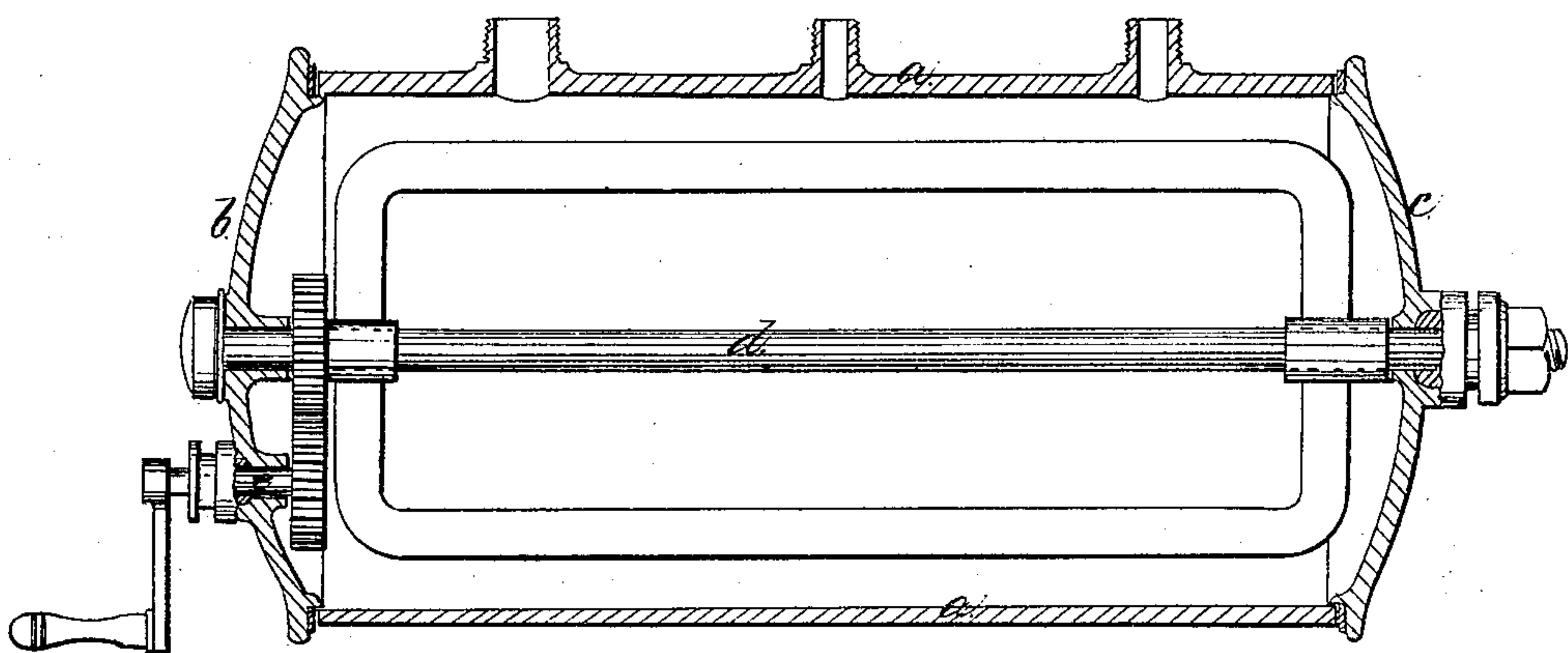


W. Gee,
Charging Soda Fountains,
N^o 13,057. Patented June 12, 1855.



UNITED STATES PATENT OFFICE.

WILLIAM GEE, OF NEW YORK, N. Y.

SODA-WATER GENERATOR.

Specification of Letters Patent No. 13,057, dated June 12, 1855.

To all whom it may concern:

Be it known that I, WILLIAM GEE, of the city, county, and State of New York, have invented certain new and useful Improvements in Generators for the Preparation of Soda-Water; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being made to the annexed drawing, making
10 a part of this specification, which is a longitudinal vertical section through a generator of my improved construction.

It is well known that the generator for soda water must be constructed to resist
15 great internal pressure, and that from the nature of the materials employed it is liable while in operation to become clogged, when it must be taken apart to be cleaned out. The most approved form of generator has
20 been a cylinder having flanges turned at each end to which caps are secured by numerous small bolts tapped into the flange. Within this cylinder is an agitator, fixed upon a shaft working in a step or socket on
25 the inside of the cap, at one end, and passing through a stuffing box in the other cap, and terminating in a crank. The cleaning of this is attended with considerable difficulty and loss of time, there being so many
30 bolts to be removed and replaced. The residuum frequently becomes quite a hard concrete, and hence it is desirable that both ends, or caps, should in cleaning be taken off. My improvement is on this kind of generator and is such that all the parts of it are
35 held together by a single bolt, whereby it can be taken apart to be cleaned and set to work again in a few minutes.

The construction is as follows: At (a) is
40 the cylinder of the generator, which is to be accurately turned and fitted to receive the

caps against its ends as shown. One of those caps (b) has a hole through the center to admit a bolt of such size as will hold the caps together against the desired internal
45 pressure, and the face of the cap around the hole is made true, that the head of the bolt may be packed against it. The other cap (c) has also a similar hole through the center, but on the outside is a stuffing box
50 to secure tightness at this end. A strong bolt (d) is passed through as shown and rings of india rubber or other suitable packing being put upon the caps those can be held tightly against the ends of the cylinder
55 by screwing the nut on the bolt down upon the gland of the stuffing box. The bolt (d) cannot now be revolved and the agitator must therefore have its motion from another source. This is given by mounting it
60 on collars which play upon the bolt and connecting it by gearing as shown with a crank shaft (e) passing through a stuffing box on one side of the center of the cap (b). As
65 thus constructed the work of taking off both the caps of the generator and of replacing them can be accomplished in a very few minutes.

What I claim as of my invention and desire to secure by Letters Patent of the United
70 is—

The herein described construction of a soda water generator, that is to say, having the heads connected to the cylinder by a single bolt which shall also serve as a shaft for
75 the agitator to revolve upon in the manner and for the purposes as set forth.

WILLIAM GEE.

Witnesses:

S. H. MAYNARD,
WM. E. WHITE.