

# UNITED STATES PATENT OFFICE.

JOHANN ZACHERL, JR., OF UNTER DÖBLING, NEAR VIENNA, AUSTRIA-HUNGARY.

## PYRETHRUM SOAP.

SPECIFICATION forming part of Letters Patent No. 308,172, dated November 18, 1884.

Application filed March 28, 1884. (No specimens.)

*To all whom it may concern:*

Be it known that I, JOHANN ZACHERL, Jr., a subject of the Emperor of Austria-Hungary, residing at Unter Döbling, near Vienna, in the Province of Nether Austria, in the Empire of Austria-Hungary, have invented certain new and useful Improvements in Soaps for Destroying Insects and other Parasites; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

It is commonly known that the particular ingredient of some species of pyrethra, which makes these plants a most powerful means for killing insects, consists in a soft resinous substance contained in these plants. I have found that this soft resin can very easily be combined with soap by adding the same to the soap mass during the manufacture of the latter. This can be made either by directly adding to the soap mass dried and powdered pyrethra-plants, or by previously extracting from these

plants the soft resin forming the efficacious insect-killing ingredient thereof, and by adding this soft resin to the soap mass. For this purpose all known sorts of soap may be applied. To the soap mass as much of the dried pyrethra, or as much of the soft resin extracted therefrom, may be added as the soap mass is able to absorb.

What I claim as my invention is—

1. Soap containing an addition of powdered pyrethra.
2. Soap containing an addition of the soft resin which forms an ingredient of pyrethra-plants and contains the insect-killing stuff.
3. Soap containing an addition of powdered pyrethra and of the soft resin contained in these plants.

In testimony whereof I affix my signature in presence of two witnesses.

JOHANN ZACHERL, JR.

Witnesses:

CLARENCE M. HYDE,  
HENRY DAVIDS.