the monkeys over the mammals in general is the change from a few, narrowly confined, practical associations to a multitude of all sorts, for that may turn out to be at the bottom the only *demonstrable advance of man*, an advance which in connection with a brain acting with increased delicacy and irritability, brings in its train the functions which mark off human mental faculty from that of all other animals."

THE AUTHOR.

ANTHROPOLOGY.

On the Relation of the Cephalic Index to Height, Weight, Strength, and Mental Ability. D. A. SARGENT. Jour. Boston Soc. Med. Sci., IV., 6. 20 Feb., 1900. Pp. 135-143.

Doctor Sargent of the Hemenway Gymnasium of Harvard University, by the research of which this article is a report, has apparently added probability to the long-standing supposition that long-headed, dolicocephalic, people differ as a rule in certain significant ways from persons who are short-headed, brachycephalic. It is interesting to recall in this connection an expression once common in New England speech, "He's a long-headed chap!", meaning always the possession of cleverness, of *savoir faire*. It is a vindication of this wisdom of a character-reading race that is offered here, a corroboration also of the results obtained in Europe by Ammon and by Beddoe.

The statistics in this case, none too numerous, come from eleven hundred male Harvard students who had recently been physically examined in the routine way of the Gymnasium. The records were divided into groups according to cephalic index, those with an index of 75 or less being classed as dolicocephalic, while those with an index of 83.33 or over were called brachycephalic.

The mean height of the dolicocephalics was found to be 175.5 cm.; and of the brachycephalics 171.5 cm. The mean weight of the former was 63 kilos and of the latter 61.5 kilos. The mean strength of the dolicocephalics was 575 points, and of the brachycephalics 550 points. (The strength-test applied was that in ordinary use, *viz.*: The number of kilos lifted with back and legs straight, plus the number lifted with the legs bent, plus the grip of both hands, plus the expiratory power, plus one-tenth the body weight in kilos, multiplied by the number of times the individual can raise his weight by dipping between parallel bars and pulling his weight up to his chin on the horizontal bar—this number is the number of points made.) "Over 5% of the dolico-

cephalics surpassed a strength test of 800 points, while only 5% of the brachycephalics surpassed 700 points." Here certainly is good evidence that at Harvard the long-headed students are better physical men than the short-headed students, a conclusion which is borne out further by other statistics as to health. etc., which need not be quoted in detail here.

As regards intellectual status, the results, it seems to Dr. Sargent, are in a like direction: he considers the dolicocephalic type on the whole superior, though not in academic scholarship. The reason for this exception suggested by the investigator is that the long-headed students devote less time to their studies than do those who are short-headed. He finds that of the dolicocephals, 6% received an average rank of A, 30% of B, 54% of C, and 9% of D, 'and some had dropped out of college' (*how many* is not stated). Of the brachycephals, 10% had received an average rank of A, 37% of B, 44% of C, 8% of D and 1% of E.

Dr. Sargent concludes thus: "How far the results of this investigation have tended to confirm or refute the conclusions of the European anthropologists as to the general superiority of the dolicocephalic over the brachycephalic types, I must leave my readers to determine. The facts brought out are certainly very suggestive to my mind, and I regret that the brief time that can be allotted to this paper will not admit of further elaboration. If we have in our midst a type of man who is superior in height, weight, strength, and energy to all other racial types, it is an exceedingly interesting fact. It is also both interesting and instructive to note that the qualities that make the dolicocephalic type superior have endured the shock and strain of hundreds of generations and are still so persistent as even to defy, in some instances, the disadvantages of bad nurture and poor environment. It is also encouraging to note that, if we include the sub-dolicocephals, this type probably predominates in all our higher institutions of learning, though it would be hardly safe to base this conclusion upon the investigations at Harvard alone."

That in a certain class of young men the long-headed persons have more physical power and vigor seems to be almost demonstrated by this and similar work, but to claim that from such statistics anything valid can be made out as regards intellectual values seems at present an unwarranted presumption. A man's mind cannot be graded in any such arithmetic way.

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