

Author unknown. "Extracting Perfume from Flowers by Electricity." *The Mail and Express Illustrated Saturday Magazine* (March 7, 1903)

Extracting Perfume from Flowers by Electricity

PROF. ELMER GATES, founder of the Elmer Gates Laboratory at Washington, D. C., has just completed a wonderful invention, by means of which sweet scented blooms are made to yield their perfume. Delicious essences, in which milady revels, are now secured straight from the blooming plant without injuring the lovely flowers from which the perfume is extracted.

With a remarkably ingenious electrical apparatus, Prof. Gates secures the little particles as they are breathed upon the air by the flowers, and, drawing them down several charged wires to glass jars, bottles the various scents which distinguish the rose, the lily and the violet.

This electrical method of extracting perfume from blooming plants, besides utilizing the blooms to better advantage than can possibly be done by the method now in use of crushing the flowers, also assures a much superior quality of perfume.

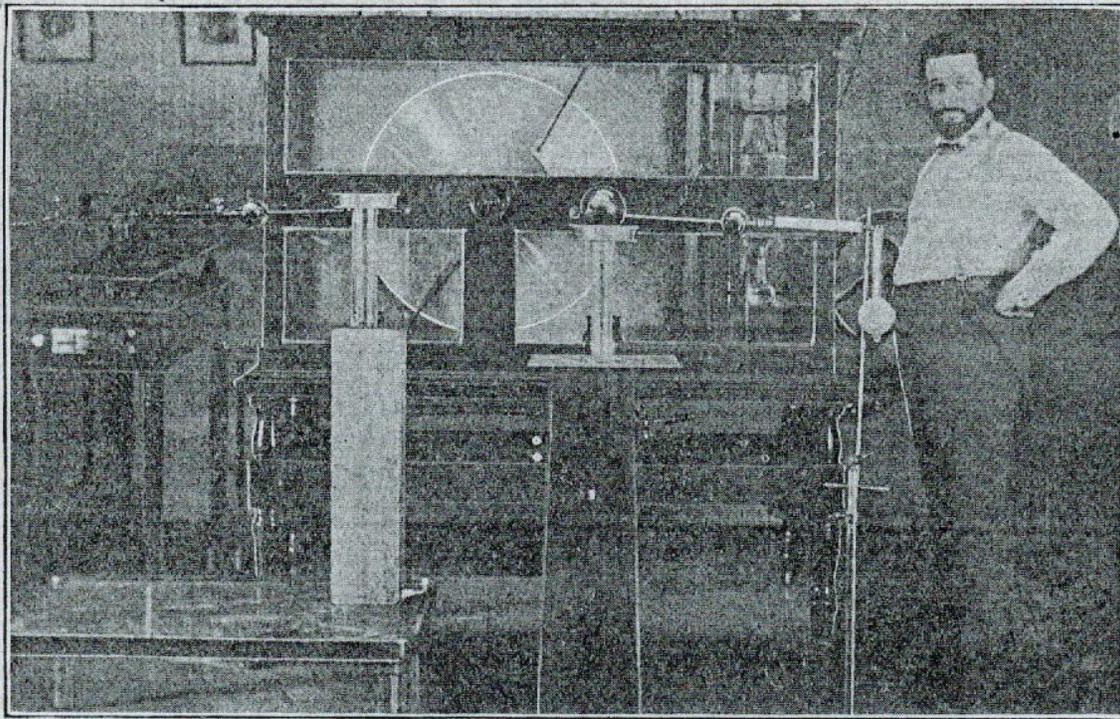
The delicate violet extract, which is so expensive and so difficult to obtain, will be secured by Prof. Gates's apparatus and put on the market at a nominal cost. Roses, lilies, lilacs, heliotrope, mignonette, carnations and all the other lovely blooms that exhale sweet odors will be made to grow in Uncle Sam's conservatories for the value of their perfume.

Prof. Gates explains his invention, and the theory from which he evolved the apparatus; as follows: "As long as a flower is supplied with sufficient moisture and sunshine to keep it growing, it continues to give off perfume, at least until it begins to die. During this period certain organic substances in the flower are ripened into a perfume which is exhaled into the air; but shortly after the flower is cut this ripening process ceases and the odor rapidly becomes less and less agreeable. My invention for capturing the odors directly [as] they are wafted from the flowers is merely an electrical apparatus with positive and negative poles. The extracting machine can be placed at a distance of five feet from the blooming plant. As the sweet scents are wafted from the flowers, in the form of little particles, they are drawn toward the positive knob of the machine.

"In order to collect this attracted vapor of perfume, a device is used for sucking it through a hole in the end of the knob which connects with a bottle containing alcohol or other liquid for absorbing or dissolving the odor. This device consists of an air pump which exhausts the air from the bottle through a rubber tube, and thus causes the precious vapor to rush into the vacant space through the hole in the knob.

"When the contents of the receiving jar are sufficiently saturated with the scent, the jar is withdrawn and replaced by a fresh one. So powerful is the machine that a single rose held in front of the receiver will in six seconds convert a pint of plain water into rose water."

The vast extent of our country, with its various climates, suited to different plants, might make the raising of flowers for perfumes a great industry in America, and the invention just described could help largely in its development. By the use of Prof. Gates's invention we may export our perfumes in the near future, instead of importing them.



PROF. GATES AND HIS ELECTRICAL MACHINE.