



TWO SKULLS FROM THE WEST INDIES.

1. 2. MALE NEGRO FROM BARBADOS, BRITISH WEST INDIES (U.S.N.M. 378246)

3. 4. UNDEFORMED MALE INDIAN FROM CUBA (U.S.N.M. 363060).

Both skulls are oriented in Frankfort position and reduced to about one-third natural size.

MAN

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NEGRO SKELETAL REMAINS FROM INDIAN SITES IN THE WEST INDIES¹. *By T. D. Stewart, Division of Physical Anthropology, United States National Museum, Washington D.C.*

52 The recent paper in this journal by Buxton, Trevor and Julien (*MAN*, 1938, 47) implies that an undeformed Negroid physical type inhabited the Virgin Islands in pre-Columbian times. Not only is this implication contrary to previously accepted findings for the Antillean area (as will be shown later), but it also fails to give adequate consideration to the possibility of these skeletal remains representing intrusive Negro burials. The mere presence of skeletons in a sand or shell mound of Indian origin, lacking careful stratigraphic records, is not certain evidence of primary association with the accompanying artifacts. Moreover, I venture to say that few physical anthropologists familiar with American Indian skulls would mistake for Indians those illustrated by Buxton, Trevor and Julien; indeed, most physical anthropologists would probably be less conservative and say "Negro" instead of "Negroid."

In support of the opinion that these authors are describing Negroes I wish to present a similar case from Barbados, British West Indies. From correspondence with Mr. E. M. Shilstone, of Bridgetown, Barbados, it appears that in August, 1933, he commenced to excavate a sandy ridge about 50 yards from high-water mark on the shore of Chancery Lane on the southern coast of the Island. This ridge proved to be a kitchen midden containing many objects of Arawak workmanship. Among other things encountered in this site was a skeleton, lying on its left side at about 20 inches under the surface. Mr. Shilstone believed this skeleton to be that of an Arawak Indian, and, in 1937, presented it as such to the U.S. National Museum. Upon reconstructing the skull from the many fragments in which it was received in Washington, I felt justified in calling it a Negro, for reasons that will appear from the following description.

Two views of the Barbados skull are shown in Plate D.I.2. Comparison with the two skulls shown in the paper by Buxton, Trevor and Julien (*MAN*, 1938, Plate D) indicates that the individual and sex differences are no more than would be expected of the range of variation in a single race. Certainly, however, such Negroid features as alveolar prognathism, broad nose, and low orbits are more pronounced in the case of the Virgin Island skulls.

In order to evaluate better the metrical findings, Table 1 contains measurements and indices of the Barbados skull in comparison with the range of variation of the five males from the Virgin Islands and with that of 68 male Negroes from Bennington's (1912) Gaboon series. These figures are presented for what they are worth, which, unfortunately, is probably very little, because measurements are very imperfect descriptive agents, and more than one racial group may fall within the same range. The eye is able to detect racial differences that are only masked by figures. I have selected the Gaboon series for comparison because it is from the west coast of Africa, and is about the best available; it is not, of course, fully representative of the population from which Negro slaves were shipped to the New World. This table shows that the Barbados specimen falls within the range of the Gaboon Negroes, except for maximum skull length and cranial index; like-

¹ Approved for publication by the Secretary of the Smithsonian Institution.

TABLE 1.—Comparative measurements of Negro skulls.

Measurement	Barbados 378246 Male	Range of Virgin Islands Males (5)	Range of Gaboon Negro Males (68)
	(mm.)	(mm.)	(mm.)
Max. sag. glab.-occ. lt. (L)	196	170.5—186.5	170—192
Max. trans. bipolar. br. (B)	134	131.5—141.5	130—148
Min. front. diam. (B')	97	95.9—99.6	90—106
Basi.-breg. ht. (H')	144	134.0—142.0	125—148
Basion-nasion (LB)	104	97.0—104.4	90—107
Basion-alv. pt. (GL)	105	102.8—105.7	90—110
Nasion-alv. pt. (G'H)	71	59.3—65.6	51—77
Max. biz. br. (J)	131	132	118—142
Nasal ht. (NH)	47	43.4—50.7	40—55
Nasal br. (NB)	26	22.0—30.3	21—33
Orb. br. (maxillo-front.) (O ₁)	42	40.9—43.6	38—45
Orb. ht. (O ₂)	33	30.8—35.5	31—40
Cranial index (B × 100/L)	68.4	74.3—78.9(?)	69.7—82.4
Ht.-lt. index (H' × 100/L)	73.5	75.6—76.1	69.6—82.7
Br.-ht. index (B × 100/H')	93.0	97.5—102.5(?)	89.9—110.7
Nasal index (NB × 100/NH)	55.3	(?)43.9—69.8	42.0—67.5
Orbital index (O ₂ × 100/O ₁)	78.6	70.6—83.7	73.8—97.4

TABLE 2.—Frequency of undeformed skulls in collections from the West Indies.

Island (Coll.)	Deformed (Fronto-occ.)	Probably Undeformed
<i>Bahamas</i>		
Brooks (1889) ...	3	—
U.S. Nat. Mus. ...	3	—
<i>Cuba</i>		
U.S. Nat. Mus. ...	—	5
<i>Jamaica</i>		
Flower (1895) } ...	5	1
Haddon (1897) } ...		
U.S. Nat. Mus. ...	11	—
<i>Haiti-Santo Domingo</i>		
U.S. Nat. Mus. ...	56	4
<i>Puerto Rico</i>		
U.S. Nat. Mus. ...	1	1
<i>Virgin Islands</i>		
U.S. Nat. Mus. ...	6	—
Totals ...	85	11

to that of one of the males (Am. 40. 1.5) from the Virgin Islands.

Without going into further details in connexion with physical type, I will call attention to one thing that clearly proves the Barbados specimen to be Negro. The photograph of the norma frontalis shows the upper median incisors (the only incisors *in situ*) to be artificially pointed. We have here a well-known type of West African dental mutilation (von Ihering, 1882). Saville's (1913) study of this practice in America indicates nothing comparable in the New World. Incidentally, the Gaboon series used in metrical comparison above are said by Bennington (Notes in tables) to include examples of filed teeth. The process by which the mutilation is produced is variously described as filing or chipping. I would say that in the case of the Barbados specimen the teeth were chipped.

In view of the fact that the teeth of the Barbados skull have been subjected to mutilation, it is perhaps significant that skull Am. 40. 1.2 from the Virgin Islands (Plate D, 2) has its four lower incisors missing (antemortem), and that skull Am. 40. 1.1. from the same locality (Plate D, 1) has what appears to be a notch between the upper median incisors. By reference to von Ihering's paper it will be seen that some African tribes practised tooth evulsion either with or without tooth filing (chipping). A notch between the median incisors is a distinct type of dental mutilation in Africa.

wise, the Virgin Island specimens fall within this range, except for nasal and orbital indices. The exceptions, as noted above, are more in the direction of the Negro than the American Indian.

In addition I may point out a Negro character in the Barbados skeleton, namely, that the long bones, particularly the femora, are straighter than is the case in Indians. The radio-humeral index is 80.1, which could be either Negro or Indian (Hrdlicka, 1932). The maximum length of the right femur is 423 mm., which corresponds

Although no further evidence would seem to be needed for refuting the inference stated in the beginning, it is desirable to show in how far this is contrary to previously accepted findings for the Antillean area. Table 2 summarizes the skulls and frontal bones from the West Indies that are available to me, either in the literature or in the collections of the U.S. National Museum. Only 11 of these 97 specimens may be said to be probably undeformed.

The small collection from Cuba, of which the history is unknown, stands apart from all the rest in showing no fronto-occipital deformity. Since Harrington (1921) has reported a clear distinction between the 'Ciboney' and Arawak peoples of Cuba as regards the practice of cranial deformation this collection may represent the former group. Since, then, it is not impossible to find undeformed Indian skulls in the Antilles I present also in Plate D.3.4. one of these Cuban skulls for comparison with the Nêgroes. The contrast with the Barbados skull shown in the same plate is so striking that I will give only three indices for the Cuban: Cranial index 79.7, nasal index 43.4, orbital index (maxillo-front.) 81.0. It will be observed that all three of these figures fall within the range of the Gaboon skulls. However, only two of the 68 Gaboon skulls have a nasal index below 47 (leptorrhine), and only eight have a cranial index over 79 (high mesocrany). I believe the Cuban skull here illustrated will prove

to be fairly representative of the undeformed Indian population of the Antilles, of which those described by Buxton, Trevor and Julien certainly are not a part.

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THE EARLY SPREAD OF AGRICULTURE. *A paper read before the International Congress of Anthropology and Ethnology at Copenhagen, 5 August, 1938. By Harold J. E. Peake, M.A., F.S.A.*

53 In a former paper¹ I endeavoured to show that the data available at the moment suggest that wheat was first cultivated in Palestine, and that the variety grown was *Emmer*. That the cultivation of this grain spread to the south-west is indicated by the fact that *Emmer*, or some derivative such as macaroni wheat, *Triticum durum* Desf., is still the grain most commonly grown in North Africa from Egypt to Morocco and up the valley of the Nile as far as Abyssinia. In the last-named country, owing perhaps to its early introduction, but mainly to the great diversity of altitudes there, more varieties of *Emmer* are grown than elsewhere; this has led Vavilov² to postulate that it was in this country that it was first grown.

We have, however, definite evidence of the early cultivation of *Emmer* in Egypt. Some

years ago Brunton discovered south of Asyût the remains of a very early culture that he termed Tasian.³ The people responsible for this were clearly immigrants, for the skulls⁴ of some of them were unlike any found in this part of Africa, and resembled those usual in Anatolia, with a southern extension to the Judæan plateau. The Tasians appear to have lived in villages and made excellent pottery; there is, however, no direct evidence that they cultivated grain, but their settled existence seems to imply that this was the case.

If there is any doubt that the Tasians were cultivators there is none with respect to the Badarians,⁵ who succeeded them in the same region. These people also appear to have been immigrants, for the skulls of most of those found are longer and narrower than is usual in