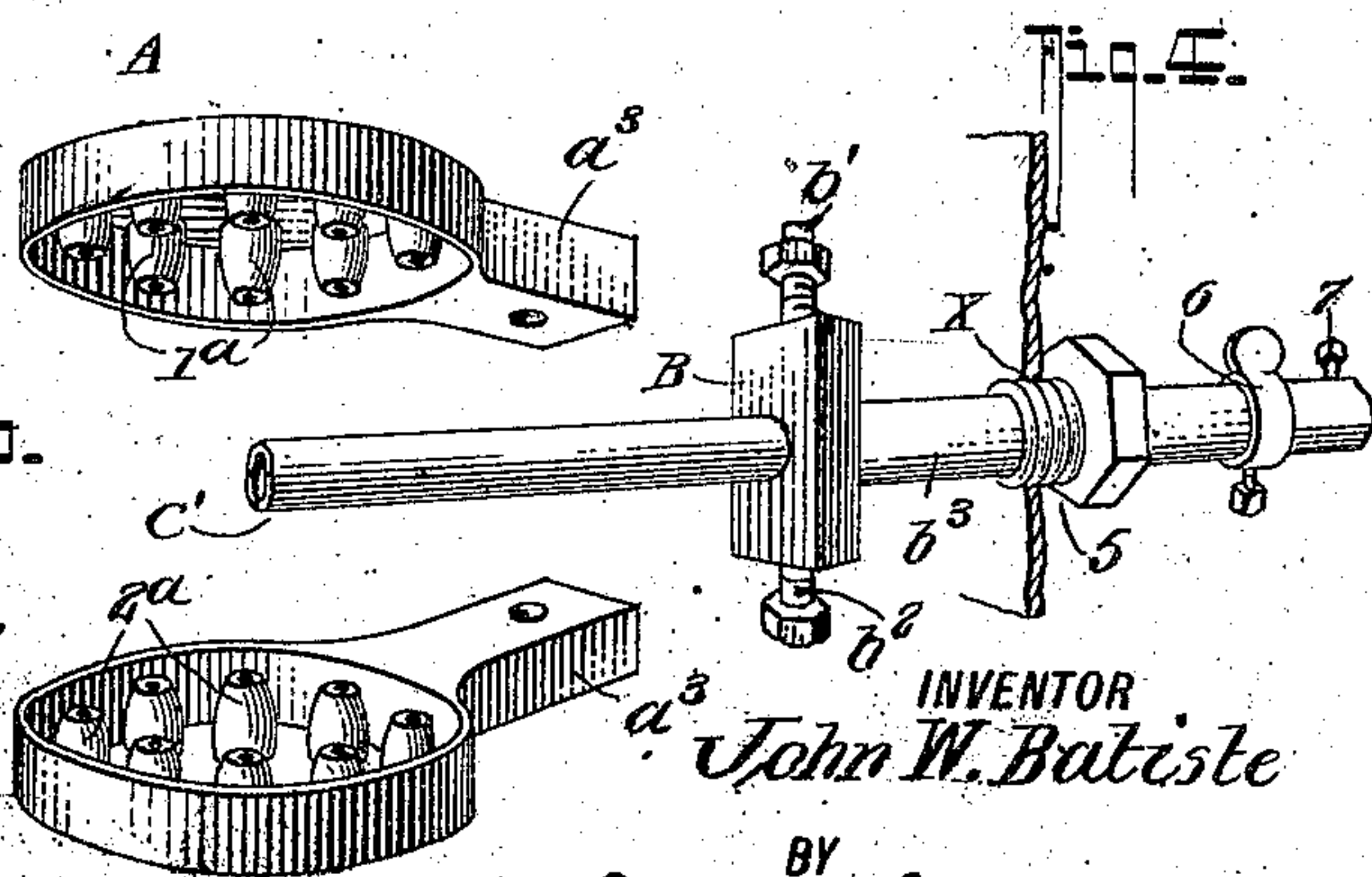


Fig. 4.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN W. BATISTE, OF PORTLAND, OREGON.

## SELF-CLEANING OIL-BURNER.

No. 840,739.

Specification of Letters Patent.

Patented Jan. 8, 1907.

Application filed August 15, 1906. Serial No. 330,719.

*To all whom it may concern:*

Be it known that I, JOHN W. BATISTE, residing at Portland, in the county of Multnomah and State of Oregon, have invented a new and Improved Self-Cleaning Oil-Burner, of which the following is a specification.

This invention relates to improvements in that type of gaseous fuel-burners more especially adapted for use in the fire pot or chamber of the ordinary stove or range; and it primarily seeks to provide an improved construction of burner capable of being economically manufactured and which is especially designed so it can be easily applied for use on the ordinary types of stoves or ranges without changing the structural arrangement thereof and which can be readily adjusted from the outside of the stove in such manner as to render the burner self-cleaning.

In its generic nature my invention comprehends a pair of oppositely-disposed burners arranged one above the other, each of which has a pan shape and has a plurality of air-holes covered by inwardly-projected conical hoods or nozzles, a means for mounting said plates with their nozzles facing each other, whereby the nozzles of the upper burner will be directly over the flame from the lower or burner plate proper, and means for reversing the positions of the two opposing burner-pans, whereby the lower one is shifted to the upper position and the upper one to the lower position and means for leading the oil to discharge or drop into the lowermost pan.

In its more specific nature my invention consists in certain details of construction and peculiar combination of parts, all of which will be hereinafter fully described, pointed out in the appended claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a portion of an ordinary cooking-stove with my self-cleaning oil-burner applied for use. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a transverse section taken on the line 3 3 on Fig. 2, the reversing movement of the two burner-pans being indicated on dotted lines; and Fig. 4 is a perspective view showing in detail the several parts that constitute my invention.

In the practical construction my burner comprises a pair of burner-pans A A', preferably

ably of circular shape and of the same size, each of which has a like number of air-passages  $a' a^2$  in the bottom, which are of conical shape and extend up through the conical nozzle or hood portions  $1^a 2^a$ , which latter extend to a plane in line with the rim of the pan, as shown. Each pan A A' has a lateral extension  $a^3 a^3$  to receive the opposite threaded bolt ends  $b' b^2$  of a supporting member B, cast or otherwise fixedly connected to a tubular stem  $b^3$ . The burner-pans A A' are reversibly mounted on the member B, so that during their different adjustments the upper pan is held in an inverted position with respect to the other pan.

In the practical application of my burner to a stove the same may be and preferably is mounted in the manner shown in the drawings, from which it will be noticed the tubular member  $b^3$  is rotatably mounted in a sleeve 5, which is fitted in an aperture X made in the end door or wall of the stove (see Figs. 1 and 2,) and to secure the sleeve 5 it is externally threaded to engage threads formed in the aperture X.

By supporting the tubular member  $b^3$  in the manner stated and shown, it can also be shifted longitudinally to bring the burner under either one of the fire-holes in the stove-top.

C designates the vertically-disposed feed-pipe having the usual regulating-valve  $c$  and connected at the lower end with the horizontally-disposed discharge-pipe C', that passes through and is mounted in the tubular member  $b^3$  and extends to a point midway between the two burner-pans, as shown, whereby to drop the oil into the lower pan.

6 designates a handle member adjustably mounted on the tube  $b^3$ , and 7 denotes a clamp-screw for securing the said member  $b^3$  from rocking on the discharge-pipe C'.

The manner in which my improved burner is used will be readily understood from the drawings.

To start the burner, the oil is first dripped into the lower pan and ignited, which heats the end of the discharge-pipe and volatilizes the oil flowing to the discharge end thereof. After the lowermost pan has been used so long that its air-holes begin to clog up, by simply loosening the set-screw 7 and by



grasping the handle 6 the operator can quickly turn the tubular sleeve, and thereby reverse the two burner-pans, bringing the upper one down and the lower one over the other, so that the nozzle or hood portion of the said upper pan will be directly over the flames from the lower burner, which, by reason of their direct impact in the nozzle of the other or upper pan all soot or other clogging deposits in the said upper burners will be burned out or destroyed, and thereby, as the lower pan or burner is being used, the upper one, by reason of being constantly in the fire zone, is cleaned.

By making the air-holes cone-shaped and extending the nozzle ends up in a plane substantially parallel with the rim edge of the pan means are provided for a large amount of air within the air-passages and a consequent freer generation of gas than would occur if the air-openings were of uniform diameter and extended merely through the bottom of the pan.

Another and important advantage of the double burner pans or plates is that the upper or inverted pan acts as a baffle and prevents the flame going against the stove-lid, thereby saving the lids from burning out, and, furthermore, since the top plate has a pendent rim, the flame is caused to circulate more freely within the upper pan instead of flashing over the edges, thereby subjecting the nozzles of the upper pan to an intense heat, which quickly cleans the air-passages by consuming all deposits therein.

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

1. A burner of the character described, which comprises a pair of parallelly-disposed apertured plates, each having an oil-collecting space on one side, the collecting-spaces of the two plates opposing each other, means for rotatably supporting the two plates whereby they can be turned to assume reverse positions, and a means for leading oil into the collecting-space of one of said plates through said supporting means for the purposes described.

2. A burner of the character described, comprising a tubular bearing adapted to be detachably fitted in a stove wall or door, a tubular member mounted in said bearing and having longitudinal adjustment therein, a burner on the inner end of the said tubular member, an oil-feed pipe that extends through the tubular member and discharges over the burner and means for fixedly connecting the tubular member to the feed-pipe, for the purposes described.

3. A burner of the character described, comprising in combination with a tubular

bearing in the stove-body; a tubular member rotatably mounted in the said bearing and having longitudinal movement therein, a burner-plate supported on the inner end of the said tubular member in a plane below the said member, a second burner-plate on the tubular member inversely located over the first burner-plate, an oil-feed pipe mounted in the tubular member and having its discharge located between the two burner-plates and means for securing the pivotal member that carries the burner-plates in its longitudinal and rotatably-adjusted positions, as set forth.

4. A burner of the character described, comprising a tube adapted to be rotatably supported in an aperture of the stove-wall, a pair of perforated burner-pans located one above the other, with their oil-receiving surfaces facing each other, said pans being secured to the inner end of the tube and an oil-feed pipe mounted in the tube with its discharge end located between the burner-pans, as set forth.

5. An oil-burner for stoves comprising a pair of superposed pans whose oil-receiving surfaces face each other, said pans having air-passages, means for rotatably mounting the said pans in the fire-box of the stove whereby to reverse the position thereof, and an oil-feed pipe having its discharge end projected between the burner-pans, as set forth.

6. A self-cleaning oil-burner for stoves, consisting of a pair of superposed pans having conical air-passages that terminate in nozzles, the nozzle-faces of the two pans opposing each other, means for rotatably supporting said burner-pans within the stove fire-box, an oil-feed pipe whose discharge end projects between the two burner-pans and means for securing the burner-pans at their adjusted positions, as set forth.

7. The hereinbefore-described improvement in oil-burners for stoves, consisting of a pair of burner-pans, each having conical air-passages that terminate in discharge-nozzles projected from the bottoms of the pans, said pans being held with their nozzle sides facing each other, a tubular member having means at the inner end for supporting the burner-pans and adapted for being rotatably mounted in an aperture in the stove-body, a stationary oil-feed pipe that discharges at a point between the two burner-pans, and a means for fixedly connecting the tubular member to the oil-feed pipe, as set forth.

8. As a new article, a gas-burner for stoves, which comprises a tubular bearing member adapted to be secured in the stove-wall, a tube rotatably mounted in the said bearing, said tube having upwardly and downwardly projecting brackets, each provided with a



shank, a pair of burner-pans, each having  
apertured extensions to fit on the shank end  
of the bracket, means for securing the pans  
on the said shanks, the said pans having air-  
5 apertures that terminate in nozzles, the noz-  
zle-faces of the two pans opposing each other,  
an oil-feed pipe that passes through the ro-  
tatable tube and has its discharge end pro-

jected between the two burner-pans and  
means for clamping the rotatable tube on the 10  
oil-feed pipe, substantially as shown.

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Witnesses:

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