

the earth, reporting automatically by radio the weather conditions encountered. It looks like a radio tube, and was designed to replace the presently used bellows-type devices which expand and contract with changes in the air pressure.

The instrument contains a small vacuum flask which holds about five thimbles-full of liquid. Water sometimes is used, but a liquid with a lower freezing point, such as carbon disulfide, is usually chosen. Inserted in the open end of the liquid chamber is a thermistor, a delicate device for measuring temperature. It is a device in which the electrical resistance changes as the temperature changes.

The steam from the boiling liquid causes the temperature changes. It is the changes in the electrical resistance of the thermistor that are transmitted to the ground station by the balloon's radio. The greater accuracy of this instrument is due to the fact that it is the temperature of the steam itself that is used as an index, not that of the boiling water.

Science News Letter, May 14, 1949

Science Service Radio

► LISTEN in to a discussion on "Progress in Detecting Cancer" on "Adventures in Science" over the Columbia Broadcasting System at 3:15 p.m. EDT, May 21. Dr. Charles Huggins, professor of surgery at the University of Chicago, will be the guest of Watson Davis, director of Science Service. Dr. Huggins recently announced a blood test for the detection of cancer which is expected to come into general use in the coming months, and it should be a very real life saver for the future. Dr. Huggins will tell in his own words about this progress and related research.

Science News Letter, May 14, 1949

Words in Science— ENDEMIC

► WHEN a disease is prevalent among a limited population or community, it is said by public health officers to be endemic, en-dem-ic with the stress on dem. Malaria, for example, is endemic in certain parts of the world.

When the disease spreads so as to affect an unusual proportion of the population or so that it is not limited to a single locality, then it is said to be epidemic, pronounced e-pi-dem-ic.

If the disease should spread to international or world-wide proportions, it is said to be pandemic. Influenza was pandemic in 1918.

The origins of these words make clear their meaning. The latter part, "demic" comes from the Greek word for people, the same one from which we get the word democracy. The prefix "en" means within and indicates its confinement to a locality; "pan" means all, pointing out its wide-spread nature; "epi" means on or over, indicating that it is spread over the community or population.

Science News Letter, May 14, 1949

CHEMISTRY

Pioneer Sugar Chemist's Son Wins \$5,000 Prize

► THE SON of a pioneer scientist in the field of sugar chemistry was awarded the \$5,000 fourth annual sugar research prize.

Dr. Hermann O. L. Fischer of the University of California was presented the award by the National Science Fund of the National Academy of Sciences. Dr. Fischer's father was the German chemist, Emil Fischer, who has been called the "father of modern carbohydrate chemistry."

The University of California chemist and

the three previous winners of the award are eligible for a final grand prize of \$25,000 to be awarded next year for the most outstanding contribution to original knowledge about sugar since 1945.

After leaving Germany in 1932, Dr. Fischer served as a professor of chemistry in Switzerland and Canada before going to the University of California last fall.

Dr. Fischer's research was hailed as "vital not only to progress in organic chemistry, biochemistry and physiology, but basic to better understanding of nutritional problems," by Dr. Hans Clarke of Columbia University in a presentation address.

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