

UNITED STATES PATENT OFFICE.

JOHN MATTHEWS, OF NEW YORK, N. Y.

IMPROVEMENT IN THE MANUFACTURE OF MINERAL WATERS.

Specification forming part of Letters Patent No. 129,044, dated July 16, 1872.

To all whom it may concern:

Be it known that I, JOHN MATTHEWS, of the city, county, and State of New York, have made a new and useful Improvement in the Manufacture of Mineral Waters; and I hereby declare the following to be a full and exact description of the same.

The waters of many springs in different parts of the world have become celebrated for their efficacy in the treatment of various diseases and ailments. Were it possible to obtain the waters of these natural springs at all times and places at a reasonable price, there would be no reason to seek for a substitute. This is not the case. By the researches of chemists the exact quantity of all the important salts contained in mineral waters has been determined; and on the basis of these researches imitations of the most celebrated mineral waters are now prepared and sold in many places. The salts for preparing such imitations or artificial waters have also been prepared by chemists for use in the manufacture of mineral waters.

My invention consists of a tablet or lozenge containing the salts in the proper proportion to form, when dissolved in the requisite quantity of water, mineral water, as nearly identical as possible with the most valuable known mineral waters—such as Congress, Vichy, Kissengen, Seltzer, Carlsbad, &c. These tablets are marked with a letter or other symbol, which shall indicate the character of the materials which make up the tablet or of the natural water imitated. Thus a convenient system is to mark the salts for forming Kissengen water with the letter "K." Those for Vichy with the letter "V," &c. These tablets are packed in boxes, and used to prepare a glass of mineral water when and wherever wanted, thus enabling families and individuals, at home or travelling, to procure when wanted the mineral water they may require. It is well known that to obtain the greatest amount of benefit from the use of mineral waters, they should be taken at particular times. By the simple and convenient manner in which these tablets, or crystals, as they have been

called, are furnished, this desirable and convenient acquisition can always be attained.

The following description will enable any one skilled in the art to make and use my invention.

First, find from chemical analysis the kind and amount of every ingredient to form a given quantity of any mineral water—as, for example, Kissengen. Then take the required ingredients, chemically pure, finely powder, and mix them in a mortar, and afterward pass them through a fine sieve, so as to get a perfectly homogeneous mass. The mixture is then slightly moistened with eighty-five per cent. alcohol, for the double purpose of making the powders cohere under pressure, and for the purpose of making the tablets more readily soluble in water when used. Next place the mixture on a marble slab and roll it to a sheet of uniform thickness, which is then cut into disks, lozenges, tablets, or other suitable form, by means of a cutter having a plunger, which serves the double purpose of compressing or consolidating the tablet or lozenge, and marking it with a letter, device, or symbol to indicate its composition, or the particular mineral water to be formed by dissolving it. The next step is to place the tablets on paper and put them in a steam-oven heated to about 160° Fahrenheit. A circulation of dry air is kept up through the oven while they are in it, so as to carry off gradually all the moisture, and leave the tablets in a porous, pliable condition, so they will readily dissolve in water and yet possess sufficient strength to be handled. They may remain in the oven from two to three days, so as to be perfectly dry, without any fusing or baking, which would make them difficult to dissolve, and might change the chemical relations of the elements. They are, when dry, put up in tight boxes for market and use.

I have described the best means known for preparing this new manufacture; but I do not limit myself to the exact details of the process, which may be varied without departing from the spirit of my invention, so long as the result produced is a tablet, lozenge, disk, or pellet of dry powdered chemicals or

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salts, mixed in proportions suitable for forming medicinal or mineral waters, substantially such as above described.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

The new article of manufacture herein described, consisting of a mixture of the com-

ponent or approximately component salts of mineral waters, made into a tablet, lozenge, or equivalent form, so as to be used substantially as and for the purpose set forth.

JOHN MATTHEWS.

Witnesses:

JOHN A. DARLINGTON,
FREDERICK TEAL, Jr.