(No Model.)

G. C. ALEXIUS.
BRICK SHOT.

No. 421,804.

Patented Feb. 18, 1890.

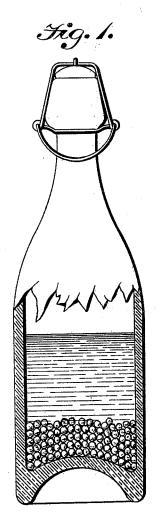


Fig. 2.

Mitnesses:

By

Grando Ginho Alexius James Shuhy

UNITED STATES PATENT OFFICE.

GUIDO C. ALEXIUS, OF COVINGTON, LOUISIANA.

BRICK SHOT.

SPECIFICATION forming part of Letters Patent No. 421,804, dated February 18, 1890.

Application filed January 14, 1889. Serial No. 296, 286. (No specimens.)

To all whom it may concern:

Be it known that I, GUIDO CINTIO ALEXIUS, a citizen of the United States, residing at Covington, in the parish of St. Tammany and 5 State of Louisiana, have invented certain new and useful Improvements in Brick Shot; and I do 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 means for cleaning bottles; and it consists of shot formed from clay or argillaceous earths, to be employed in the place of lead shot heretofore

15 used for that purpose.

In the drawings, Figure 1 is a side view of a bottle, showing part broken away; and Fig. 2 is a view of some of the shot on an enlarged scale.

20 It is well known that shot made of lead have long been employed in bottle-cleaning, the method being to partly fill a bottle with such shot and then shake the bottle sufficiently to give them violent agitation. The 25 friction of the shot against the inner wall of

the bottle by continuous shaking serves to remove any soiling or offensive matter that may be found thereon; but the above-named process is objectionable, and is sometimes of ound to be dangerous. Lead is of a poisonous nature, and it sometimes occurs in clean-

ous nature, and it sometimes occurs in cleaning a bottle it leaves on the walls thereof a subtle poison. To remedy this difficulty, I prepare what I call "brick shot" in the follow-

35 ing manner:

I first take clay or argillaceous earth and grind it in a pug or other suitable mill. I then, while it is in a plastic state, pass it be-

tween suitable rollers provided with shapingcells, or through dies, to secure the desired 40 size and shape. When thus formed, I take the plastic shot and burn them in a kiln until they are thoroughly dried and baked, when they assume the color and rigidity of burnt brick. Shot thus formed have a rough 45 surface, and may be safely used in the manner that lead shot are employed in bottlecleaning without risk of poison; and, furthermore, inasmuch as they are impervious to ordinary acids or alkalies, they are found to 50 be much more effective than lead shot.

It is obvious that marls, loams, and various other earths may be employed usefully in making my shot; but I find no earth is equal

to clay in such manufacture.

While I have described the shot as being formed from clay, kaolin, loams, marls, or argillaceous earth, yet it is obvious that they may be formed from any material which will not produce an injurious effect or be affected 60 by chemical preparations, alkalies, or acids.

Having described my invention, what I

claim is-

1. As a new article of manufacture, shot formed of suitable earths, substantially as 65 specified.

2. Shot formed from suitable earths and having a rough external surface, substantially as specified.

In testimony whereof I affix my signature 70 in presence of two witnesses.

GUIDO C. ALEXIUS.

Witnesses:

W. R. STRINGFELLOW, PERCY D. PARKS.