



#### LAYING GLASS BRICKS

This is the way the glass block building at Chicago's Century of Progress exposition was erected. Working with the new material, five masons laid 25,000 glass "bricks" in 12 days of eight hours each. The 50-foot tower which rises above the body of the unusual structure glistens with sunlit color in the day and is a pillar of illumination at night.

#### ASTRONOMY

### Invisible Radiations Lag in Variable Stars

**V**ARIABLE stars, which shine brightly for a given period and then become dimmer for a time, have a second and invisible variability, at least in certain types of such stars. Studies disclosing this invisible variability were described before astronomers attending the meeting of the American Association for the Advancement of Science in Chicago by Dr. Edison Pettit and Dr. Seth B. Nicholson, of the Mount Wilson Observatory of the Carnegie Institution of Washington.

Drs. Pettit and Nicholson have trained exceedingly sensitive instruments, attached to telescopes, on a number of variable stars of one special type. They have discovered that although such stars get hotter as they grow brighter, and cooler as they grow dimmer, nevertheless when the total amount of radiation, visible and invisible, is measured, the time of maximum radiation is found to lag appreciably behind the time of maximum brightness.

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#### MEDICINE

## Tumor of Pancreas Believed Cause of Much Mental Illness

### Operations Relieve Patients Apparently Suffering From Epilepsy and Other Mental Disorders

**M**ANY SUFFERERS from mental disorders might be restored to their right minds by surgical operations removing tumors of the pancreas, a report to the American Association for the Advancement of Science reveals.

These patients have a disease that is practically the opposite of diabetes, Dr. Evarts A. Graham of Washington University of Medicine, St. Louis, declared. They suffer from a lack of sugar caused by the presence of too much insulin, which rapidly uses up the sugar of the body, Dr. Graham explained. He pointed out that certain tumors of the pancreas have been found to be responsible for stimulating the secretion of insulin to over-production.

Convulsions, often mistaken for epilepsy, and mental confusion resembling that of alcoholic intoxication result from this lack of sugar, Dr. Graham said; consequently, many persons who have this condition consult a neurologist first.

"One is forced to wonder," he continued, "how many patients there are in our mental institutions suffering supposedly from epilepsy and other mental disorders who perhaps really have pancreatic tumors of this type which could be removed with a satisfactory disappearance of the symptoms. This condition is undoubtedly much more common than the few reported cases would indicate."

#### Sometimes Cancerous

"Sometimes these tumors of the pancreas are cancers," the surgeon explained, "but many of them are benign (adenomas) which after removal do not return. It is interesting that seven cases have been reported in which a tumor of this tissue has been diagnosed and removed successfully. Three of these patients have been operated on at the Barnes Hospital, St. Louis. One of our own cases is unique in the fact that after the removal of one tumor it was necessary to perform a second operation a few weeks later to remove a second tumor. In all of these instances the

patient has made a successful recovery from his symptoms."

The tumors originate in tissue which forms the so-called islets of Langerhans of the pancreas. This is the tissue which produces insulin, the substance that patients suffering from diabetes lack.

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#### ARCHAEOLOGY

### Vast Mayan Ruins Found by Briton

**H**ITHERTO unknown ruins of a vast center of Mayan civilization, where a dense population once lived, have been discovered in the jungle of Yucatan. Dr. Thomas Gann, well-known British archaeologist, announced the discovery on arrival in New Orleans, after three months "in the bush" of Quintana Roo, in eastern Yucatan.

A tip from a chicleo, a chicle gatherer for a chewing gum company, led Dr. Gann and his party to the site, 12 miles from Tzibanche. The ruins spread over an area of about 15 by 20 miles, and may be, Dr. Gann believes, the most extensive ruins ever reported in the Mayan land.

"The district is a stupendous expanse," said Dr. Gann. "It is almost literally covered by hundreds of mounds, beautiful plazas, walls, circular forts, all fairly well preserved."

Some of the mounds are handsome piles of elaborately cut stone. There are four great temples of carved stones still standing. These are more than 140 feet high. Evidences of dwelling houses of the common people can also be seen, Dr. Gann said.

This heretofore unknown center of Mayan civilization was occupied during the late Mayan period, between 600 A. D. and 1200 A. D., the explorer stated.

Dr. Gann was accompanied on the expedition by his wife and nine native assistants.

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