

Rheumatic Fever and Teeth

Medicine

A medical progress note prepared by the American Association for Medical Progress.

The report of some recent studies of rheumatic fever by Drs. Swift, Derick and Hitchcock of New York suggests a new significance for the observed relation between this disease and the "focal infections" often associated with it. Infections of the teeth, tonsils, and other localized areas have hitherto been thought of as breeding places for specific disease germs, and as foci from which the germs are disseminated throughout the body by gaining access to the blood stream. Considerable evidence has accumulated, however, to show that in rheumatic fever there is a hyper-sensitive state which is not specific to one particular strain of bacteria. This hyper-sensitiveness may be produced experimentally by the production of focal lesions (localized areas of infection) where injection of the characteristic germs directly into the blood does not produce it. The foci may be areas in which the substance responsible for the hyper-sensitive state is produced, and from which it is distributed to other tissues. Possibly the characteristic feature of the disease may be the state of the tissues rather than the specificity of the bacteria.

Science News-Letter, September 8, 1928

Sleeping Sickness

Medicine

A medical progress note prepared by the American Association for Medical Progress.

A recent study by J. R. Perdrau of the National Institute for Medical Research, London, confirms an earlier statement that changes in the bodily tissue caused by post-vaccinal encephalitis, a rare disease about which there has recently been some newspaper discussion, can be distinguished under the microscope as different from those caused by encephalitis lethargica, or ordinary sleeping sickness. From the literature it also appears to the author that the nervous disorders sometimes complicating smallpox, measles, and other fevers, as well as those occurring in the course of anti-rabic inoculation, are identical with the post-vaccination variety of encephalitis. His suggestion is that there may be a common agent for all of these complications, as well as for the disease known as acute disseminated sclerosis, which produces similar conditions.

Science News-Letter, September 8, 1928

Research Hits "Fletcherizing"

Physiology

"Fletcherizing" decreases muscular endurance, typewriting accuracy, and basal metabolism. It has no significant effect on blood pressure, pulse, temperature, sleeping time, mental multiplication, and typewriting speed but increases efficiency in solving chess problems.

The results of a five year experiment on his own food consumption and human efficiency furnished Harald G. O. Holck, graduate student in physiology at the University of Chicago, with material for his thesis toward the Ph. D. degree. The long period included a year and a half of "Fletcherizing," two and a half years of "control" period before the "Fletcherizing," and half a year control period afterwards. According to A. J. Carlson, professor of physiology at the University and an authority on the physiology of food, this experiment, with its long control periods, is a most valuable contribution to the subject.

During the whole period of five years, Mr. Holck has kept detailed

record of food and water intake, material eliminated, body weight, blood pressure and pulse rate, and basal metabolism or the rate of energy consumption. Physiological efficiency was measured by means of tests of muscular endurance, mental multiplication and typewriting tests, and chess problems. Only food of known composition was used so that calories might be accurately measured and the amount of protein, carbohydrates, and fat determined.

During the control period Mr. Holck ate whenever he desired and as much as he wanted. During "Fletcherizing," he ate only when hungry, stopped when he was satisfied, and masticated his food about twice as long as normally. Calory intake dropped from about 3,200 in the control period to about 2,800 during "Fletcherizing." His body weight fell about 30 pounds during this period but returned to its previous average in the last control period.

Science News-Letter, September 8, 1928

Photographs Poor Character Guides

Psychology

Reading fortunes in faces is impossible for practical purposes, according to two psychologists who have conducted an experiment to determine whether vocational aptitude and success can be judged by careful study of photographs.

College graduates destined to become famous lawyers or surgeons carry no shining mark of success upon their youthful faces in photographs, at least none that an employer can rely upon. College boys who will never rise beyond a clerk's desk in a law office are apt to look just as keen and promising at graduation time.

The psychologists, Dr. Carney Landis and L. W. Phelps, of Wesleyan University, selected the five most successful lawyers, doctors, teachers, and engineers in a big university class that graduated 25 years ago, and also the five graduates who have attained the least worldly success in each of these fields. Photographs of the 40 men taken at graduation and 25 years later were shown to psychology students, who judged the success or failure of each and the line of work that would suit him best.

"In practically every case the ob-

servers disagreed and the same subject might be assigned to from ten to fifteen different vocations," the psychologists state, in reporting their investigation to the *Journal of Experimental Psychology*.

One successful engineer was thought by 10 of the 20 student judges to be clergyman. Six of them thought he was a successful clergyman and four decided that he was a failure at his church career. Another man, who, 25 years after graduation, holds a minor teaching post, was rated as a successful banker by six of the judges.

The popular belief that we can judge a man's ability and personality from seeing his photograph is not borne out by the evidence, the psychologists conclude. A photograph included in a letter of application for a job will not enable an employer to gain any positive idea of an individual's talents or his character, the investigation indicated.

Science News-Letter, September 8, 1928

Why people of different countries pronounce the same sounds in different characteristic ways is being investigated at the University of Chicago.