

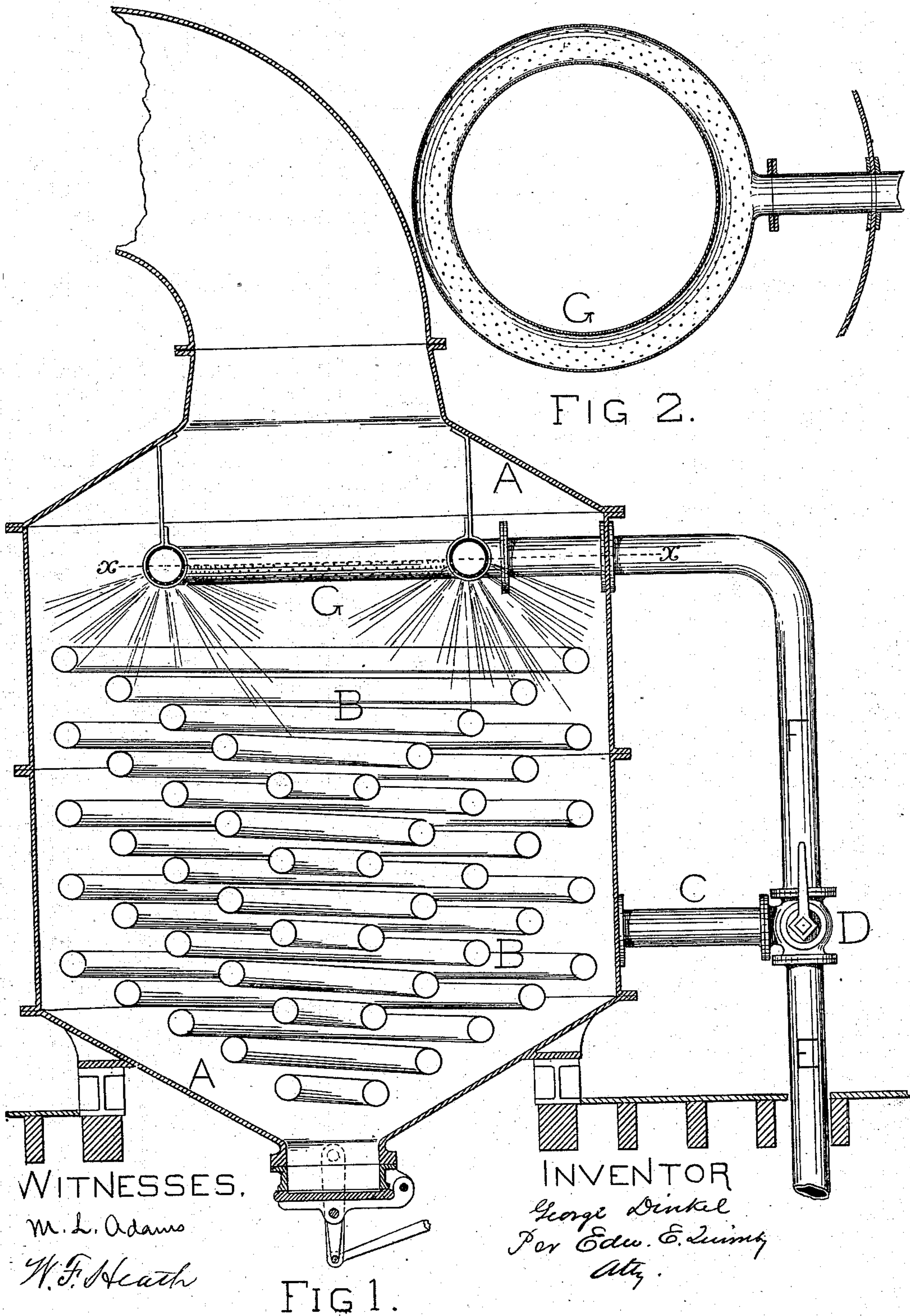
(No Model.)

G. DINKEL.

DEVICE FOR CLEANING VACUUM PANS.

No. 277,012.

Patented May 8, 1883.



UNITED STATES PATENT OFFICE.

GEORGE DINKEL, OF JERSEY CITY, NEW JERSEY.

DEVICE FOR CLEANING VACUUM-PANS.

SPECIFICATION forming part of Letters Patent No. 277,012, dated May 8, 1883.

Application filed March 10, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE DINKEL, of Jersey City, New Jersey, have invented a certain Improvement in Devices for Cleansing Vacuum-Pans, of which the following is a specification.

In charging vacuum-pans the thin sugar-liquor is usually introduced through a supply-pipe at the side of the pan. In boiling, sugar collects upon the upper convolutions of the worm, and frequently dries thereon. To clean the worm, it is usual to introduce steam into the vacuum-pan after the charge has been dropped. This method of removing the sugar from the surface of the worm heats the sugar so much as to sometimes burn it.

It is the object of my invention to effect the cleansing of the worm without heating the sugar collected thereon. This I accomplish by introducing the charge of thin sugar-liquor into the pan, in the form of spray, from a suitably-perforated supply-pipe arranged in the upper part of the pan, above the worm, so that the jets of thin liquor strike against the top of the worm and wash off any sugar which has collected thereon during the boiling of the previous charge.

The accompanying drawings of a vacuum-pan containing my improvements are as follows: Figure 1 is a central vertical section, and Fig. 2 is a horizontal section through the line *xx* on Fig. 1.

The drawings represent a vacuum-pan, A, of the usual form, provided with the internal worm,

B. The usual supply-pipe, C, is connected to the three-way valve D on the service-pipe E, by means of which the pan may, if desired, be charged in the usual manner. The upper end of the three-way valve is joined to the supplemental supply-pipe F, which is carried upward and bent over and united to the outer end of the spraying-pipe G, arranged in the upper part of the pan, above the worm. By adjusting the three-way valve so as to close the opening into the pipe C and open the passage to the supplemental supply-pipe F, the charge of thin liquor may be introduced into the pan in the form of jets or spray from the spray-pipe G. By employing the latter mode of introducing the charge into the pan immediately after the preceding charge has been dropped, any sugar collected upon the surface of the worm is effectually washed off without being overheated.

I claim as my invention—

In a vacuum-pan provided with the ordinary worm or heating-coil, B, the supply-pipe C, the supplemental supply-pipe F, the spraying-pipe G, and the service-pipe D, provided with a valve, substantially as described, for effecting the introduction of the sugar-liquor into the pan, either through the supply-pipe C or through the supplemental supply-pipe F, as and for the purpose set forth.

GEORGE DINKEL.

Witnesses:

ASA FARR,
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