

Mice Fight Rabies

Development of a special breed of mice to help fight rabies was described by Dr. Leslie T. Webster of the Rockefeller Institute for Medical Research, New York City. By selection and cross-breeding methods, he obtained a strain of mice that are highly susceptible to rabies. These mice are used to diagnose rabies in doubtful cases and to test the effectiveness of commercial anti-rabies vaccines. Pasteur treatments prevent rabies deaths if given early enough after a person has become infected with rabies. But not everyone bitten by a dog needs Pasteur treatment. The dog may not have had rabies. If there is doubt about this, the mouse test will help to decide the matter, it appears from Dr. Webster's work.

One in Five Has Chronic Ills

Chronic sicknesses like heart disease and arthritis are an important cause of disability and unemployment. Figures on such sickness have been collected on a large scale for the first time by the U. S. Public Health Service. One out of every five persons has suffered from a chronic illness for three months or longer, the Federal Health Service's principal statistician, G. St. J. Perrott, reported. His figures were obtained in a survey of a number of large cities, and give a fair idea of the extent of chronic illness all over the country. One in ten of unemployed heads of households was unable to work because of

serious disability due to chronic sickness.

Such figures show, Mr. Perrott pointed out, how an effective public health program is necessary for achieving economic security.

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SURGERY

Surgery of Abdomen Advanced by Research

NEW HOPE for better treatment and speedier recovery from severe abdominal conditions, including obstructions and peritonitis, is offered by reports being made to the American College of Surgeons.

A method of treatment of acute intestinal obstruction devised by Dr. Owen H. Wangensteen of Minneapolis, Minn., is hailed as one of the greatest contributions to surgery in recent years. It consists in using continuously a stomach tube to reduce the internal pressure in the distended abdomen. Dr. Wangensteen gave the assembled surgeons the technical details of his decompression method.

In discussion, Dr. Thomas A. Shallow of Philadelphia declared that the Wangensteen method has added to the operative safety of patients with acute intestinal obstruction and to the post-operative comfort of patients without intestinal obstructions to such a degree that it has now replaced all methods used in the past.

"While Dr. Wangensteen does not

make any claim for the cure of peritonitis by means of this method of treatment," he explained, "I am strongly of the belief that many cases of peritonitis are made exceedingly comfortable and the balance is cast in favor of a certain number of a group by the use of the decompression mechanism."

Peritonitis is the acute inflammation of the lining of the abdominal cavity.

"The most serious problem which confronts the abdominal surgeon today is the distended abdomen associated with acute intestinal obstruction," Dr. Shallow continued. "Even in the hands of the most skillful surgeon or the best technician, the distended abdomen in acute intestinal obstruction is a nightmare. In the past, all of us have attempted to fight our way across the pushing coils of intestines to isolate, diagnose and release the cause of obstruction. In our effort, we produced shock and we traumatized tissue to such a degree that, even in successfully performed operations, a fatality occurred.

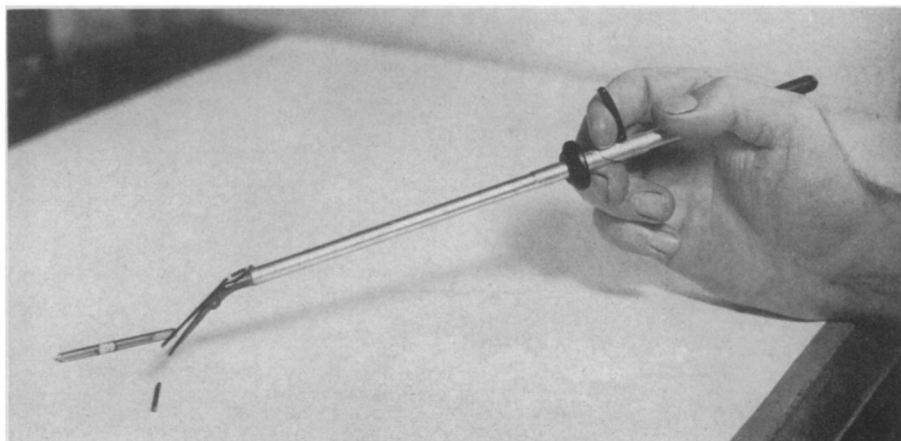
State of Storm

"It might be said that we entered the abdomen in the state of storm to launch our surgical ship into its depths. The introduction of the Wangensteen decompression principle has made it possible for us to enter the abdomen in a calm, to carry the individual through the storm without the danger of gangrene, rupture, or permeation of the bowel. It has made it possible for us to reach the area of obstruction under direct vision and with proper exposure, then to exercise our surgical skill and judgment in overcoming the obstructing agent. All of these surgical principles have been accomplished after due consideration of the physiologic factors and the pathologic processes which exist, so that the operative delay has not been deleterious to the patient.

"Dr. Wangensteen has clearly shown that the permeability of the intestinal wall, the rupture of the vessels and the development of gangrene all pass through stages of circulatory dysfunction. This begins with a gradual increase in pressure in the capillaries and ends when the intramural intestinal pressure exceeds that of the systolic vascular pressure. He establishes beyond question that rupture, permeability and gangrene can be prevented."

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So common is diabetes, that in New York City there are said to be between 50,000 and 100,000 persons with this disease.



TO HANDLE RADIUM

Scientists of the National Bureau of Standards at Washington are protected from the deadly radiation of radium and other radioactive substances by use of these new forceps for handling the tiny but dangerous and costly packets tested there. Specially designed by Dr. L. F. Curtiss, they are light weight and keep the hands as far removed from the radium as possible. Many investigators in the early days of radium's use received burns because of lack of adequate handling apparatus.