

PUBLIC HEALTH

Rabies Control Possible If Public Demands it

RABIES, or hydrophobia as it used to be called, is one of those diseases which can be controlled or even eradicated. Apparently few persons realize this fact, however, because in spite of the panic and hysteria that arise in any community at the first cry of "mad dog," public opinion does not demand enforcement of control measures.

Rabies does not exist in Canada or in Great Britain.

"That it is not controlled or eradicated in the United States is uncomplimentary," declared Dr. C. R. Schlottbauer, veterinary scientist in the division of experimental surgery of the Mayo Clinic.

Measures which Dr. Schlottbauer and other scientists know will control the disease and prevent it in humans are: compulsory licensing and vaccination, impounding and destruction of all stray dogs, quarantine of all dogs during the presence of the disease in a community and of all dogs brought in at any time.

Rabies is a highly fatal inflammation of the brain or of the brain and spinal cord. It is caused by a germ which has the characteristics of a virus. The virus is present in the saliva of infected animals. You can get rabies from a dog without being bitten if the infected saliva gets into a wound such as a scratch or bruise.

The common impression that rabid dogs become furious or vicious and foam at the mouth is not entirely correct. The irritable period is usually short and the ensuing mental depression is the symptom most often noted. Vicious dogs may even become more friendly and quiet, friendly ones hard to manage. Rabid dogs will rarely and probably never willfully go out of their way to bite. If not entirely unconscious of their actions, they appear afraid of man and other animals. In the late stages of rabies, dogs may unconsciously bite anything that crosses their path.

Science News Letter, September 17, 1938

● Earth Trembles

Information collected by Science Service from seismological observatories and relayed to the Jesuit Seismological Association resulted in the location of the following preliminary epicenter:

Thursday, Sept. 1, 5:48.5 p. m., E.S.T.

Near the coast of Salvador, Central America.
Latitude 13.3 degrees north, longitude 89.5 degrees west.

For stations cooperating with Science Service in reporting earthquakes recorded on their seismographs see SNL August 13.



MEASURING THE BREATH OF DEATH

Inventor Fichlen takes his carbon monoxide measuring device into a garage for a practical demonstration.

CHEMISTRY

Carbon Monoxide Detector Developed by Engineer

A MECHANICALLY simple, inexpensive method of estimating the carbon monoxide content of the atmosphere and thus of detecting harmful amounts of this dangerous "automobile exhaust" gas has been developed by J. B. Fichlen, chemical engineer of The Travelers Insurance Company.

Depending upon the conversion of carbon monoxide into carbon dioxide, a gas whose quantity can readily be measured, the device can be built by anyone who desires to do so, Mr. Fichlen states.

An ordinary bicycle pump forces air through a filter which removes carbon dioxide and hydrocarbon gases from the air. This air then passes over an ordinary cigarette lighter coil, which further oxidizes the carbon monoxide to the measurable gas, carbon dioxide. The product is then bubbled through an alkali solution. The carbon dioxide neutralizes the alkali, causing an indicator, phenolphthalein, to lose its reddish color. The number of strokes of the bicycle pump necessary to force enough atmosphere through the system to make the phenolphthalein's color disappear en-

tirely measures the amount of carbon monoxide present in the air. If the capacity of the bicycle pump is known, the concentration of the dangerous CO, as chemists label the gas, can be determined and checked with known facts as to what constitutes a dangerous concentration.

The company announces its intention of giving out specifications for construction of the device to any interested party. Carbon monoxide, which is found in the exhaust from gasoline engines and results from incomplete combustion of the fuel, is one of the most insidious gases known. Not only is it quickly lethal when it passes a certain concentration, but it is odorless and tasteless and hence not readily detectable. Non-lethal amounts of the gas are believed also to have harmful effects in slowing the reactions and alertness of people exposed to it. This has been blamed for many accidents in the past.

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There is one automobile to 55 persons in Germany, compared to one to every five persons in the United States.