

R. M. ATWATER.
Marking Bottles.

No. 213,606.

Patented Mar. 25, 1879.

FIG. 1.



FIG. 2.



Witnesses,
Harry Smith
John W. Bumer.

Inventor,
Richard M. Atwater
by his Attorneys
Howson and Cox

UNITED STATES PATENT OFFICE.

RICHARD M. ATWATER, OF MILLVILLE, NEW JERSEY, ASSIGNOR TO JAMES WHITALL, R. PEARSALL SMITH, JOHN MICKLE, JR., CHARLES ROBERTS, CHARLES A. TATUM, AND WILLIAM H. NICHOLSON, OF PHILADELPHIA AND NEW YORK.

IMPROVEMENT IN MARKING BOTTLES.

Specification forming part of Letters Patent No. **213,606**, dated March 25, 1879; application filed April 22, 1878.

To all whom it may concern:

Be it known that I, RICHARD M. ATWATER, of Millville, Cumberland county, New Jersey, have invented a new and useful Improvement in Lettering Glass Bottles, of which the following is a specification:

The object of my invention is to render the raised letters and figures on glass bottles more legible, and such ornaments as are in relief more distinct, by grinding the faces of such letters, figures, or ornaments.

In the accompanying drawings, Figure 1 is a side view of a bottle on which is a beading, *a*, inclosing a space which contains sundry letters in relief, these letters being formed by corresponding sunken letters in the mold in which the bottle is blown.

It has been usual in bottles of this class to leave the projecting letters untouched, and they are consequently more or less indistinct and illegible, especially when placed on shelves and viewed from a distance, the glaze with which the letters and figures are coated tending to produce a confusing effect, which renders the bottles inapplicable to use by druggists, who generally resort to more distinct markings or labels.

In order to render the letters, figures, or other designs or characters which are in relief more distinct, I simply grind them down to

such an extent that they will present opaque or translucent figures or letters with well-defined edges, the sides of the projecting letters retaining the glaze, and the glazed sides presenting a marked contrast with the ground faces of the letters and figures, which are thus brought into prominence.

Fig. 2 represents an enlarged section of a portion of a bottle, *d d* being the projections which form the letters or figures, and these projections, which are in the first instance slightly rounded, are reduced, so as to present well-defined sharp edges.

I do not claim the process of ornamenting glassware by first pressing up the raised portions thereon, and then subjecting the said raised portions to the action of a grinding-surface; but

I claim as my invention and as a new manufacture—

A glass bottle in which raised letters and figures are rendered more distinct and legible by grinding them, in the manner described.

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

RICHARD M. ATWATER.

Witnesses:

ROBT. RUMBF,
A. E. FINKELL.