

PHYSIOLOGY

Scientists Discover Odd Cases Of Taste and Odor Blindness

Disagreement Found as to What Tastes Bitter and Sweet And Whether or Not Arbutus Blossoms Are Fragrant

“WHAT is bitter?” and “What is sweet?” may soon find their way into the class of questions which includes “How high is up?” Dr. A. F. Blakeslee and M. A. Salmon, of the Carnegie Institution of Washington, have discovered odd cases of odor and taste blindness which are comparable to the familiar color blindness. Flowers which some persons call sweet, others declare odorless; and an intensely bitter chemical is tasteless to a few.

Dr. Blakeslee's discovery of “odor blindness” occurred quite by accident. In his garden in which he has been experimenting with the breeding of new kinds of flowers, he secured a Verbena which to him was so very fragrant that he thought of calling it the Arbutus Verbena. But when he called the attention of a friend to this blossom, the friend smelled nothing but exclaimed over the delightful fragrance of the flowers of another plant which to Dr. Blakeslee were quite odorless.

Each suspected the other of a hoax, and they immediately called in all the persons available to sniff the two flowers to settle the dispute. Of forty persons who smelled the two varieties of Verbena, two-thirds could notice fragrance in the pink flowers but none in the red; one-third could smell sweetness in the red but not in the pink. Dr. Blakeslee was of the belief that this sensitiveness to certain odors and blindness to others might be hereditary, but unfortunately an early frost killed the plants before it was possible to test his theory.

This experiment with the Verbena interested Dr. Blakeslee in a discovery by Dr. A. L. Fox, a chemist of Wilmington, Del., of a taste-blindness for a certain synthetic chemical which is intensely bitter to some persons. The curious behavior of persons volunteering to taste this chemical was reported exclusively by Science Service last April.

The chemical which bears the complicated name of para-ethoxy-phenylthio-carbamide is so bitter that a solution of only one teaspoonful in 200 gallons of water will pucker the mouth of

the unfortunate taster and leave an unpleasant flavor on his tongue for several hours. Others will place the pure crystals on their tongue, taste nothing, and wonder what all the fuss is about.

Dr. Blakeslee is now testing as many subjects as he can find willing to take the chance of tasting the bitter dose in an effort to find out how the inheritance of this odd taste blindness fits in with the laws of heredity known to science.

Science News Letter, August 8, 1931

AVIATION

Akron Will be First Airship With Heat System

THE AKRON will be the first airship in this country to be equipped with a heating system which will make all the living and working quarters of the ship comfortable in the chilly heights through which she will sail. Even the Graf Zeppelin does not have a heating system.

But despite the fact that heat for making the ship comfortable will be furnished by the engines, there will be no danger to the crew from carbon mono-

xide poisoning even should some accident cause a leak in the exhaust lines.

For the officer on duty in the control room would be automatically warned by a flashing light and a buzzer should the deadly gas find its way into the most remote room even though the concentration might be only one hundredth of one per cent.

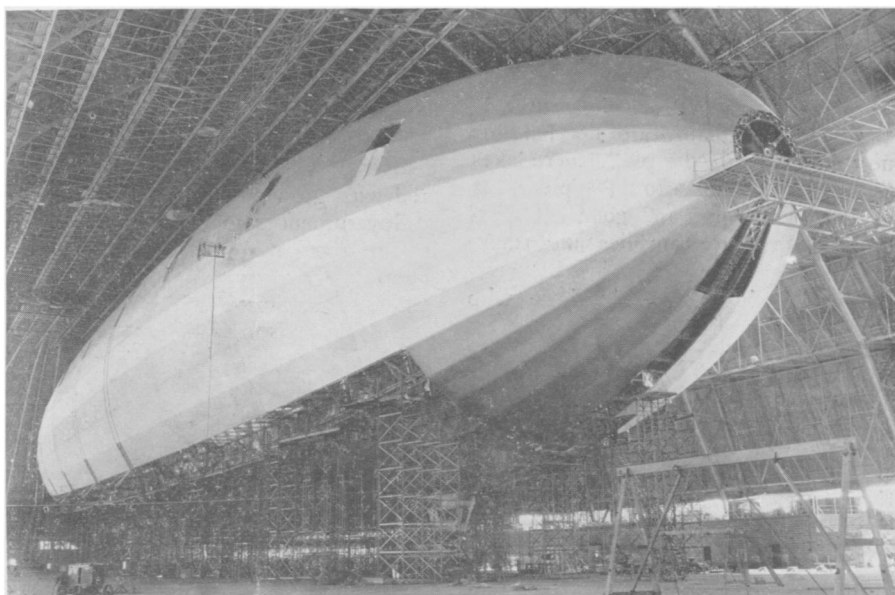
This small amount of the gas would never be a serious danger under ordinary circumstances, but where a person might sleep all night breathing the gas or even remain in the tainted atmosphere for days, it undoubtedly would affect his health to some degree.

When the dread gas flashes its own signal to the officer in the control room it also sends warning to the engine room. There the heating system is immediately cut off and the air which otherwise circulates through it is discharged outside the ship. Then the trouble can be investigated and the leak found without any further danger to those aboard.

The warning device has been developed by Dr. Joel J. White, Flight Surgeon of the Navy's Bureau of Medicine and Surgery, and C. E. Earle, chemical engineer, Bureau of Aeronautics, Navy, in cooperation with the Mine Safety Appliance Co. It is a modification of one previously used in the Holland Tunnel in New York City, and is based on research at Johns Hopkins University and the University of California.

Samples of the air from the main heating ducts of the airship are carried by leads to the safety apparatus.

Science News Letter, August 8, 1931



THE AKRON, WORLD'S LARGEST AIRSHIP, NEARING COMPLETION