

(No Model.)

D. & J. E. O'DONNELL.
NON-REFILLABLE BOTTLE.

No. 594,274.

Patented Nov. 23, 1897.

FIG. 1.

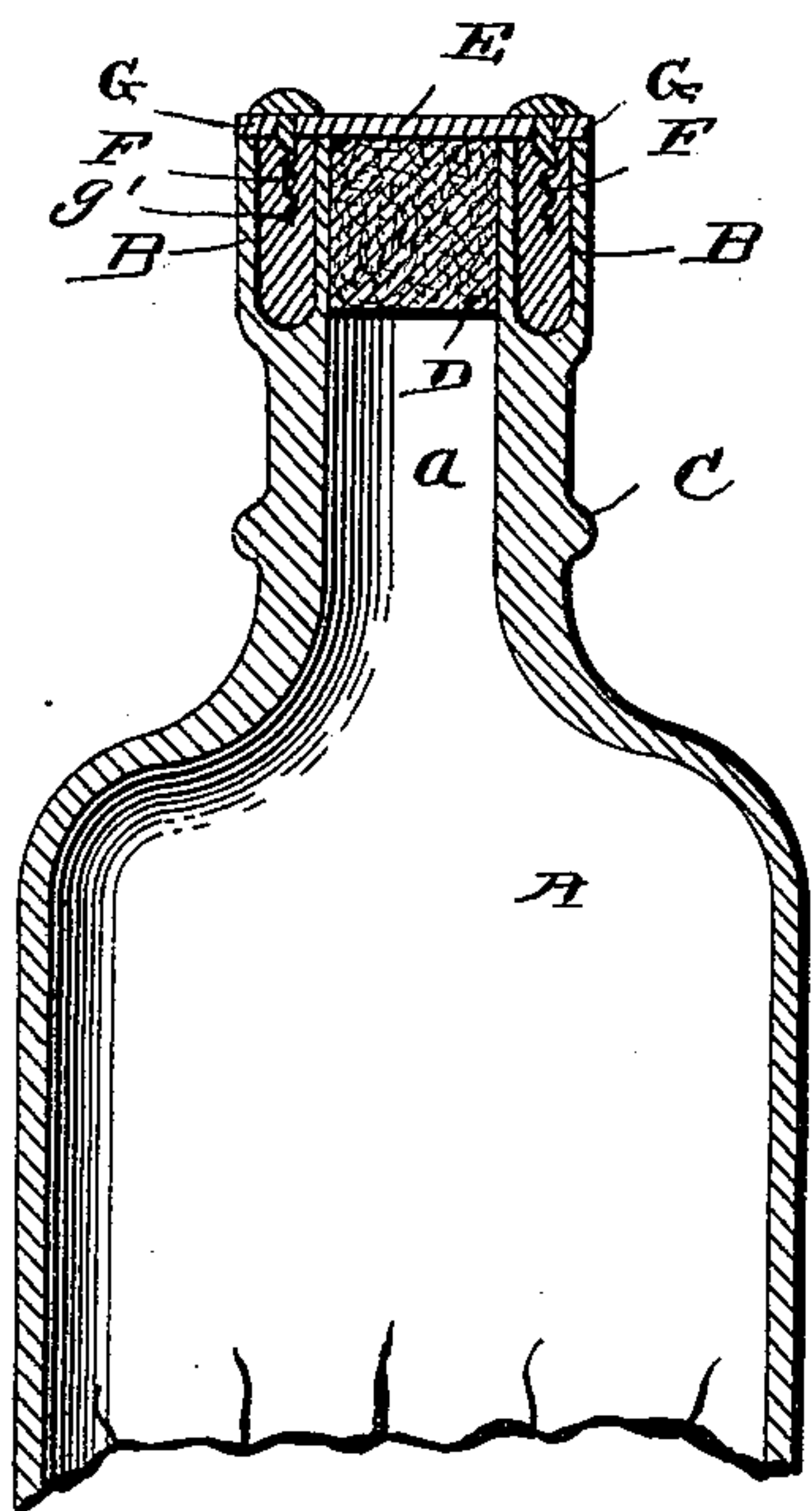


FIG. 2.

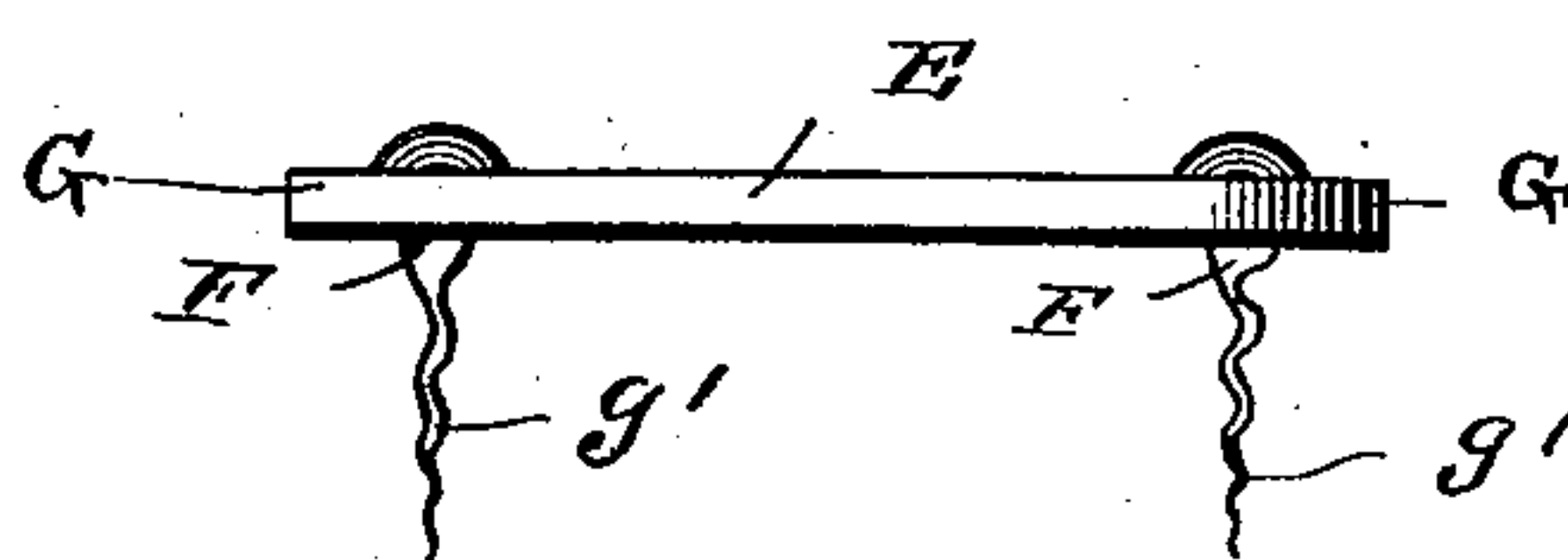


FIG. 4.

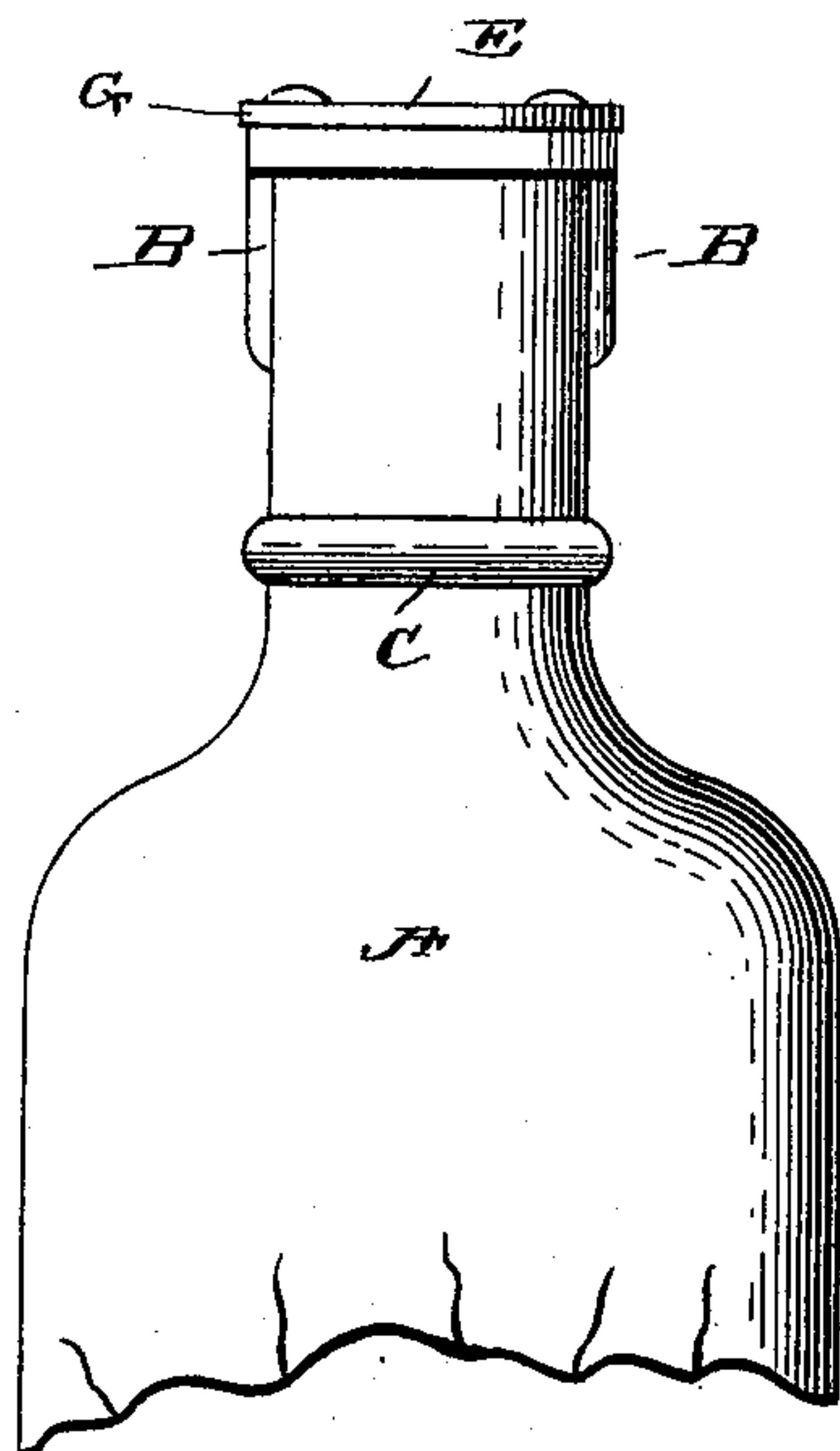
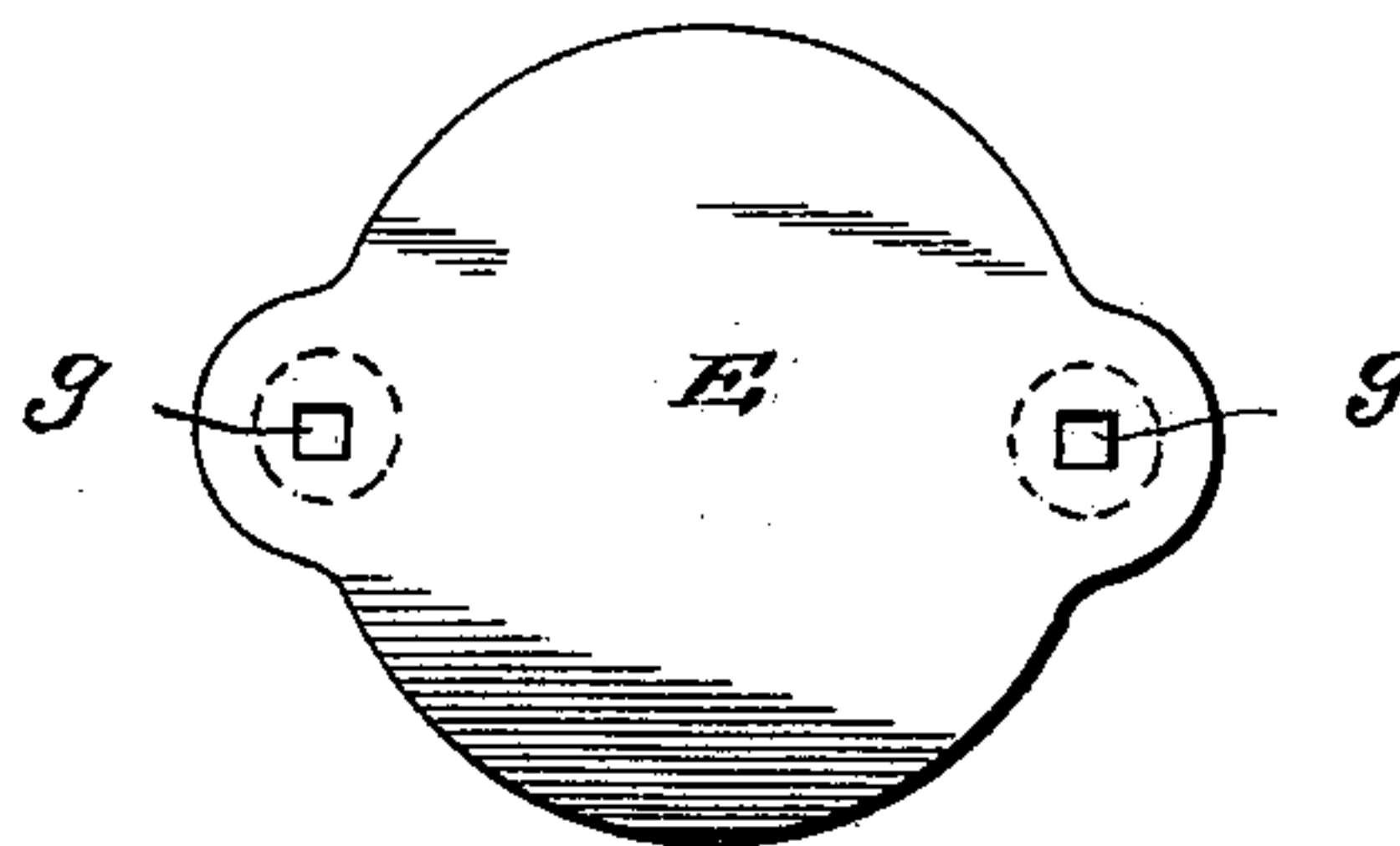


FIG. 3.



Witnesses
C. D. Hester,
K. A. Han.

Inventors
Daniel O'Donnell
James E. O'Donnell
By John Hedderburn
Attorney

UNITED STATES PATENT OFFICE.

DANIEL O'DONNELL AND JAMES E. O'DONNELL, OF GRIMES, IOWA.

NON-REFILLABLE BOTTLE.

SPECIFICATION forming part of Letters Patent No. 594,274, dated November 23, 1897.

Application filed May 28, 1896. Serial No. 593,457. (No model.)

To all whom it may concern:

Be it known that we, DANIEL O'DONNELL and JAMES E. O'DONNELL, citizens of the United States, residing at Grimes, in the county of Polk and State of Iowa, have invented certain new and useful Improvements in Non-Refillable Bottles; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in bottles; and it has for its object, among others, to provide a simple and cheap bottle and stopper or cap so constructed as to prevent its being refilled without detection, whereby its reuse for counterfeiting or inferior medicines or the like is prevented. We provide a frangible cap and means for securely affixing it over the mouth of the bottle after the same has been filled. We form the neck of the bottle with small vials or receptacles which are designed to contain a cement, plaster-of-paris, or the like, and into this depend the spirally-formed pins carried by the cap or seal. When the cement or plaster-of-paris is set, the pins are held immovably therein, and the cap must be destroyed before the contents can be removed.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claim.

The invention in this instance resides in the peculiar combinations and the construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a vertical section through the neck of a bottle embodying our improvements. Fig. 2 is a view of the cap and its pins. Fig. 3 is a plan of the cap. Fig. 4 is an elevation with the parts in place.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates the bottle, and a the neck thereof, which is blown or formed

with the vials or receptacles B preferably at opposite sides of the neck. Into these receptacles is designed to be placed a suitable cement or plaster-of-paris.

C is a glass band or rim around the neck of the bottle and above which is placed the cork D.

E is a glass cap adapted to stand less pressure than the neck of the bottle and less than the pins F. This cap is designed to be placed over and cover the mouth of the bottle, and at opposite sides has the extensions or lugs G, having square holes *g*, through which pass the glass pins F, which have round heads and square shoulders and terminating in spirals or screw-threads, as seen at *g'*.

In practice the bottle is filled. Then the cork is inserted, and then the cap is placed over the end of the neck and the pins set in the cement or plaster-of-paris in the receptacles at the sides of the neck, and when the cement sets the pins are held immovably therein, and in order to remove the contents of the bottle the cap or the neck of the bottle must be broken.

We may sometimes form the mouth of the neck with niches I for the reception of a wire when it is desired to use the bottle for beer and other liquids that are liable to effervesce or contain gases and the stopper requires to be fastened down.

Other modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What is claimed as new is—

A bottle having its neck formed with receptacles upon the outside thereof, combined with a glass cap having lugs with openings and pins having shoulders and passed through said openings and having their lower portions screw-threaded and extended into cement or the like in said receptacles, substantially as specified.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

DANIEL O'DONNELL.
JAMES E. O'DONNELL.

Witnesses:

E. F. PAGE,
L. E. BENNETT.