

## SURGERY

**Anti-Cancer Hormone in Cancerless Duodenum?**

►THE FIRST ten inches of digestive tract leading from the stomach, called the duodenum, may hold the clue to the whole problem of cancer, Dr. Andre B. Carney of Tulsa, Okla., told the meeting of the International College of Surgeons in Chicago.

He based his opinion on the fact that cancer almost never starts in this portion of the digestive tract, although it is a frequent site of ulcers, and nearby organs have high cancer rates.

Existence of an anti-cancer hormone in the walls of the duodenum may be what protects this organ, he suggested.

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## BIOCHEMISTRY

**Hope Pill Can Control High Blood Pressure**

►HOPE THAT high blood pressure can some day be controlled by a pill appears in a discovery announced by Drs. D. W. Woolley and Elliott N. Shaw of the Rockefeller Institute for Medical Research, New York, in the *Journal of the American Chemical Society* (Aug. 20).

The pill would contain a chemical of the class called alkyl nitro-indoles. The safety and effectiveness of these and the fact that they act when taken by mouth have already been shown in laboratory animals.

These new, potential anti-high-blood-pressure chemicals were developed by changing the chemical structure of serotonin. Serotonin can make blood vessels constrict and raise the blood pressure of normal animals. It is not found in normal blood but is found in the blood of patients with the high blood pressure called essential hypertension.

Although it has not been proved to be the cause of high blood pressure, serotonin seemed suspiciously like such a substance, so Drs. Woolley and Shaw proceeded to make chemicals related to it which would lower the blood pressure that had been elevated by serotonin.

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## PHOTOGRAMMETRY

**Polaroid Instrument Teaches Map-Making**

►A NEW instrument to train future map-makers to spot details easily and quickly in three dimensions went on display the first time at the opening session of the Seventh Congress of the International Society of Photogrammetry in Washington.

Usable in a small booth, the instrument throws two photographs on a screen with polarized light. The image is viewed with polaroid goggles, a pointer allowing the teacher to indicate specific details. Dr. Bertil Hallert of the Officine Galileo, Florence, Italy, perfected the instrument.

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**MOCK RESCUE**—Civil Defense workers demonstrate a method that can be used to remove injured persons from a badly bombed dwelling. Buildings at the National Civil Defense College, Olney, Md., have been carefully constructed to be realistic, yet safe for teaching rescue techniques.

## GENERAL SCIENCE

**Civil Defense Manual**

►LITTLE OR no thought of protection against atomic bomb blast is being put into the 20 billion dollars spent for new building construction of all kinds, the Federal Civil Defense Administration has found.

The charge was made in a new manual issued by the agency called "Windowless Structures, a Study in Blast-Resistant Design." It tells how a building can be constructed to withstand the terrific blast from an atomic bomb.

New buildings, the authors say, can be designed to take advantage of the fact that the pressure of the blast from an A-bomb drops to zero in less than a second. It is during that fraction of a second that the bomb delivers a punch that cannot be taken by buildings designed before the atomic era.

The windowless structure the manual recommends is designed to give with the atomic blow and absorb it. The building is left somewhat deformed, but the people inside can go right on working with no damage.

The manual is an introduction to the problem of making our buildings atom-blast proof. The windowless structure is not offered as an exact model for all new buildings, but many of the principles demonstrated, say the authors, can be incorporated into new construction.

The new methods were developed by Ammann and Whitney, New York, consulting engineers. Consultants included

Prof. N. W. Newmark of the University of Illinois and Drs. John B. Wilbur, Charles H. Norris and Robert J. Hansen of Massachusetts Institute of Technology. Methods of evaluating the force of an atomic blast were prepared by C. W. Lampson and J. Meszaros of the Army Ballistic Research Laboratories.

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## PSYCHOLOGY

**Schizophrenia Found A Poor Man's Disease**

►THE MOST common of the mental diseases, schizophrenia, is a poor man's illness. Those in the upper levels of society are more likely to be neurotic.

This difference in mental illness in different social classes was brought to light by a survey of approximately all the psychiatric patients under treatment on a given date who were residents of the metropolitan area of New Haven, Conn.

In general, it was found that mental disease is not a luxury of the pampered rich. The number of cases increases as the social level goes down.

Results of the survey were reported to the American Psychological Association meeting in Washington by Drs. H. A. Robinson, F. C. Redlich and A. B. Hollingshead of Yale University.

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