

shrouds the lower limbs of the mother. It is of the same general characteristics as that covering the body in Fig. 1.

Fig. 4 represents the body of a younger woman, although less perfectly preserved. She has small delicate features, very small hands and feet, and the instep is highly arched. On part of the head is found long, fine black-brown hair. It comes off readily, half of it having already fallen out. From the appearance of the mammæ and nipples, I should say she had born children. The pelvis is large and well formed.

The cranial, throacic, abdominal, and pelvic viscera have not been disturbed in any case. No violence has caused death; and why these five remains of ancient civilization should have been placed side by side in a stone sarcophagus, five thousand feet up in a cave, must remain a matter of speculation for the present. Perhaps they all belonged to one family, — father, mother, and child, with husband and daughter or son and wife.

The heads are well shaped. The measurements of their skulls would place them among the meso-cephalic, or intermediate between the dolicho- and brachy-cephalic. The face is oval, high cheek-bones, long eyes sloping outwards, the fleshy lips and nose rather flat and wide. In my judgment, these are bodies belonging to a period not less than four or five hundred years ago. The owner of these bodies, Mr. Joel Docking of San Francisco, is going to place them in one of the large museums of the world.

WINSLOW ANDERSON, M.D.

EXPLORATION AND TRAVEL.

New Guinea.

SINCE the Germans have taken possession of the eastern part of the north coast of New Guinea, and the island has been divided by treaties among the Dutch, English, and Germans, explorations are carried on very vigorously. It is only a few years since d'Albertis discovered the upper part of the Fly River, and thus was the first to enter the interior of the large island for a considerable distance. Since that time English missionaries have been very active in the exploration of the south coast. Of prime importance is the work of Rev. J. Chalmers, who knows the natives probably better than any other white man. His remarks on the distribution of a light and a dark colored population of New Guinea, the former of whom he considers Malaysians, the latter Papuans, are of great interest. He states that the former, on their migration from the north-west, located between the Papuan aborigines (*Proc. Roy. Geogr. Soc.*, 1887).

The Australian colonies take a particular interest in the exploration of the island, as they are watching with jealousy the attempts of the French and Germans to gain a foothold in the Pacific Ocean. Since the close of 1885 they have equipped several expeditions, but so far they have not been very successful. In 1885 the small steamer 'Bonito' was sent out to explore the high mountain-ranges in which the Fly River has its source; but this attempt failed, as the steamer was in the hands of an unskilled captain. The only geographical result was the exploration of a small tributary of the Fly River, though the cost of this expedition was about eighteen thousand dollars.

In 1886 the well-known traveller H. O. Forbes set out to explore the Owen Stanley Mountains in the south-eastern part of New Guinea; but unfortunately he arrived on the island in the rainy season, when travelling is impossible, and later on he had to give up his intention on account of lack of means. The project has, however, been taken up again, and Mr. Vogan, the curator of the Auckland Museum, and Mr. Cuthbertson, are about to start on a journey from the south coast to Huon Bay.

Besides these attempts, which have so far had no important results, a great number of successful explorations have been carried out. The *Deutsche Kolonialzeitung* reports that a private expedition was sent by a Sydney house to the Gulf of Papua. The steamer 'Victory' reached Aird River at the northern extremity of the Gulf on March 21, 1887, and ascended the river for eighty miles. Its delta is very extensive, and was partly explored by the steamer. The river was called Douglas River. The 'Victory' returned and discovered another large river near Bald Head. It received the name of Jubilee River, and was found navigable for one hundred and

ten miles. Even at this point it was three hundred yards wide and from two to five fathoms deep. Unfortunately no map of this survey has been published so far, and therefore these discoveries could not be inserted in our sketch-map.

New discoveries in the region of Baxter River were made by J. Strachan, who explored part of the river-branches forming the delta of Fly and Baxter Rivers. The same traveller has been exploring the southern coast of Dutch New Guinea, and reports the discovery of a narrow channel leading from McClure Gulf to Geelvink Bay; but Mr. Wichmann remarks justly in *Petermann's Mitteilungen*, that the correctness of this discovery must be doubted, as A. B. Meyer, who travelled over the isthmus, states expressly that there is no connection between the bays.

The best surveys made in New Guinea during the last years are those of the officers of the New Guinea Company and of German men-of-war visiting these coasts. In these parts of our map will be found the most important and most extensive alterations, as compared to former maps. The coast from Humboldt Bay to the southern boundary has been resurveyed for the greater part, and the results have been published by the New Guinea Company (in *Nachrichten über Kaiser Wilhelms-Land*). From these publications we have taken the course of Augusta River and the coast-line. South of Cape della Torre another river was discovered which was called Otilie River, but it could not be followed to any distance on account of its shallowness: it carries a great volume of water, and may be ascended by a steamer of three or four feet gauge. The course of these rivers shows that the high part of New Guinea is formed by a narrow range of mountains which begins at Geelvink Bay and continues throughout the island to its south-eastern point. The banks of the rivers are inhabited by natives, large villages being found on their upper parts. It will be of great interest to learn where the large river emptying itself at Point D'Urville has its source. So far, the rivers have been the only means of penetrating into the interior, for the vegetation is so dense that it prevents extensive journeys. The map shows that the outlines of many islands are still unknown, and we must add that the positions of the small islands and reefs are uncertain.

A great difficulty in all enterprises on New Guinea is occasioned by the hostility of the natives. In some parts the English missionaries have succeeded in gaining their confidence, particularly by the help of Polynesian teachers, but generally the natives are distrustful and aggressive. The same is true in New Ireland and New Britain; but it is hoped that in course of time better relations will be established. Recently natives of New Guinea and New Britain have begun to work on the plantations of the companies. The climate of the island is in most parts unhealthy, particularly in the swampy alluvial districts, which are very fertile. It may be, however, that it will become more healthful when the woods are cleared and the swamps drained, as was the case in northern Queensland.

ETHNOLOGY.

Mound-Exploration.

THE second bulletin of the Bureau of Ethnology is a statement by Mr. Cyrus Thomas, who is in charge of the archaeological division of the bureau, on the methods adopted for carrying on mound-exploration, and on the present state of the work of the division. His method of investigation is to mark out the several archaeological districts by searching for typical forms of remains in the different parts of the country. For the present the field of researches is limited to the district east of the Rocky Mountains. Three north and south lines were worked: the first and principal one, the immediate valley of the Mississippi from Wisconsin southward; the second, from Ohio southward through Kentucky to Mississippi; and the third, in the valley of eastern Tennessee and western North Carolina, thence southward through Georgia and Alabama to Florida. Sections which had been somewhat carefully worked over were generally passed by. The specimens found by the exploring parties are handed over to the National Museum.

Among the results so far obtained, the most important ones are mentioned in the bulletin. The links discovered directly connecting the Indians and mound-builders are so numerous and well established that there should be no longer any hesitancy in accepting the theory