

other doctor has found successful for patients with your blood pressure. But suppose the other doctor's method of taking blood pressures gives readings 20 to 30 points higher or lower than the method your doctor uses. You can see the confusion that may result, especially since your doctor has no way of knowing how the other doctor takes blood pressure readings.

The joint committee found that a large proportion of medical schools did not know how their students were being taught to take blood pressure readings

and many did not agree on how this should be taught. Neither did 100 insurance companies know how their medical examiners were recording blood pressure readings. One examiner might reject for insurance a man who would be passed by another examiner.

Besides lessening confusion over blood pressure readings, the new standard method recommended by the joint committee may call attention to heart ailments now being overlooked and may result in discovery of new facts about blood pressure.

*Science News Letter, June 10, 1939*

PHYSICS

# Light Weight Mesotrons Have A Longer Life

## Those With Mass 200 Times That of Electron Are Found To Disintegrate 200 Times as Quickly

**I**F HUMAN life behaved like the newly discovered mesotron particles of atomic physics one could set up a rule which would read, "If you're light you'll live longer."

The "father" of the mesotron particles—the first scientist to suggest their existence from theoretical considerations—shows this is true in the British science journal *Nature*.

The "father" is the Japanese scientist, Prof. Hideki Yukawa of Osaka University. While the name mesotrons has been given now to the particles of intermediate mass which he postulated, there was considerable feeling that the particles be named "Yukons" in his honor.

In his latest report, with Dr. Shoichi Sakata, Prof. Yukawa shows that observed differences in mass of the mesotrons account for this swiftly-dying particle which has a half-time of the order of a millionth of a second.

The new Japanese report shows that where the mass of the mesotron particle is 100 times that of the electron the radio-active half life is 9.5 millionths and 1.9 millionths of a second for two cases respectively.

When its mass is 200 times that of the electron, however, it disintegrates spontaneously about 200 times as quickly.

A mass of from 100 to 160 times that of the electron appears to agree best with current experiments, the scientists state.

By present theory the disintegration of a mesotron is accompanied by the production of an electron and a neutrino.

The former has been observed, the latter has not. It is now believed that much of the penetrating cosmic radiation which is observed on the earth consists of mesotron particles formed high in the stratosphere by the impact of incoming primary cosmic rays.

The experimental discovery of mesotrons came about through cosmic ray investigations. Virtually simultaneously Drs. Carl D. Anderson and Seth H. Neddermeyer of California Institute of Technology and Drs. J. C. Street and E. C. Stevenson of Harvard University reported the discovery late in 1936 and early in 1937.

*Science News Letter, June 10, 1939*

ARCHAEOLOGY

# Tomb Rich in Copper Saws May Be of Doctor-Pharaoh

**E**XPLORING a tomb at Sakkara containing boxes packed with copper saws and other tools, Egyptian archaeologists believe they may have discovered the resting place of Egypt's second pharaoh, King Zer, noted for his interest in medical lore.

When entered, the tomb was in badly wrecked state, due to robbers who long ago plundered and burned the place. The burial chamber suffered most, only traces of the wood and copper sarcophagus being left by the fire. The falling roof, however, served to extinguish the fire and protect piled boxes in another room. These boxes contain 35 copper daggers with wooden handles, hundreds of copper needles, 79 copper chisels, copper saws a foot long, copper bodkins, 68 copper vessels, 47 copper hoes, and other valued objects.

Whether any of the tools interested King Zer surgically may never be known, but the pharaoh was famous for his anatomical writings, more than 5,000 years ago. His wife, Queen Shesh, is said to have contributed a hair-restorer prescription in Egypt's famous Ebers medical papyrus.

The tomb is linked with this pharaoh by finding stacks of wine jars, on some of which the name Zer can be deciphered. No other name occurs in the tomb. A tomb at Abydos is also linked with this pharaoh, but it was not unusual for Egypt's kings to plan several tombs.

*Science News Letter, June 10, 1939*

The Greenland Colony established by Eric the Red in 986 was a republic for 271 years.

