

Another mode of interpreting these results is to calculate the number of grams of brain-weight per centimeter of stature (Table III.). This shows that the relative brain-weight is about the same in the races mentioned and only in the very small Japanese individuals is the ratio high. The small stature of these people is therefore more characteristic of the race than is the absolute brain-weight.

TABLE III.  
Males.

Grams per Centimeter of Stature.					
Less than 150 cm.	Germans.		Russians.	Czechs.	Japanese.
	Bischoff.	Marchand.	Gilttschko.	Matiegka.	Taguchi.
150	8.7	9.2			9.3
155			8.6	9.0	8.7
160	8.3	8.4			
165	8.1	8.2	8.4	8.6	8.5
170	7.9	7.9			
175	7.6	7.8	7.9	8.3	
180		7.8			
185				8.1	
190	7.1	7.8			

As regards the relation of brain-weight and body-weight there are bound to be great diversities of opinion as to the average ratio. Bischoff's ratio is 1:36.6 in males, 1:35.2 in females. Vierordt's more extensive tables give 1:46.3 in males, 1:44.8 in females. Taguchi finds 1:38.3 and 1:42.9 respectively in his Japanese series. The weight of the body is, however, a very unsatisfactory standard for comparison since the mode of death and other factors exert a great influence upon it. Such objections can not be raised against employing the stature as a basis for estimating relative brain-weight.

To recapitulate, the brain of the Japanese grows more slowly during infancy and early youth than it does in the European. In the adult the brain-weight compares favorably with that of Europeans of similar stature and it may be shown to be superior in this respect to other races of the same general stature. These facts are of not a little significance in relation to the learning, industry and aptitudes of this progressive race.

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#### GONIONEMUS VERSUS 'GONIONEMA.'

WITH the growing multiplicity of names in zoological nomenclature and their great similarity, although referring to widely different forms, it is certainly a questionable practice to change the name of any animal unless there is urgent reason for doing so.

It is well known that names of animals are not all good etymology or derivation, but this should not be sufficient ground for changes. A name once given an animal by proper authority is its name irrespective of etymology or its significance, and would better not be changed in most cases for any less reason than being preoccupied.

As *Gonionemus* is a jellyfish that will be frequently referred to, on account of its being used both in many experiments and in universities and colleges for class study, it is desirable to have the form of its name established.

Haeckel ('System der Medusen') first changed Agassiz's naming of the genus to '*Gonynema*,' because he supposed the name was intended to mean 'knead thread.' And in the light of Agassiz's description ('North Am. Aculephæ,' 1865), in which he said '\* \* \* the moment a blade of kelp touches their disc, they stop, bend their tentacles like knees, and remain attached to the seaweed \* \* \*,' it is evident that he meant to use for part of the name the word that refers to knees. If the name were to be changed, therefore, it should be *Gonynema*, which would also be correct in construction.

The form of the name '*Gonionema*' was first published by Yerkes (*Am. Jour. of Physiol.*, Vol. VII., No. 2) and since then used by others, but here again only the ending is corrected and it still remains to change the end of the first part, making it *Gonianema*.\* Dr. Perkins (*The Proc. of the Acad. of Nat.*

\* Since the above was put into type a letter from Professor Agassiz states that, in 1859, in making the name *Gonionemus* he meant to suggest 'something with knees browsing about in the huge kelp,' which reminded him of a grove. According to this, then, the part of the name in question is from '*nemus*' and the original ending is the proper one.

*Sciences, Phila.*, March 7, 1903) in his interesting paper on 'The Development of *Gonionema*' first gives the authority of Agassiz approving the correction, but in view of the confusion that might arise I propose to retain the name *Gonionemus*, originally given the genus by Professor Agassiz, and would like to urge that future writers use this form.

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#### BOTANICAL NOTES.

##### MOSSES.

DR. A. J. GROUT has just published 'Mosses with Hand-Lens and Microscope, Part I,' as a quarto pamphlet of 86 pages. This is a 'non-technical hand-book, of the more common mosses of northeastern United States,' and is the outgrowth of 'Mosses with a Hand-Lens,' published by the same author a few years ago.

After a brief introduction, chapters are given dealing with classification and nomenclature, collection and preservation, mounting and methods of manipulation. The life history and structure of the moss plant are then given in some detail. Since the peristome is of considerable importance in indicating the relationships of mosses, the discussion of its structure is given due prominence in this section. An illustrated glossary of bryological terms constitutes a valuable feature of the work.

After listing the more important works on mosses for American students, the author takes up the systematic study of the more common forms. The key to the families is followed by the treatment of the Sphagnaceæ, Andreaceæ, Georgiaceæ, Polytrichaceæ, Buxbaumiaceæ, Fissidentaceæ and Dicranaceæ in part, leaving the remainder of the twenty-seven families recognized for treatment in subsequent parts (four to five parts in all will be issued). The classification adopted does not deviate very much from that given in Dixon and Jameson's 'Hand-book of British Mosses.' In the matter of changes in nomenclature the author has been quite conservative.

The work is illustrated with a considerable number of figures in the text, besides ten full-page plates. The fact that the latter are reproductions from 'Recherches sur Les Mousses,' by Schimper, 'Bryologia Europea,' and Sullivant's 'Icones Muscorum' is sufficient guarantee for their excellence. The purpose of the work is best given in the words of the author: 'To give by drawings and descriptions the information necessary to enable any one interested to become acquainted with the more common mosses with the least possible outlay of time, patience and money,' but we doubt if the author's prediction, 'that it makes the mosses as easy to study as the flowering plants,' will ever be realized. The beginning student will find Dr. Grout's publication a very valuable aid, and by those who do not have the more exhaustive treatises at their command it will be especially prized.

##### MORPHOLOGY OF ANGIOSPERMS.

STUDENTS of morphology will welcome the appearance of 'Morphology of Angiosperms,' by Dr. J. M. Coulter and Dr. Chas. J. Chamberlain, from the press of D. Appleton & Co. It is worthy of note that this work is not issued as Part II. of the 'Morphology of Spermatophytes,' as was the intention when its companion volume dealing with the Gymnosperms was published in 1901. This may be taken as a protest against considering the Spermatophytes as a group coordinate with the Pteridophytes.

The present volume, to use the authors' words, "Has grown out of a course of lectures accompanied by laboratory work, given for several successive years, to classes of graduate students preparing for research. It seeks to organize the vast amount of scattered material so that it may be available in compact and related form." After a brief introduction the following sequence of chapters is taken up: The flower, the microsporangium, the megasporangium, the female gametophyte, the male gametophyte, fertilization, the endosperm, the embryo. The chapter on the microsporangium ends with the formation of the mother-cells, and with their division the history of the male gametophyte is entered.