

appearing in the same issue of the *Journal*, of their results with sulfapyridine treatment in 93 cases of pneumonia in children.

The value of sulfapyridine in saving lives, especially from Type III pneumonia for which serum treatment does not have as good a life-saving record as it does in other types, was stressed in another report to the A.M.A. Journal by Drs. Norman Plummer and Herbert K. Ensworth, of New York. Among 270 sulfapyridine-treated patients at New York and Bellevue Hospitals there were

only 34 deaths, they report. Of these, 11 died within 24 hours of the beginning of treatment, which reduces the death-rate in this group to 8.5%. Serum treatment was used in addition to sulfapyridine in 102 of the cases. In serum-treated pneumonia cases a deathrate of about 18% to 20% has previously been reported from Bellevue Hospital. Besides reducing the deathrate, sulfapyridine shortens the period of fever and sterilizes the blood stream, Drs. Plummer and Ensworth reported.

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in less interesting technical matter, Dr. Vernon P. Scheidt, of the Waverly Press, has found.

Rest periods help the accuracy of proof-readers, he told the meeting. Both speed and accuracy drop after three hours of reading and even with rest periods efficiency goes down when the reading time extends beyond six hours.

To insure greatest accuracy in proof-reading, a copy-holder should read aloud to the proof-reader, he found. Looking back and forth from copy to proof is least efficient.

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PSYCHOLOGY

Girls Like Stenography Men Want To Be Flyers

At Meeting in Washington, the Practical Applications Of Psychology Are Discussed; Aid Offered to Government

FAVORITE occupation among both men and boys is flying, a survey revealed to Dr. Glen U. Cleeton of the Carnegie Institute of Technology, who reported his findings to the American Association for Applied Psychology in Washington.

Girls want most to be secretaries, typists or stenographers.

Very popular also among men and college boys in this scientific age are the jobs of inventor, chemist, scientific research worker, and—in contrast—athletic director. Younger boys want to be carpenters or machinists.

Most detested among all the jobs for men is that of the undertaker, but men dislike this job less than do boys. Unpopular also were the jobs of clergyman, music teacher and life insurance salesman.

Girls dread most the jobs of laundress, cleaner, factory worker, politician and baker.

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Practical Tests Urged

PRACTICAL tests of ability to recognize forms and spatial relations and speed in mechanical assembly were urged in place of the "Army Alpha," World War intelligence test, for the selection of Uncle Sam's new recruits for aviation mechanics.

These tests were found to be satisfactory for picking the boys who would make good on their training course, Dr.

Willard Harrell, of the University of Illinois, reported from tests of more than 600 students of the United States Army Air Corps Technical School.

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Stand Ready to Aid

PSYCHOLOGISTS stand ready and willing to help formulate a program for the best use of man-power in our national defense. Official notice of the intention of these experts on the human mind to enlist the immediate aid of their science in expanding America's defense forces was served by Prof. Donald G. Paterson, of the University of Minnesota, in his address as president.

Psychologists are available, he indicated, who are professionally trained to make applications of their science in the practical service of mankind in industry and in the nation's service. Psychologists who were mobilized in 1918 to aid in the World War by making practical use of their scientific knowledge, went back to their laboratories with a new appreciation of applied psychology as distinguished from the "pure science" taught earlier. Now many of their students are ready to contribute in a similar way.

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Miss Errors in Novel

PROOF-READERS miss errors more often in proof on a good novel than

Need Understanding

A NEW deal for the cured tuberculosis patient so that he has a fair chance to return to normal life was advocated by Dr. Morton A. Seidenfeld, of the National Jewish Hospital at Denver, Colo.

The "Magic Mountain" personality of the tuberculous, described by the novelist Thomas Mann as symbolic of their uncertainty, mental unrest and feeling of social insecurity, is due, Dr. Seidenfeld charged, to the failure of the public to understand the tuberculous.

Fear that the patient experiences about the attitude of others makes him depressed and nervous, gloomy and unfriendly and ashamed of his illness.

The public should learn that the patient who has undergone proper medical treatment and been taught how to take care of himself is really a public health asset, Dr. Seidenfeld declared.

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Mistake Trade Names

IF THE public calls all cameras "Kodaks" or all phonographs "Victrolas," they may be giving a lot of free advertising to the manufacturers, but they are giving them some worries. A great many companies try to avoid this misuse of trade names for generic names of products because they fear that the consumer will be led by it to accept imitations, Dr. John G. Jenkins, of the University of Maryland, told the meeting.

As a matter of fact, however, Kodak is generally recognized as a trade name, Dr. Jenkins found through tests on his students. But Mimeograph was mistaken for a name for all duplicating machines by two-thirds of those tested. Most people similarly mistake Dictaphone and Knee Action.

Mixed in Dr. Jenkins' test with the trade names were such truly generic

terms as calendar, altimeter, humidifier, safety glass, chromium plate, and incinerator. Other trade names included Caterpillar Tractor, Lysol, Frigidaire, and Thermos Bottle.

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Reading More Than Visual

READING is a great deal more than just seeing the printed page, but psychologists have learned relatively little about the process of comprehension, Dr. Robert P. Larson of the University of Illinois, told his colleagues at the meeting.

Students who have difficulty in reading may comprehend very well what is read to them, or what they hear in a lecture, Dr. Larson found. Others who read well may have difficulty in listening.

Remedial training in listening was urged by Dr. Larson for some students.

In general, difficult material is comprehended best when read, the experiment revealed, and for this reason, Dr. Larson recommended that material presented orally as in lectures or radio talks should be less difficult than printed material in order to be comprehended with equal effectiveness.

Questioning revealed that some good readers who were poor hearers were hampered when the rate of speaking was not adjusted to their individual needs; others were unable to concentrate while listening.

Poor readers-good hearers reported inability to concentrate on reading, intense dislike for reading, a habit of skimming and dependence in comprehension upon a speaker's intonations, and pauses.

Comprehension, Dr. Larson concluded, is largely a centrally determined function operating independently of the mode of presentation of the material. Reading seems to be largely language or thought activity.

Little improvement in this central comprehension process can be obtained, he believes, by excessive mechanization of the reading skills.

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● RADIO ●

G. H. Collingwood, Forester of the American Forestry Association will answer questions on Christmas trees and give hints on their care as guest scientist on "Adventures in Science" with Watson Davis, director of Science Service, over the coast to coast network of the Columbia Broadcasting System, Monday, December 18, 4:30 p.m., EST, 3:30 CST, 2:30 MST, 1:30 PST. Listen in on your local station. Listen in each Monday

ARCHAEOLOGY

Battle Fronts of Europe's War Predestined Long Ago

Director of Archaeological Expeditions To Discover Remains of Prehistoric Balkan Wars Comments on Present

By **DR. VLADIMIR J. FEWKES**

Acting Director, American School of Prehistoric Research.

BATTLE fronts and vantage points of the present European War were predestined long ago by nature. Wherever the battle lines form in Europe, they are almost bound to follow lines of previous wars. For, from the dawn of human culture, man has had the warring habit, and one of his early discoveries was to recognize the strategic advantages of rivers, hills, and mountain passes.

The German Siegfried line and the French Maginot line are close to ancient Roman defenses which guarded outposts of the empire against Teutonic barbarians. Ancient Gaul was pretty well peppered with fortified towns, forts and camps. So were Roman provinces in the regions of Hungary, western Yugoslavia, and Austria. All of Rome's provinces were thoroughly militarized, and arteries of strategic significance were protected by intricate defense systems.

During the World War, soldiers digging trenches in various parts of the Balkans cut through ancient archaeological remains. Gunners established machine gun nests in ruins of Greek, Roman, or Byzantine forts. Labor crews tunneled or excavated prehistoric mounds, as they worked at sites chosen as advantageous for ammunition dumps, first aid stations, and the like. They reverted even to using caves, and in fact especially welcomed finding such shelters.

Little did these World War soldiers realize that many, many times before them, the ground had been soaked with blood. Nor did they think anything of the damage war was doing to archaeological science and its efforts to reconstruct European past events.

That salient vantage points have repeatedly served their military purpose through centuries, and even thousands of years, is evident from archaeological surveying in Europe. During the past ten years, the American School of Prehistoric Research, Harvard University, and the University Museum of the Uni-

versity of Pennsylvania have dispatched expeditions to seek traces of peaceful and warlike activity in the Balkans' past.

As director of these Balkan expeditions, the writer has had an opportunity to analyze the nature, location, and distribution of the many strongholds encountered. They shed an interesting light on modern military strategy.

Should the current war spread into the Balkan region, there is little doubt that many of these sites would see war service again. In all major river valleys crossing the Balkan massif, both sides in the World War called ancient ruins into use. This is only natural when it is realized that the Romans themselves took over and improved trails and routes already in existence for their arteries of trade and transportation; and the best protection for the vital Roman highways, in the mountains, at any rate, was from hilltops. Knowing this, an archaeologist searching for lost ancient sites in central and southern Europe cannot allow a single hill to escape his careful scrutiny.

During the World War, the once-famous Via Egnatia saw much action. Romans built this highway to run from present-day Thessalonike (Greece) to Durres, the chief seaport of Albania, and it is still traceable in the mountainous terrain. The road bed itself has been changed, but a line of ruins marking the protective outposts provide a dependable guide for retracing the Roman road. World War troops used the ancient ruins for machine gun emplacements.

East of Belgrade, Yugoslavia's capital, runs the Via Trajana which Roman engineers finally succeeded in building by 104 A. D. through the Danubian gorge of Iron Gate. This route was an important factor in Rome's conquest of the formidable Dacians, who were finally subdued to the status of Roman provincials. To protect the road and to guard the Roman limes, a line of forts and camps in modern pillbox manner was established on either end of the Iron Gate pass, and within it, too.

Ruins of these ancient Roman pillboxes now have so (*Turn to page 380*)