

ogy and Psychology of the National Research Council, to be concerned with the maximum, effective utilization of psychologists in the war effort. This office is continuing and extending the work begun last year by the Subcommittee on the Listing of Personnel in Psychology, of which Dr. Steuart Henderson Britt is chairman. Dr. Britt is now serving as executive director of the Office of Psychological Personnel and may be addressed at the National Research Council, 2101 Constitution Avenue, Washington, D. C.

A NATIONAL Registry of Rare Chemicals has been established by the Armour Research Foundation. Information on chemicals too rare to be listed in the

catalogues of regular chemical supply houses will be filed with the registry and indexed according to name, location and amount available. Dr. Martin H. Heeren, chairman of chemical engineering research, has been appointed director. Chemicals to be found in the catalogues of supply houses are not included, but all those not available through regular channels will be listed. The file will be regarded as confidential and will not be open to general inspection. Specific inquiries will be answered by the registry. In transactions in which the owner of the chemical wishes to remain anonymous to prevent the disclosure of commercial secrets, the registry will act as intermediary.

DISCUSSION

GRAVEL OUTWASH NEAR CHILLICOTHE, OHIO

THE occurrence of Illinoian gravel at two markedly distinct levels on the border of the Scioto Valley, near Chillicothe, Ohio, though known for many years, seems not to have been given a satisfactory interpretation. There are quite extensive deposits of the gravel directly east of Chillicothe at an altitude of 800 to 860 feet, or 200 to 250 feet above the flood plain of the Scioto River. Directly south of these deposits on ground only 700 to 740 feet there is a sheet of glacial gravel showing a similar degree of weathering. They both are regarded as an Illinoian outwash by the several geologists who have observed them. They were noted by M. R. Campbell in 1918 in a description of the country around Camp Sherman printed on the back of the Camp Sherman map, and the suggestion made that two lobes of the Illinoian ice sheet, one occupying the Scioto Valley and the other Walnut Creek, met and enclosed between them the ground carrying the high gravel deposits. The lobes then became separated and exposed the ground to the south where the lower deposits are located. This interpretation was cited by J. E. Hyde in his report on the Camp Sherman Quadrangle.¹ But he decided that it was not to be accounted for by such localized conditions, as the deposit extends far up Walnut Creek. He noted that the upper limits of these gravels are nearly identical with Illinoian gravels on Paint Creek and its tributaries west of the Scioto Valley, and likely to have been determined by wide-spread common condition. He also found the lower set of gravels to have a distribution far down the Scioto Valley. But he failed to find a satisfactory explanation of the occurrence of the two sets of deposits at such markedly different levels.

¹ *Bull.* 23, Geol. Survey of Ohio.

The Cincinnati ice blockade of the Ohio River in the Illinoian stage of glaciation has been pretty fully established in the geological literature for more than fifty years. The ponding that it is assumed to have produced above the site of the ice dam has also been under discussion from the first. In 1890 the Beech Flats of northwestern Pike County, only 25 to 30 miles southwest from Chillicothe, were found by G. F. Wright to carry silt deposits at a level similar to the highest gravel deposits under discussion, and were interpreted by him to be due to the ponding by the Cincinnati ice dam.² It therefore seems natural to look to this ice blockade of the Ohio for the explanation of the features under consideration. It seems very probable that we have in the higher set of gravel deposits a close relation to the giving way of the ice dam. That they fill a space of fully 50 feet in altitude, and are of gravel with some interbedding of silt, seems a natural condition attending the breaking of the blockade, with some fluctuation in the height of the ponding. An interval of some years may have been involved in the complete clearing of the blockade. The lower set of deposits in the Scioto Valley probably dates from the practical disappearance of the obstruction of the Ohio River in the vicinity of Cincinnati. The distribution of the gravel far down the Scioto shows a free drainage, inconsistent with the presence of an obstruction in the Ohio valley. It is a matter of especial interest that we seem to have in these two sets of deposits decisive evidence that the Illinoian ice held possession of the Scioto Valley as far down as Chillicothe after the blockade of the Ohio had been lifted.

A few words seem pertinent as to the pre-Illinoian trenching of the Scioto Valley. Well records presented by Professor Hyde in his report on the Camp Sherman area show the bedrock in Chillicothe and

² *Bull.* 58, U. S. Geol. Survey, pp. 92-96. 1890.

points above that city to have been trenched to a level fully 100 feet below the present stream, or to less than 500 feet above sea level. The filling with gravel to 700 feet thus shows an aggradation of about 200 feet.

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AVERAGE HEIGHT OF AMERICAN MEN

RECENT articles in *SCIENCE* have left the reader with a certain amount of skepticism as well as a large amount of thought-provoking data.

In the December 12 issue of *SCIENCE* (Vol. 94, No. 2450, pp. 552-553) Leonard R. Rowntree gives an average height of over 2,000,000 registrants examined as 67½ inches, the identical average of men in World War I. An increase in weight of 8 pounds was shown.

In the January 13 issue of *SCIENCE* (Vol. 95, No. 2454, *Supplement*, p. 13) Dr. Laurence B. Chenoweth and Richard G. Canning found that of 10,005 students of the University of Cincinnati born between 1904 and 1921, the average height of freshmen in 1916 was 67.5 inches; in 1936 it had increased to 69.9 inches; and that no increase in average size had occurred since 1936. Not only has the size of man increased, the scientists say, but children are growing more rapidly.

To this reader the foregoing statements are very contradictory unless the increased weight of registrants as shown by Rowntree can be assumed to be increased size. Even with this assumption, the conclusions drawn by Chenoweth and Canning that the size of man has increased and children are growing more rapidly is only half substantiated by Rowntree's observations.

Not having available the full text of either report it may be premature on my part to comment; nevertheless, outwardly there appears to be a false hypothesis on the part of Chenoweth and Canning, not on the data obtained, but as a result of the population from which their sample was drawn. Since their sample was only representative of those individuals who no doubt had, through the force of circumstances, been given greater or higher privileges as children, as evidenced by their university attendance, it should not have been used to draw the general conclusions given. In Rowntree's sample of 2,000,000 individuals, taken from all walks of life and from all sections of the United States, it would seem that we have a most complete and uniform distribution, and the odds that the average is a true average are very great. He shows no growth in height from 1916 to 1941, but does show an increase in weight.

These observations would lead one to conclude that the childhood care and advantages, which result in increased growth, are much greater for those students

in the University of Cincinnati than for the United States as a whole, and that any conclusions drawn by Chenoweth and Canning should be confined and not generalized.

The most interesting and enlightening article, "Life in the Andes and Chronic Mountain Sickness," by Dr. Carlos Monge, University of San Marcos, Lima, Peru (*SCIENCE*, Vol. 95, No. 2456, pp. 79-84) would appear to be of value to our officers of the Army, Navy and Air Corps. The strength, lung and heart reactions of the Andean man is certainly something to be reckoned with. It indicates there is possibly a selective area in the United States from which men for certain types of combat and for combat in certain types of terrain could or should be drawn. We have in this country men coming from sea-level to elevations of several thousand feet. Very few have probably been reared at elevations above 6,000 to 7,000 feet, but many have been reared in elevations of 2,000 to 5,000 feet, and their heart, lung and strength reactions would possibly be in a more or less direct ratio to the elevation in which they were reared.

Have our commanding officers given any thought to grouping these men according to their branches of service and to the possible combat areas in which they are to serve? Would not a grouping of our men from coastal areas or sea-level and from the areas of higher altitudes give greater efficiency to our armies?

After reading the latter article by Dr. Monge it was recalled that Rowntree showed that 7 of 10 men from Colorado were accepted as physically fit for service, but only 3 of 10 from one of the southern states. The elevation of Colorado may or may not be a factor, but it does give food for thought to the layman.

In conclusion, I should like to see Dr. Monge's article stripped of its more technical terms, written in a more popular vein so that the layman could better understand it fully and published for distribution. It is believed that many people would derive as much pleasure and information from reading it as I have.

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A CASE OF "WINE-FED" TERMITES

DURING the summer of 1937, a wine dealer was alarmed at the leaking of wine from wooden boxes packed on the floor of his concrete vault. On examination of the cases, insects were found and immediately an exterminator was called in to investigate the situation. The exterminator brought a leaking case of the imported wine to the writer, who identified the "bootleggers" as *Reticulitermes flavipes* Kollar. Several of the bottles had the lead foil, sealing the neck and cork, eaten through, as well as the corks punctured. There were no insects drowned in the wine, but the straw jackets covering the bottles were alive with soldiers