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specimens, and point out that O'Meara left St. Helena three years before Napoleon's death, and any unsupported assertion of his carries no weight. Another strong point against the authenticity of the relics is the fact that in the report of the *post-mortem* examination no mention is made of secondary growths anywhere except in the lymphatic glands of the small omentum; and, as Dr. Chaplin points out, secondary deposits in the intestines are extremely rare in cases of cancer of the stomach. The autopsy was carried out under the eye of Sir Thomas Reade, representing Sir Hudson Lowe, and there were strict orders that everything should be replaced before the coffin was closed. The circumstances make it impossible to believe that any part of the remains could have been abstracted.

In conclusion, we feel bound to express our admiration for the thoroughgoing manner in which Dr. Chaplin has worked out the whole case. As his account is from unpublished and absolutely authentic sources, his book is of special value as a contribution to history and also to medical science.

THE DISCOVERY OF ANCIENT MAN IN SUSSEX.

OWING to the exigencies of space in our issue of last week, we were obliged to withhold details relating to the important business of the Geological Society on December 18th, when the fossil human remains recently discovered at Piltdown, Sussex, were described and discussed. So widely do the characters of the skull, and especially of the mandible, depart from those of modern man, that Dr. Smith Woodward, F.R.S., felt it necessary to create a new genus in the family Hominidae to receive the only member so far discovered, which he proposes to name *Eoanthropus dawsoni*, after his—or rather her—discoverer, Mr. Charles Dawson, of Lewes. It is very likely, however, that this find will be spoken of simply as the "Sussex skull"; it will be time enough to create a new genus of mankind when we know more of the other extinct human forms which are certain to be found in coming ages.

The most notable contribution to the meeting was made by Professor Elliot Smith, to whom had been entrusted the examination and description of the brain cast. The mandible, it will be remembered, is essentially of a simian form; the impress left by the digastric muscles, by the mylohyoids, by the muscles of the floor of the mouth, so intimately concerned with articulate speech, are ape-like in form, and presumably the power of speech was absent in the Sussex individual. From the brain cast Professor Elliot Smith was able to recognize that the association areas connected with hearing, and therefore with speech, were very imperfectly developed as compared with modern man. The association areas of the parietal, occipital, and frontal regions were primitive and simple as compared with the corresponding parts in representative modern brains. He regards the brain as the prime mover in every evolutionary departure, and maintains, therefore, that the evolution of any particular area of the brain must precede the bodily adaptation with which it is connected. Cerebral evolution must necessarily be slow; it implies so complex a change. In the hands of the Professor of Anatomy in the University of Manchester the brain casts of fossil skulls are destined to open up quite a new and sure source of information concerning the

nature and status of the more primitive forms of man's ancestors.

As regards the manner in which the reconstruction of the skull had been carried out, there was no adverse criticism; it was agreed that the model made by Mr. Frank Barlow, who worked under the direction of Dr. Smith Woodward, was superior both in accuracy and finish to any of the models of paleolithic man, mostly of Continental workmanship, with which we are now familiar in museums. We hope that at an early date it will be possible to add the model of the Sussex skull to the museum series. The only adverse criticism passed related to the restoration of that part of the mandible which carries the canine and incisor teeth. In the opinions of Sir E. Ray Lankester and of Professor Keith the form and features of the chimpanzee's dentition had been followed too closely.

As was mentioned in our last issue, the chief divergence of opinion related to the antiquity of the Sussex skull. There are two opinions possible: it may belong to the middle of the geological period immediately preceding the present—the Pleistocene, roughly some 200,000 to 400,000 years ago—or to the Pliocene period—giving it an antiquity of more than a million years. The authors of the paper, following a recognized geological precept, chose the more recent date. In or near the stratum which contained the skull were found certain well-worked flints which, from their form and design, are assigned to a period near the middle of the Pleistocene, known as the Chellean age or period, when implements of the type of those now found at Piltdown were made. The Chellean period lies in the interval between the second and third glaciations. The authors of the paper assigned the newly-discovered genus of man to the Chellean age. With this view Professor Boyd Dawkins concurred. On the other hand, Sir E. Ray Lankester regarded the so-called Chellean flints found at Piltdown as not necessarily of the Chellean period, and thought it probable that they were of a much earlier date.

In the same stratum as the skull were found the fossil bones of mammals which became extinct in the Pliocene period—hippopotamus, mastodon, and an early form of elephant—all past inhabitants of Sussex. The skull and these fossil bones were in an equally mineralized condition. Professor Keith regarded the human skull as Pliocene in age—the same age as the fossil mammals. In his opinion the authors had made a much more important discovery than they were conscious of; they had discovered what anthropologists had been looking for in vain these forty years past—namely, Tertiary Man. His reasons for this opinion were: (1) The human mandible found near Heidelberg in 1907 was known for certain to belong to near the beginning of the Pleistocene; it showed distinctly human markings in the region of the chin, whereas the Sussex mandible was as distinctly simian. If the authors were right in assigning the Sussex skull to the middle of the Pleistocene (Chellean age), then it must be supposed that the inhabitants of Germany were comparatively human at the beginning of the Pleistocene; at a much later date those of England were still ape-like. If, on the other hand, the Sussex skull were placed at a Pliocene date, this anomalous position would not exist. (2) The characters shown by the Sussex skull were exactly those which had been postulated for Pliocene man. (3) It was difficult to believe that such a primitive being could fashion the artistically worked Chellean flints; the eoliths found with the skull seemed more likely to represent the extent of

his skill. (4) The primitive form of skull, brain, and mandible were in keeping with the forms of Pliocene mammals with which the Sussex skull was associated. Mr. A. S. Kennard, whose opinion regarding the geology of South England is regarded as authoritative, gave it as his conclusion that the gravel stratum at Piltown was very probably of Pliocene age. Many interesting and useful additions to the discussion were made by Dr. W. L. H. Duckworth of Cambridge and Professor Waterston of King's College.

THE GREAT DECISION.

THE Representative Meeting has given its decision in the sense which, after the result of the voting of the Divisions, could alone have been expected; but the enthusiasm and conviction with which the decision was expressed produced a profound impression on every one present, and this impression will find an echo throughout the country.

The meeting expressed the definite opinion that it is prejudicial to the interests of the profession for practitioners to apply for service under the Insurance Committees and the Regulations now issued. The Association therefore calls upon all practitioners to refrain from placing their names on any panel under Government control or to accept any whole-time office. Local Medical Committees are left free, but it is suggested that they should lay their terms and arrangements before the insured or their representatives, and offer to them a list of practitioners willing to attend on terms arranged by the Local Medical Committees with the approval of the Association. These terms must include free choice of doctor by patient and of patient by doctor, a financial arrangement made by the Local Medical Committee on a minimum contract basis of 8s. 6d. a year for each member, inclusive of drugs, or 2s. 6d. a visit, and an income limit arranged locally. These conditions are outside the treatment of tuberculous persons, the arrangements for which, made by the Insurance Commissioners, have been accepted by the Association. Where any local arrangements satisfactory to the majority of the practitioners has been made, it is to be continued if approved by the British Medical Association, the desire being that every practitioner should keep all his old patients who may wish him to attend them. These points are more fully set out in the appeal to the profession issued by the Representative Meeting, and published on the first page of the SUPPLEMENT for this week. That appeal concludes by warning every practitioner not to make terms individually, but only to agree to those approved by the Local Medical Committee.

This advice is in accordance with the previous decisions of the Association on the same point. Until now the decision has been in suspense, with the result that many men in the profession have not subscribed to the Guarantee Fund, but now that an almost unanimous decision has been arrived at, those who have hitherto held back will feel themselves under an obligation to lend their aid to the campaign by providing the sinews of war. Moreover, those who have already given will be encouraged to subscribe still more generously, and so enable the profession to wage a good warfare.

Of the other questions before the meeting perhaps the most important was that of the relation of voluntary hospitals to the insurance scheme. In this matter the meeting was fortunate in having before it the resolutions recently adopted by St. Bartholomew's

Hospital with regard to persons presenting themselves there for treatment on and after the day on which medical benefit is to come into force, January 15th, 1913. The resolutions, which were approved by the meeting, are reproduced in the report published in the SUPPLEMENT. All persons applying for treatment at the hospital will be required to state whether they are insured persons or not, and each insured person will be referred to a medical officer of the hospital who will decide whether the ailment for which treatment is asked is urgent or not. Should the ailment be of a nature which can be efficiently treated by a general practitioner of ordinary competence* the applicant will be informed that the requisite treatment must be obtained from a medical practitioner outside the hospital. In this connexion we would call particular attention to the letter from Mr. H. A. Ballance of Norwich, a former chairman of Representative Meetings, who is in hearty agreement with the decision of the meeting to approve the regulations instituted by St. Bartholomew's Hospital. He points out that on and after January 15th it will be incumbent upon any honorary officer of a voluntary hospital to cause inquiries to be made of any person who is within the age limits specified in the Act, and who is under his care at such a hospital, but is not a case of urgent necessity, whether he or she is an insured person, and if such be the case to refuse treatment. He insists that the staffs of voluntary hospitals have now an opportunity of binding the profession together, of influencing public opinion, and of profoundly affecting the present situation in the interests of general practitioners, many of whom have risked so much. The action to be taken by hospital staffs must be definite and immediate, and the resolutions of St. Bartholomew's Hospital give a lead to all the hospitals in the country which can hardly be bettered.

The Council determined to leave to the Divisions and the Representative Meeting the decision for or against working the Act. The decision has now been given in terms so strong and definite that it must command the adhesion of every practitioner.

Though many of the Representatives came up with definite instructions how to vote, others were left to exercise their own judgement after hearing the facts and arguments advanced at the meeting. According to the regulations of the Association, those who were definitely instructed by the Divisions gave their vote in accordance therewith for or against the resolution refusing to give service, but probably most of those who were given a free hand were so influenced by the arguments that their votes went to swell the majority to the overwhelming number of 182 to 21. The Representatives left the meeting full of enthusiasm and determination, and will return to inspire a like enthusiasm and determination in the Divisions they represent. The result cannot fail to be a united effort, which will result in enabling the profession to carry out its true mission of bringing to the discharge of its daily duties throughout the length and breadth of the land the best skill actuated by the highest ideals of service in the cause of suffering and the welfare of the community. The Government must understand that the only way in which the Act can be worked is through a frank recognition of the reasonable demands of the Association, which, it has again been proved, speaks in the name and expresses the wishes of the profession at large.

* See the memorandum by the Chancellor of the Exchequer (SUPPLEMENT, December 7th, p. 622), and the Regulations and proposed provisional agreement (ibid.).