

most rapid rate of growth at an early time pass through the whole developmental period with greatest rapidity. They have a higher rate of growth at this period than any other group, and their total increase during a period beginning three years before and ending three years after the period of most rapid growth is greatest. The material available at the present time does not show any appreciable influence of the difference in period of most rapid growth upon the average stature of the adults. Even those who have their maximum rate of growth at the same time vary in the extent of the growth period; among some it closes soon after the period of maximum rate of growth; among others it extends over several years. It is probably due to this fact that the variability of stature of slowly maturing groups of boys is greatest. The increase of variability, which is characteristic of growing boys taken *en masse*, disappears for the group whose maximum rate of growth is between thirteen and fourteen years. For all the others the increase of variability is much reduced. The data available at the present time also suggest that adults who have developed slowly are more variable than adults who have developed rapidly. This may be an expression of a more intensive influence of environmental conditions favoring or inhibiting growth.

An archeological research and its ramifications: A. V. KIDDER and S. G. MORLEY (introduced by John C. Merriam). In order to interpret in terms of history the archeological data emanating from investigations by Carnegie Institution of Washington in the Maya field, it is necessary to call upon botanists, zoologists, geologists and meteorologists for information regarding environmental factors, and upon medical men and physical anthropologists for information as to biological aspects of man. Cooperations have been established with workers in certain of the above sciences and enlistment of aid from others is contemplated. Work accomplished to date reveals problems of special interest to individual sciences and of general significance to larger groups. The interrelation of the studies is considered, and it is pointed out that coordinated effort not only is necessary for solving the complex questions of human history but also serves as a practical method of forming contacts between diverse branches of natural science.

Concentration of remnants of Indian tribes in northwestern California: C. HART MERRIAM. Probably no part of the United States is so little known from the standpoint of its aboriginal inhabitants as a small area in the mountains of northwestern California—an area restricted to the drainage basins of the Salmon and New Rivers with adjacent parts of the main Trinity and its South Fork. Within a radius of forty miles from Hoopa Valley there were in whole or in part the home lands of nineteen tribes of Indians, representing eight linguistic stocks. It is doubtful if in any other part of the world there are in so small an area so many tribes speaking different languages. Most of these tribes are fairly well known, but during the mining days of the fifties and early sixties several of them were practically

exterminated by the onrush of gold seekers and the troops called in to help. Indeed, so complete was the destruction that in the case of four of the tribes the few survivors succeeded so well in remaining hidden from inquisitive eyes that not even the names of the tribes were ascertained by anthropologists.

A remarkable case of word borrowing among California Indians: C. HART MERRIAM. Work among the Shoshonean tribes on both sides of the Nevada-California boundary south of the latitude of Mono Lake has brought to light a surprising if not unique case of the borrowing of words, particularly the names of animals. These names as used by the Monache of Owens Valley, on the east side of the Sierra, disagree almost wholly with the names used by their relatives only a short distance farther north—the “Northern Piute” bands of Mono, Walker and Pyramid Lakes. Further study has shown that the un-Shoshonean names of the Owens Valley Monache are in current use among the several derivative Monache tribes on the west side of the Sierra. These names, that differ from those of the “Northern Piute,” agree essentially with those of an unrelated stock, namely, the Yokut, of San Joaquin Valley. In other words, a series of tribes of Shoshonean stock have set aside the animal names in common use among their near relatives and have replaced them by the names used by several tribes of a widely different linguistic stock—the Yokut. So far as I am aware, no parallel is known.

The theory of specific skills in musical training: C. E. SEASHORE. The theory that success in musical performance, either vocal or instrumental, is conditioned upon the early mastery of a few fundamental skills was advanced. Methods of developing these skills by instrumental aids in intensive training were illustrated and the instruments needed for such training were shown. Among these were the rhythm meter, the tone dynamometer, the tonoscope, the projectoscope and the piano camera, all instruments designed and built in the psychological laboratory of the University of Iowa.

BOOKS RECEIVED

- BEERY, PAULINE G. *Stuff: The Story of Materials in the Service of Man*. Pp. xiii + 504. Illustrated. Appleton. \$5.00.
- CLARK, AUSTIN H. *The New Evolution: Zoogenesis*. Pp. xiv + 297. Illustrated. Williams and Wilkins. \$3.00.
- GARRETT, HENRY E. *Great Experiments in Psychology*. Pp. xvii + 337. 11 plates. 35 figures. Century.
- JASTROW, JOSEPH. *Piloting Your Life*. Pp. xvi + 372. Greenberg. \$3.50.
- PARSONS, T. R. *The Materials of Life: A General Presentation of Biochemistry*. Pp. 288. 8 illustrations. Norton. \$3.00.
- SCOTT, GEORGE G. *The Science of Biology: An Introductory Study*. (Revised edition.) Pp. xx + 633. 390 figures. Thomas Y. Crowell. \$3.75.
- WORSNOP, B. L. *X-Rays*. Pp. ix + 101. 36 figures. Dutton. \$1.10.
- YOUNG, JOHN W. *Projective Geometry*. The Carus Monograph Series. No. 4. Pp. ix + 185. 65 figures. Open Court.