

F. O. MATTHIESSEN.

Sugar Machine.

No. 61,224.

Patented Jan. 15, 1867.

Fig. 1

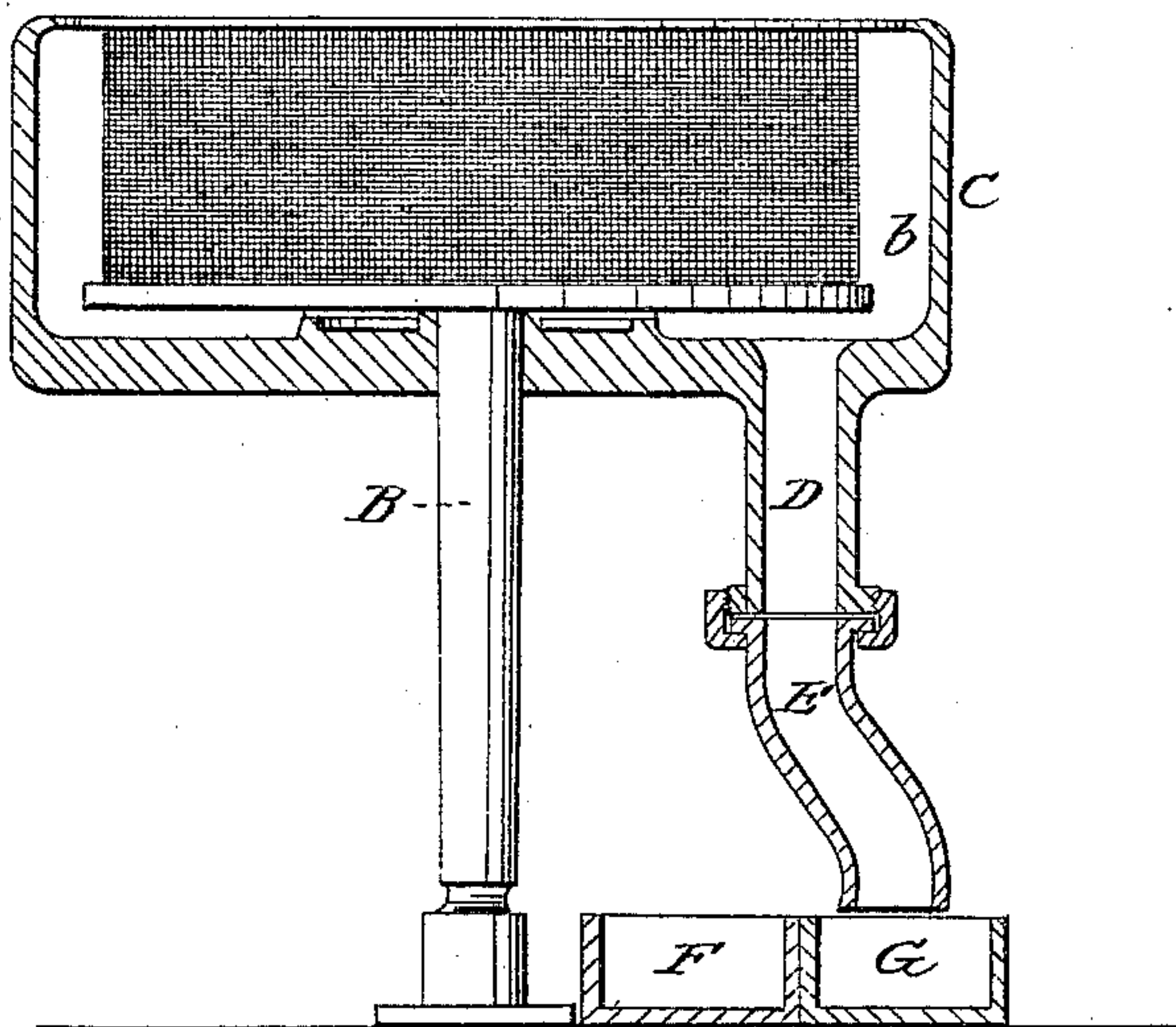
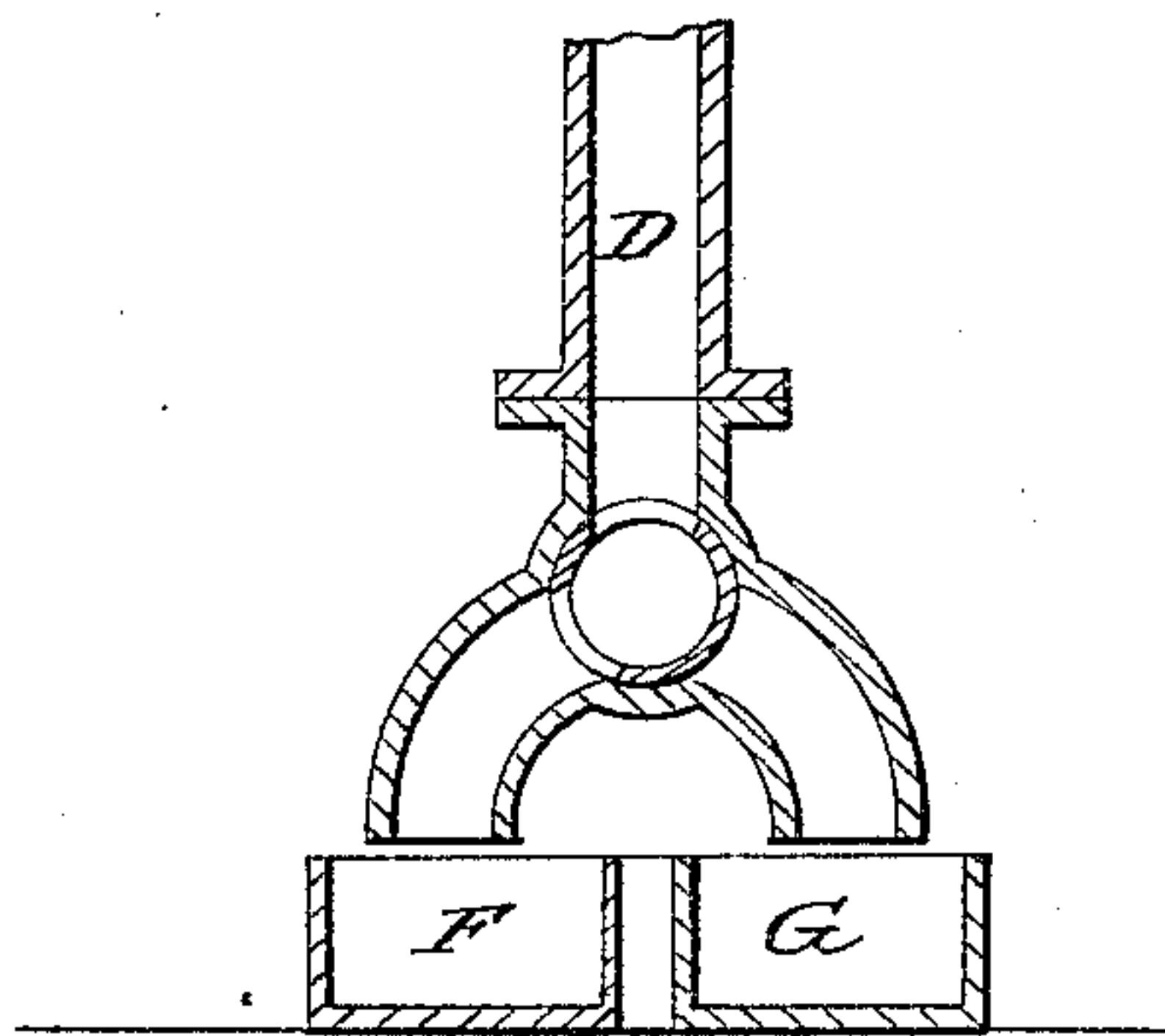


Fig. 2



Witnesses:
J. M. Coombs
G. W. Reed

Inventor:
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United States Patent Office.

FRANZ O. MATTHIESSEN, OF JERSEY CITY, NEW JERSEY.

Letters Patent No. 61,224, dated January 15, 1867.

IMPROVEMENT IN THE MANUFACTURE OF SUGAR.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, FRANZ O. MATTHIESSEN, of Jersey City, in the county of Hudson, and State of New Jersey, have invented a certain new and useful Improvement in the Manufacture of Sugar, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents a vertical section of an apparatus in part in illustration of my improvement; and

Figure 2 a like view of the modification of the lower part of the same.

Like figures of reference indicate like parts in both figures.

Heretofore, in the manufacture of sugar, it is customary in washing or freeing the sugar of organic or foreign matter, by the centrifugal or other machine, to charge said machine with sugar as it comes from the vacuum-pan, and which being put in rapid motion first throws off what is denominated "green sirup," after which water or other cleansing liquid is introduced, by hose or otherwise, into said machine to separate or wash off the remaining sirup and other coloring matter from the crystals, such washing, or "liquoring" as it is termed, running off into a common receptacle with the "green sirup." This mode of operation is detrimental to the green sirup, and after-processes are usually resorted to to separate or otherwise utilize the admixture so produced, in default of which the green sirup has its value deteriorated by the "liquoring." To avoid this is the object of my invention, which consists in a device or devices arranged in connection with the discharge spout of the centrifugal machine, whereby the green sirup may be separately run off into one receptacle or reservoir, and afterwards the washing or liquoring into a different receiver, thus collecting the green sirup for separate after-treatment, and the cleansing liquid or liquoring also for separate treatment or admixture with fresh raw sugar.

Referring to the accompanying drawing, A represents the reticulated cylinder of a centrifugal machine, B its vertical shaft, and C the outer cylinder or case, provided with a discharge spout, D. Connected with this discharge spout is a swivel-nozzle or spout, E, arranged to project at pleasure, accordingly as it is turned, over either one of two spouts or troughs, F G, so as to deliver into either, or, instead of such swivelling nozzle, the discharge pipe D may be continued and divided, as represented in fig. 2, to deliver into either trough F G, accordingly as a cock or other valve is operated to establish communication with said discharge pipe and its branches or continuations that form the delivery outlets to said troughs. By these means the green sirup, as it is thrown off by the centrifugal machine, may be delivered separately along one of the troughs into any suitable reservoir for separate after-treatment, and then the nozzle or spout E, or valve controlling the discharge, adjusted to run off, separately and distinct, along the other trough into a separate vessel, the cleansing liquid or liquoring for distinct after-treatment, or for admixture with fresh raw sugar, as preferred. By means of the swivelling nozzle E the one outlet serves for both troughs F G; a valve, however, as referred to, may be employed instead to change the discharge from one outlet to another, or separate discharge pipes connected with the outer case C, and provided with separate cocks or valves, may be used to control the delivery between or into the two troughs.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The process, substantially as herein described, of separating the products as discharged from the centrifugal machine, by first running off the green sirup, and afterwards the cleansing liquid or liquoring, into distinct vessels or reservoirs for separate treatment or use, substantially as specified.

2. The combination, with the discharge spout D of the centrifugal machine, of a swivelling spout E or spouts controlled by a valve or valves, substantially as and for the purpose or purposes herein set forth.

F. O. MATTHIESSEN.

Witnesses:

A. LE CLERC,

J. W. COOMBS.