## UNITED STATES PATENT OFFICE.

RALPH GROW, OF GALESBURG, ILLINOIS.

## IMPROVEMENT IN THE MANUFACTURE OF SOAP.

Specification forming part of Letters Patent No. 36,516, dated September 23, 1862.

To all whom it may concern:

Be it known that I, RALPH GROW, of Galesburg, in the county of Knox and State of Illinois, have made a new and useful Improvement in the Manufacture of Soap; and I do hereby declare that the following is a full and exact description thereof and of the process of manufacturing and compounding the same.

I would here state that the hydrocarbons which I intend to use for the manufacture of my improved soap, and which I designate in this my specification under the general term "naphtha," are the light oils or oils of distillation from petroleum and coal-oil, such light or distilled oils being cheaper for my purpose than either benzole, for which I have a patent, or petroleum, and such light oils I here designate under the term "naphtha" and desire to claim, whether they be produced by a single distillation or be redistilled.

In the manufacture of toilet-soaps the main object is, first, to produce an article which, while it is of a desirable quality, shall at the same time be afforded at a cheap rate to the consumer, and, second, which can be used either for toilet purposes or for ordinary household washing. To this end I have ascertained that by the simple combination of naphtha with the common soft or hard soap an article is produced which when perfumed will answer all the requirements of the household; that while its penetrating qualities are such as to remove grease, varnish, paints, and spots from cloth, it acts upon the skin of the person using it in the most desirable manner, leaving the surface soft and without liability to chafe or While not confining myself to any particular proportions, I would state that thirty pounds of common soft or hard soap added to

one gallon of naphtha, as I shall describe, will produce the soap in question. The soft soap (or any other fluid soap) or hard soap is first taken and thoroughly dissolved in a proper vessel over a slow fire—say thirty pounds. One gallon of naphtha is then added and the whole stirred until thoroughly mixed. The compound is then poured into molds to cool, after which it is fit for use. The naphtha may be added to the soap before subjecting the compound to the action of heat; but in either case care should be taken to cause a thorough union of the ingredients.

When intended for toilet purposes the soap may be perfumed in the usual way.

By the simple combination of the abovenamed ingredients I produce in every desirable respect a soap adapted to household purposes, and which can be afforded at a cheaper rate than any other soap with which I am acquainted.

To the ingredients above named others might be added—such as ammonia, turpentine, camphene, coal-tar, sal-soda, spirits of wine, gumcamphor, olive-oil, alcohol, rosin, marble-dust, kaolin—in varying proportions; but all these I discard as unnecessary, either separately or in combination, and as adding a useless expense in the manufacture of my soap.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The use of hydrocarbons in the manner and for the purpose substantially as described.

RALPH GROW.

Witnesses:

H. H. WILLSIE, B. F. DANFORD.