

UNITED STATES PATENT OFFICE.

MARCELLUS NEWTON, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN MAKING SOLUTIONS OF GUN-COTTON.

Specification forming part of Letters Patent No. 128,416, dated June 25, 1872.

To all persons to whom these presents may come:

Be it known that I, MARCELLUS NEWTON, of Boston, of the county of Suffolk and State of Massachusetts, have invented or discovered a new and useful Improvement in the Process of Making Solutions of Soluble Cotton; and do hereby declare the same to be described as follows:

The common method heretofore practiced in making pyroxyline has been to mix together equal or about equal quantities of sulphuric ether and alcohol, and to place in such or pour the mixture upon the required quantity of cotton, subsequently stirring the whole, so as to effect the dissolution of the cotton. It has been a difficult matter to produce the last-mentioned result, as more or less of the cotton fiber unreduced would remain in the compound and be a bar to the subsequent contraction and reduction to a mouth-plate for reception of artificial

teeth, or, while in the plate, will cause such plate to warp or get out of shape.

I have found that by first pouring the alcohol upon the cotton and thoroughly wetting the latter with the former, or allowing them to stand until the cotton may have become completely saturated with the spirit, and afterward adding the ether to the mixture of cotton and alcohol, a new and valuable result follows—viz., the complete and more rapid resolution of the cotton.

I therefore claim as my improvement—

The new mode hereinbefore described of preparing solutions of cotton or fibrous matter in the manufacture of pyroxyline.

MARCELLUS NEWTON.

Witnesses:

R. H. EDDY,
J. R. SNOW.