MEDICINE

Cancer Follows Injection Of Germ From Proved Case

Conventional Ideas Attacked as Culture From Human Makes Guinea Pig Cancerous at National Health Institute

DEVELOPMENT of cancer following the injection of a germ or micro-organism has been announced by the U. S. Public Health Service's National Institute of Health.

The discovery was made by Drs. T. J. Glover and J. L. Engle who have been working at the Institute, although they are not attached to the regular government staff nor to the U. S. Public Health Service.

They have succeeded in producing typical, unmistakable cancer in a guinea pig. This cancer followed the injection of a culture of a micro-organism or germ isolated from the tissues of a proved case of cancer of the human breast.

Medical scientists here are frankly excited by the discovery. They realize that it attacks the prevalent opinion that cancer is not a germ disease.

Application of the new discovery to the treatment of human cancer is far in the future, but the experiments of Drs. Glover and Engle promise to blaze a new line of cancer research that appears very hopeful.

"It promises to open a valuable field for further research," commented Dr. George W. McCoy, director of the Institute.

Drs. Glover and Engle have also found that cancer in rats follows injection of their culture of germs from human cancerous tissue. But rats develop cancer so very easily that this was not considered convincing evidence that the germ or culture actually could cause cancer. The production of cancer in guinea pigs which, so far as anyone knows or can find out, do not readily develop it, is considered much more of a feat and more convincing that the germ culture of Drs. Glover and Engle is cancer-producing.

The cancer produced in the guinea pig has all the characteristic appearance of cancer when examined by the unaided eye and under the microscope. Furthermore it spread, producing cancer in other parts of the body, thus fulfilling another of the criteria for the diagnosis of the growth as cancer.

The germ itself is what scientists call a spore-bearer. It was isolated on special media from the tissues of the human cancer.

In the report made public, only one case of cancer in the guinea pig is described. The diagnosis of cancer in this case was confirmed by a pathologist of the National Institute of Health, and the foremost staff bacteriologist is now checking the bacteriological side of the work.

Dr. Glover started his investigations several years ago in New York. For the last three years, the work has been carried on by himself and Dr. Engle at the National Institute of Health where the director and staff scientists could follow and check various steps of the research.

In their report made public recently they do not claim specifically to have discovered the cause of cancer, but state with characteristic scientific reserve:

"It is the purpose of this report to place on record the production of metastatic malignancy in one of a group of guinea pigs inoculated with a culture containing a spore-bearing micro-organism which (*Turn to Page* 220)

GEOLOGY

Internal Fires Make Mountain Move

INTERNAL FIRES of Carbon Mountain, near Durango, Colo., are the cause of the "moving mountain" phenomenon now attracting attention, scientists of the Colorado Museum of Natural History at Denver explain. The explosion under this mountain producing additional avalanches of rock, heavy smoke and fumes, indicates fire in the underlying deposits. The original movements are doubtless traceable, in the opinion of the scientists, to expansion and pressure imposed through the heat of underlying fires.

Science News Letter, April 8, 1933

DR. LYMAN J. BRIGGS

GENERAL SCIENCE

New Bureau of Standards Head Chosen From Ranks

PRESIDENT ROOSEVELT'S nomination of Dr. Lyman J. Briggs to be director of the National Bureau of Standards of the Department of Commerce is received with acclaim in scientific Washington as evidence that there will be no playing of politics in the operation of the scientific research bureaus of the government under the Roosevelt administration.

The elevation of Dr. Briggs to succeed Dr. G. K. Burgess who died last year is a promotion from the ranks of scientists who labor at the Bureau of Standards for Uncle Sam. He has been acting director since Dr. Burgess' death and President Hoover nominated him to the directorship but his nomination, with all others made to the lame-duck Senate by Hoover, died because of inaction by the Senate. President Roosevelt, by renewing Dr. Briggs' nomination, has followed the tradition that directors of this great government testing, research and standardization laboratory are eminent scientists who have won research laurels in the organization. Dr. Briggs is the third director in the history of the Bureau of Standards. The late Dr. S. W. Stratton who resigned to become president of the Massachusetts Institute of Technology was director at the formation of the institution shortly after the turn of the century. Dr. Burgess was chief of the