the requisites of health and comfort and variety of scenery and exercise, while perhaps no other place could supply a greater abundance of the material for study, both marine and terrestrial.

Of course I am unable to give an opinion of value on this subject. I only ask an investigation of this Island of Pines.

J. Fred. Clarke.

'MOUNT PELEE.'

To the Editor of Science: In Science for June 5 Mr. Mark S. W. Jefferson raises a question which is of interest to those who, like myself, are studying the volcanoes of the West Indies: What shall we call the now celebrated volcano on the island of Martinique? Mr. Jefferson seems to be inclined to use the name 'Mount Pelee.'

During a stay of four weeks on the island last year and another visit of like duration this year, I heard the mountain called almost invariably 'Mont Pelé,' very rarely if at all 'La montagne Pelée.' The latter form is that employed on the charts of the island, but the former is the one most commonly used by the French in correspondence and in written descriptions, as well as in conversation, as being more compact. The general tendency among geographers now is toward using geographical names in the way in which they are employed in the region containing the geographical feature, hence it seems to me better to write the correct French 'Mont Pelé,' than the Anglicized 'Mount Pelee,' in which there is little suggestion of the true pronunciation of the name. When but one word is to be used for the mountain, the generally accepted form, 'Pelée' is convenient and is to be recommended as conforming the formal appellation of the volcano. I speak with the more feeling on this topic, because I am one of those who have helped to perpetuate the incorrect combination, 'Mt. Pelée.'

Regarding the origin of the name and its applicability to the mountain it may be remarked that the accepted explanation among Martiniquans is that the term has been derived from the ancient Carib name for the mountain. When Columbus discovered Martinique he found a Carib town at Le Carbet, nearly two miles south of the present site of St. Pierre. The Caribs were afraid to live any nearer to the volcano on account of their traditions regarding its activity; and they called it the 'bald' or treeless mountain, a name which in itself indicates traditional eruptions. Any one who has seen Mont Pelé since May 8, 1902, will grant that the mountain now merits its name.

Edmund Otis Hovey.

SHORTER ARTICLES.

ON THE LIMITS OF UNAIDED VISION.

It is generally accepted that the sixth stellar magnitude is the limit of naked-eye vison. Though observers with eyes of unusual sharpness may under favorable conditions see stars nearly an entire magnitude fainter, that this is for all practical purposes the limit may be seen from a consideration of the faintest stars given in the various star catalogues and uranometriæ devoted to naked-eye stars. The average magnitude on the scale of the Harvard photometry of the faintest stars visible in several of these catalogues is as follows (*H. C. O. Annals,* Vol. XIV., Part II.):

Ptolemy's Almagest	5.38 M.
Sûfi	5.64 "
Argelander, Uranometria Nova	5.74 "
Heis, Atlas Cœlestis Novus	6.06 "
Houzeau, Uranométrie Générale	6.40 "
Gould, Uranometria Argentina	6.71 "

Argelander states that his sixth magnitude comprised stars as faint as he could make out at Bonn; his eye, according to his own estimate, was of moderate sharpness. The faintest class of Houzeau comprised those stars which, under favorable conditions, could not be seen continuously, but only at intervals. Gould found in the clear atmosphere of Cordoba that on very good nights observers of ordinary vision might go even below his seventh magnitude (6.71 M. Harvard phot.), and attributes it mainly to the advantage given by the altitude of the observatory. Several of the observers at the Lick Observatory have, under the most favorable condi-

tions, seen stars well down toward the seventh magnitude.

The invisibility of stars of the seventh magnitude or slightly fainter is due mainly to the amount of light given by the background of the sky, even on the clearest nights and in regions well removed from the Milky Way (*cf.* papers by Professor Simon Newcomb, *Astroph. Jour.,* December, 1901; Dr. S. D. Townley, *Pub. A. S. P.,* No. 88, and G. J. Burns, *Astroph. Jour.,* October, 1902). At Professor Newcomb's suggestion Director Campbell has asked me to find my own limit of naked-eye vision, having given as artificial aids the direction of the star, and the screening off of the light of the sky.

Two blackened screens were attached to the twelve-inch telescope at a distance apart of 178 inches. The rear screen was pierced with an aperture half an inch in diameter and that at the object glass with one of one quarter of an inch. These apertures were so aligned that when a star was seen centrally through them it would be found at the intersection of the cross-wires of the three-inch finder. A movement of two or three minutes of arc was sufficient to carry the star out of the field thus formed.

The method of observation adopted was to clamp the telescope at the proper declination for the selected star. It was then swept slowly in right ascension with the eye at the aperture till the star was picked up. The position of the star was then noted in the finder and if not more than a minute or two of arc from the intersection of the cross-wires the observation was considered successful. Several such trials were made on each star.

Eleven stars were observed on three nights, of which only the last could be called a very clear night. The magnitudes of the stars employed ranged from 6.42 to 8.5. It was found that up to and including magnitude 8.0 the stars could be certainly seen in every instance, though in no sense easy objects. Stars of magnitudes 8.1, 8.2, 8.3 and 8.5 were seen with great difficulty and with occasional failures, generally when the eye was tired from the strain of searching for these very faint objects.

The contrast between the almost perfect darkness of the object glass screen and the sky immediately around it, as seen through the rear aperture, was very marked. It seems evident that for the observation of such faint objects without telescopic aid the screening off of the light of the sky is more important than the concentration of the vision in a definite direction as afforded by the use of the apertures.

HEBER D. CURTIS.

LICK OBSERVATORY,
April 22, 1903.

A MODIFICATION IN MEASURING CRANIAL CAPACITY.

ONE of the most important, but at the same time rather difficult and tiresome, manipulations in anthropometry is the measuring of cranial capacity. The importance of the measurement lies mainly in that it gives us the volume, as well as a fair basis for the calculation of the weight, of the brain, both of which data are very valuable in racial comparison, and, so far as most of the more primitive races of people are concerned, are quite impossible to be secured in any other manner.

It is plain that a procedure of such importance should be brought to the utmost possible simplicity and perfection, and so regulated that the capacity measurements could be utilized with full safety and universally. This sentiment was undoubtedly common to all the practical workers in physical anthropology up to the present day, and the results have been an invention of many more or less related methods for measuring cranial capacity, and a gradual approach to an ultimate, generally adoptable, procedure, under the circumstances the nearest possible to perfection. It is in connection with this very desirable, ultimate method, the main points of which are already well understood, that there is still a place for some modification, and one such will be described in this paper. In the first place, however, it is advisable to give a few explanatory notes as to the various procedures in general use.

The many methods of measuring cranial