

No. 842,219.

PATENTED JAN. 29, 1907.

C. F. MARSH.
BOTTLE OR LIKE ARTICLE.
APPLICATION FILED MAY 24, 1906.

Fig. 2.

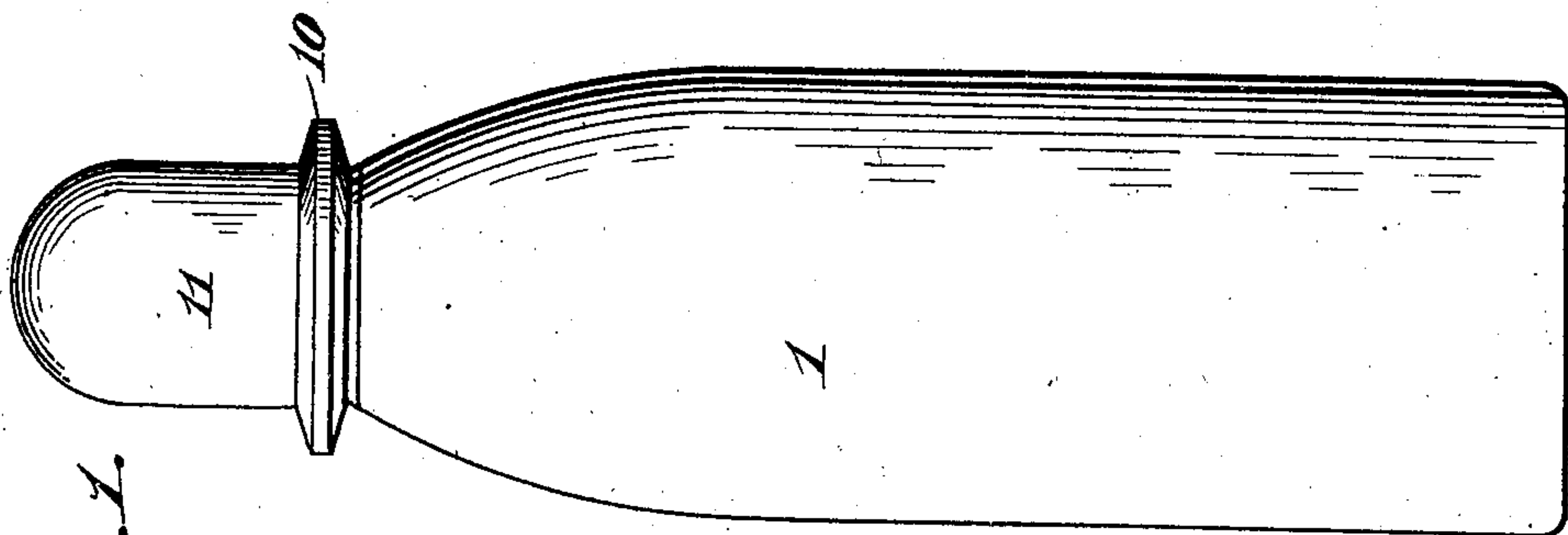
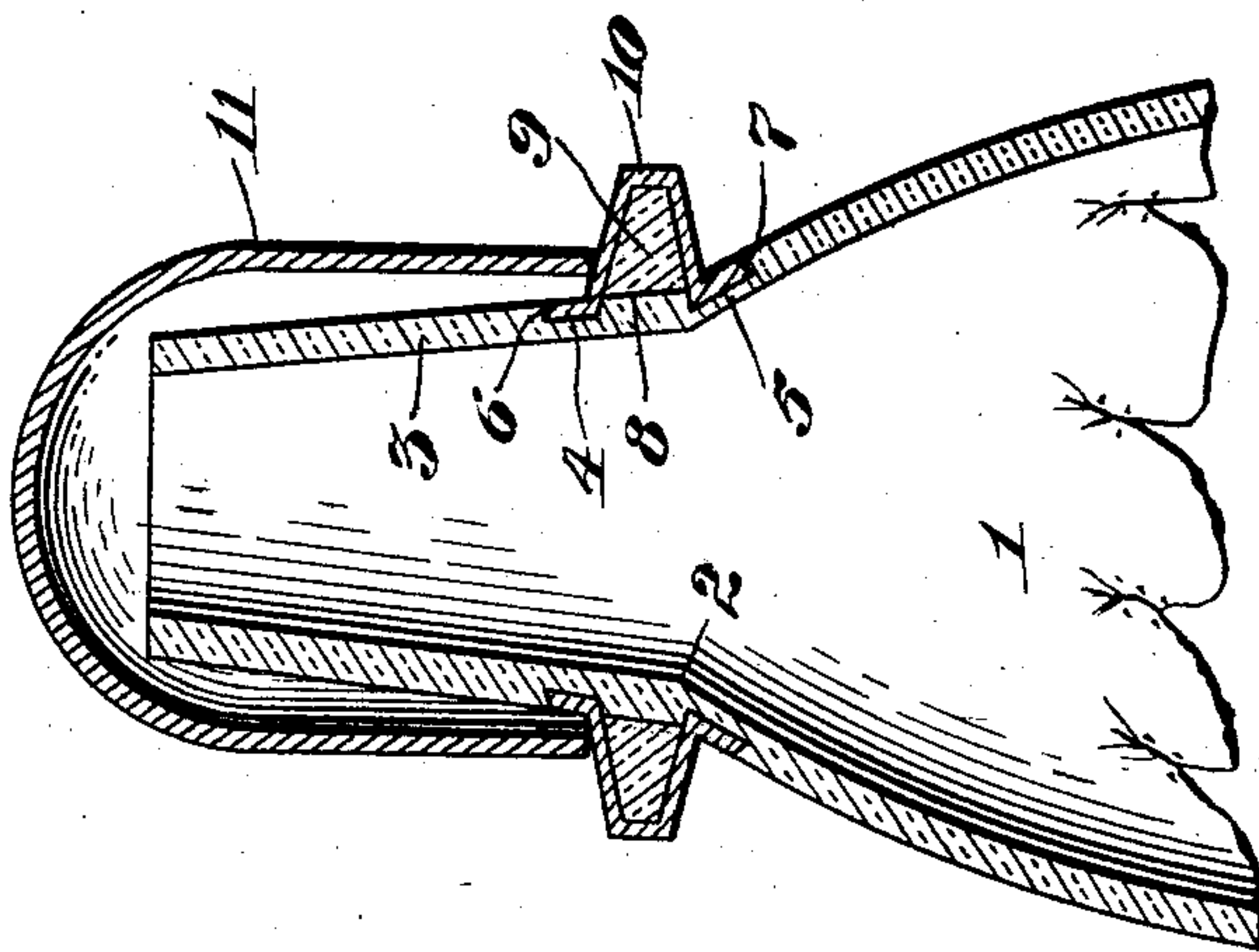


Fig. 1.

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CAROLINE FOOTE MARSH, OF NEW YORK, N. Y.

BOTTLE OR LIKE ARTICLE.

No. 842,219.

Specification of Letters Patent.

Patented Jan. 29, 1907.

Application filed May 24, 1906. Serial No. 318,496.

To all whom it may concern:

Be it known that I, CAROLINE FOOTE MARSH, a citizen of the United States, and a resident of the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Bottles or Like Articles, of which the following is a specification.

My invention relates to bottles or like articles, by which I include vessels of glass, china, or other pottery. Its object is to secure parts or pieces to such vessels in a permanent and sanitary manner.

Further objects of the invention will appear in the specification and be pointed out in the claims.

While my invention is applicable, as above stated, to non-metallic vessels of various forms to which a part or portion is to be secured, it is particularly adapted to bottles, and especially to bottles provided with annular flanges, such bottles being commonly used for containing flavoring extracts or the like. In this case the annular flanges are formed at or adjacent to the shoulder of the bottle and are intended to support a metallic cap so that the cap may be freely detached from the bottle and so that any drip from the mouth of the bottle will be caught on the flange and prevented from running down the sides of the bottle, whereby its appearance would be marred.

It has heretofore been customary to secure flanges of glass or similar material on the necks or adjacent the shoulders of such bottles either by shrinking them on or by securing them with cement. In either case the ordinary dropping of the cap on the flange or handling the bottle is apt to loosen the flange, or it may often be broken in this way. My device covers the flange with a metal, which decreases the danger of breakage and at the same time firmly secures it to the bottle or other article.

In the drawings, Figure 1 is an elevation of a flanged capped bottle embodying my invention. Fig. 2 is a partial vertical section of the bottle shown in Fig. 1 on an enlarged scale.

In the drawings, 1 designates the body of the bottle, 2 its shoulder, and 3 its neck portion. Adjacent the shoulder 2 are provided two depressed portions 4 and 5, which may be formed in the bottle when it is made or which may preferably be afterward produced

therein by the use of a sand-blast or by hydrofluoric acid or the like. Preferably the sides 6 and 7 of the portions 4 and 5 are undercut, as clearly shown in Fig. 2 of the drawings. These depressions are spaced apart from each other, leaving an annular portion 8, to the exterior surface of which in the present instance is snugly fitted a flange 9, which may be of glass or any other suitable material. For securing the flange 9 in position and for preventing its accidental breakage I inclose it in a metal covering 10, which extends into the portions 4 and 5 and preferably completely fills the same, having its outer surface flush with the exterior surface of the body 1 and of the neck 3 of the bottle. The flange 9 so inclosed forms a seat for a loose metal cap 11 in the usual manner.

As a means of producing the metal covering 10 I preferably coat the surfaces of the depressions 4 and 5 with a composition composed of a metal having a good electric conductivity, together with a suitable flux and ordinarily a powdered vitreous material. The outer surface of the flange 9, with which the metal covering 10 is afterward to contact, may preferably be covered with the same composition, although this is not essential to my invention. The bottle is then fired in a kiln in the usual manner, as is also the flange in case the composition is used thereon. Advantageously the flange 9 will be placed in position on the bottle before the composition is applied and the two coated and fired together. In either case the bottle, with the flange placed in proper position, is then placed in an electrolytic bath and the metal covering 10 deposited thereon. This covering 10 is preferably of sufficient thickness to fill the depressions 4 and 5, leaving a smooth exterior surface. It should also be of sufficient thickness, as shown, to form a strong protection against breakage for the flange 9.

By reason of the intimate connection of the metal portion 10 with the bottle a very sanitary as well as strong article is produced.

I have illustrated the best form of embodying my invention known to me; but it is evident that considerable changes may be made therein without departing from my invention. It is also evident, as above stated, that my invention is not limited to a bottle of particular form or a bottle of any form or to the securing thereto of any particular flange or the like.

What I claim is—

1. A non-metallic vessel, an independent non-metallic part on the outer surface of said vessel, and a metal covering extending
5 over said part and the adjacent surface of said vessel and permanently secured by adhesion to said vessel and to said part, substantially for the purposes specified.

2. A non-metallic vessel, an independent
10 annular flange, and a metal covering extending over said flange and the adjacent surface of said vessel and permanently secured to the latter, substantially for the purposes specified.

3. A non-metallic vessel formed with an annular depression, an independent flange on said vessel adjacent said depression, and a metal covering extending over said flange
15 and into said depression and permanently united to the latter, substantially for the purposes specified.

4. A bottle or the like having an exterior annular depression in its neck, an annular flange surrounding said neck adjacent said
25 depression, and a metal covering extending over said flange and the depressed annular portion of said neck and permanently united to the latter for securing said flange in position.

5. A bottle or the like having two exterior annular depressions adjacent its shoulder and spaced apart from each other, an annular flange surrounding said bottle between said
30 depressions, and a metal covering extending over said flange and filling said depressions for securing said flange in position.

6. A bottle or the like having two exterior annular undercut depressions adjacent its shoulder and spaced apart from each other, an annular flange surrounding said bottle
40 between said depressions, and a metal covering extending over said flange and filling said depressions for securing said flange in position.

7. The process of securing a flange on a
45 vessel of vitreous or like material comprising: forming an annular depression in said vessel, fitting an annular flange on the surface of said vessel adjacent said depression, covering said depressed surface and said flange with a
50 composition containing a metal and a flux, firing said vessel and said flange to fuse such composition, and depositing on such fused composition a metal covering.

8. The process of securing a flange on a bot-
55 tle comprising: forming two annular depressions on the exterior surface of said bottle adjacent its shoulder and spaced apart from each other, fitting an annular flange on the surface between said depressions, cov-
60 ering said depressed surfaces and said flange with a composition containing a metal and a flux, firing said vessel and said flange to fuse such composition, and depositing on such
65 fused composition a metal covering.

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

CAROLINE FOOTE MARSH.

Witnesses:

GEO. L. COOPER,
OLIN A. FOSTER.