

It still remains a fact that the average brightness of the adult population as measured by psychological tests, is no higher than that found among school children in the teens, Dr. Thurstone pointed out. "But bright children," he said, "undoubtedly continue to grow in intelligence beyond the conventional so-called adult level of fifteen!"

SOLVING THE RIDDLE OF INSULIN

Insulin, the extract from the pancreatic gland, that was first prepared by Banting and Best at the University of Toronto three years ago and since used extensively in the treatment of diabetes, may soon be made by synthesis in the chemical laboratory, according to a statement by Prof. Treat B. Johnson of Yale University at the American Chemical Society meeting recently.

Prof. John J. Abel of Johns Hopkins University, who has been studying the structure of the natural insulin, has come to the conclusion that it is an "auto-oxidizable sulphur compound, probably of the thio-peptide type." This means that it is an unstable substance similar to ordinary albumin in composition but simpler in structure. Prof. Johnson announced that research has been started in the Yale laboratories on the structure and reactions of this kind of compound in the hope that it may lead to a method of making it artificially, or to the discovery of a substitute of value in medical science.

Insulin belongs to the class of secretions of the ductless glands, known as "hormones", which in minute amount circulate through the blood and control bodily processes. Insulin is the hormone that regulates the utilization of sugar from which the muscles obtain their energy. In diabetics it is lacking but may be supplied by injections of the prepared insulin.

SUN BURN RAYS OF SUN GROWING STRONGER

The ultra-violet radiation of the sun, invisible rays of too short wavelength to be seen, but which are responsible for tanning people's skins and which also affect photographic films, is increasing with the rise in the number of sun spots. This is the conclusion of Dr. Edison Pettit, astronomer at the Mt. Wilson Observatory, in a paper read before a recent meeting of the American Astronomical Society.

Dr. Pettit's studies have been concerned with the ultra-violet waves about one-seventy-five-thousandth of an inch long, just a little shorter than the deepest violet rays visible to the eye, which are about one-sixty-five-thousandth of an inch in length. As glass absorbs the ultra-violet rays, it has been necessary to use quartz lenses, and the amount of radiation is measured by means of a thermocouple, a device which gives a minute current when light, either visible or invisible falls on it, the exact current being measured by means of a delicate galvanometer.

The method used has been to compare the ultra-violet radiation which passes through the quartz lenses and a thin film of silver, with green light passed through similar lenses, a green celluloid filter and a thin layer of gold, a series of measurements being made, first of the ultra-violet and then of the visible green light. The whole apparatus is attached to one of the observatory's

telescopes, so that it can follow the sun in its motion across the sky.

When he first began his investigations in June, 1924, Dr. Pettit found that the amount of ultra-violet light from the sun was about two-thirds that of the green, but as the atmosphere absorbs more of the ultra-violet than it does of the green, he had to calculate what it would be if he could examine the sun's light before it passed through any of the air around the earth. In this way it was found that the sun gave off about 39 per cent more of the ultra-violet than of the green, but in November, 1925, the ultra-violet radiation, when corrected for atmospheric absorption, was over one and a half times as great as the green, and it is still getting stronger. This means that the proportionate amount of the rays which tan the skin has increased 83 per cent in the last year and a half. This, Dr. Pettit said, is in harmony with the increase in the number of sunspots, of which an unusually large number have been seen on the sun's face within the last few months.

OLD-FASHIONED TREATMENT HAS UNEXPECTED RESULTS

Bleeding, once the universal remedy for all kinds of ailments, has been shown to bring relief to dogs suffering from a type of convulsions brought on by lack of lime in their blood which follows the destruction of the parathyroid glands, situated in the sides of the throat. Drs. W.W. Swingle and Wm. Wenner, of Yale University, reported results of their experiments before the meeting of the American Society of Zoologists.

Dogs showing these symptoms, they learned, had less than two-thirds of the normal amount of lime in their blood. They opened the veins of some of their animals and removed about three and one-half ounces of blood. Thereupon the dogs recovered, at least temporarily, and though they had lost some blood it was found that the calcium concentration in what was left had risen to above three-fourths of the normal.

TABLOID BOOK REVIEW

PITTED STONES - By J. M. Arms Sheldon. E. L. Hildreth & Co., Brattleboro, Vt.

This is a monograph of a group of stone implements of ancient origin and uncertain use, in the collection of the Pocumtuck Valley Memorial Association. The author inclines to the opinion that these stones were not used as hand hammers, as others have suggested, but that they were smoothing and polishing implements.
