but every third week begin a very thorough examination of one school, and pay several visits at short intervals till it is deemed sufficiently cleansed. The teachers should then endeavour to maintain the results of the nurse's work for weeks or months. Managers do not realize the amount of work a nurse has to do, and in many instances have sent in requests for more frequent visits from the nurse, or for greater attention to their particular school, which at present it is quite impossible to afford."

Ringworm—It is estimated that loss of attendance owing to ringworm is about one-ninth; absence may be prolonged over many months and even years.

Favus.—Favus, which may be regarded as a disease nearly allied to ringworm, chiefly occurs in the East End. It has been decided to open an elementary school for favus cases only, to accommodate 80 children, a separate room for a nurse being provided.

Unclean Heads—The number of unclean heads is continually diminishing. The methods of dealing with these cases are cumbersome and slow, and though the results are excellent, powers for a more rapid method of dealing with objectionable cases are required. The powers should be on the lines of the Glasgow Police Act, so that if a child is found by a duly-appointed officer of the Council (medical officer or nurse) to be in school in an objectionable state, notice may be served on the parents to cleanse the child within twenty-four hours, or it may be cleansed at the public expense and the cost recovered from them.

Baths.—Owing to complaints that children have become infected with vermin from using public baths, Dr. Kerr recommends that school baths for cleansing the children should be provided quite apart from swimming baths. He says: "For cleansing purposes a very shallow tank 6 in. deep, with a rose for a shower over each child is used, worked by a chain which the child pulls when under the rose. In some German schools the shallow tank is provided, others have a somewhat raised flat part with a gutter of white tiles round about 1 ft. broad and 6 in. deep. In a recently provided school the bath room was square, with a sloping concrete edge run round, and on this twenty ordinary galvanized iron slipper baths arranged, into which each child got before working the shower. All these devices are intended to economize room, to save expense in heating and in cost of water. With the campaign now being carried on in favour of personal cleanliness in schools, the provision of school washing baths, as distinct from swimming arrangements, is becoming increasingly necessary in many parts of London."

INFECTION IN SCHOOLS.

Under this heading we find notification and school closure discussed. Dr. Kerr writes:

"School or class closure, in each case, is decided on individually and on its merits. We can now get the returns from the school so quickly that it is safe to judge as to school infection from these returns. As a rule, when measles appears in a single class of an infants' school, closure is applied, but where several classes are affected from the first, and especially where several schools in a district are affected, it is held that the district is generally affected, and experience has shown that school or class closure is of no benefit.

"Excepting the borough of Lewisham, the method of closing a school on account of the prevalence of measles, and because the attendance has dropped 10 or 20 per cent., has now been abandoned throughout the metropolis.

"It is to be noted that one of the consequences of the abolition of the Article marked 101* in the late Code of the Board of Education is that, not only is the grant for absentees lost, but in cases of severe epidemics authorities are actually fined for keeping schools open, and it would be almost worth while defining what percentage attendance is required to prevent loss of grant arising from counting the school as open and marking the registers.

"The reinstatement of this Article 101* has been urged on the Board of Education by many educational and sanitary authorities in the country, but their entreaties are made to those whose training has not been such that they can appreciate the enormous importance of keeping infectious and convalescent children out of school without penalizing teachers and school authorities. The value of the regulation was so great that efforts should be continued to have it re-enacted."

Diphtheria and measles are dealt with at length, the report by Dr. Thomas on measles in the Woolwich district being given in an appendix.

SPECIAL SENSES AND SPECIAL SCHOOLS.

Vision, hearing, special schools, and intermediate schools are further subjects of interest with which we hope to deal subsequently.

SCHOOL HYGIENE.

The report ends with a short note on School Hygiene, which we append:

"The necessity for a knowledge by the teachers of the conditions under which school life may be conducted in a healthy manner is now being urged on all sides, and some pressure has been brought to bear on the Board of Education to make this knowledge compulsory.

"A means exists in the course of training and examination in physical training for the Physical Exercise Certificate which is required to be passed by each teacher. It is quite possible to remodel this course and examination, to make it much more useful and practical than it is at present, and instead of a knowledge of physiology, as asked for at present, to draw up a syllabus of a course of lectures which, being given on scientific lines, and by using typical examples, would help teachers to gain a knowledge of the matters which are of importance, not only from the sanitary but also from the educational point of view, and by this means lead to a considerable practical improvement in school conditions and school life."

THE DIET OF THE PRECIBICULTURISTS.

By HARRY CAMPBELL, M.D., F.R.C.P.,

Physician, North-West London Hospital and to the Hospital for Diseases of the Nervous System, Welbeck Street.

IX.

NEOLITHIC MAN OF EUROPE.

It is probable that quite early in the neolithic age man began to cultivate the soil and breed animals for food, but though neolithic man must, strictly speaking, be regarded as a cibiculturist, a brief description of his diet may perhaps not inappropriately terminate this series of papers.

The neolithic age, or age of polished flints, lasted, according to Keane's estimate, some 70,000 years. Its culture was greatly in advance of that of the paleolithic age, for not only did man of this age cultivate the soil and breed animals, but he also understood the arts of spinning, weaving, and pottery-making, as well as copper, tin, and gold mining; while he erected noble monuments to his dead, which, in the shape of cromlechs, tumuli, menhirs, stone circles and the like, still stretch wellnigh round the earth.

Our knowledge of the neolithic man of Europe is derived from the relics he has left in the Danish peat-bogs, the Danish kitchen middens, the oldest lake dwellings of Switzerland and Italy, the earliest tumuli, and, finally, the sepulchral caves of France and Belgium. Before considering the diet of neolithic man as disclosed by these relics, it may not be out of place to make a brief reference to the origin of neolithic culture.

There is little evidence that it developed in Europe from paleolithic culture, though Mortillet holds that this is what actually happened. He contends that towards the end of the Magdalenian epoch the climate of Europe became unfavourable to man's existence, and that, in consequence of this, his primitive industries fell into decay: he ceased to fashion delicate stone implements, while his elegantly carved weapons of bone and reindeer-horn gave place to more crudely-worked weapons made from stag-horn (the reindeer having permanently migrated to the north), of which the most characteristic was a short, flat harpoon, pierced at one end and furnished with short irregular barbs. To this period he gives the name of Tourassian, so called from a rock shelter where relics supposed to be characteristic of it have been found; and he appears to hold that neolithic culture grew out of this Tourassian culture.

In some parts of Europe, at least, the gap between the paleolithic and neolithic cultures is so abrupt and striking that we must assume an entire disappearance of paleolithic man, and a subsequent reappearing by neolithic successors. This is what must have taken place in Britain, where the few scattered paleolithic hunters could scarcely have lived through the last ice age in a contracted region, at one time reduced by subsidence to a cluster of islets, and for long intervals entirely severed from the mainland (Keane).

Neolithic culture must, however, have emerged somewhere or other from the paleolithic. Keane places its origin in a southern region, where the conditions of life were much more favourable for advancement than in those parts of Europe which the devastating influence of the northern ice-cap

had rendered all but uninhabitable. One can hardly doubt that it had its birthplace in some southern clime—either in the southernmost part of Europe or Asia, or in northern Africa, and had attained considerable development long ere the termination of the old stone age in Europe, and

that while primitive man was still struggling with the mammoth in Dordogne and Britain, a relatively advanced degree of culture had already been developed, say in the Nile and Euphrates Valleys (Keane).

From these centres we may suppose that neolithic hordes spread over Europe, gradually imposing their culture on the surviving paleolithic inhabitants, and establishing it also in parts whence, as in Britain, man of the old stone age had long disappeared. In this latter case there would obviously be an abrupt break between the paleolithic and neolithic cultures.

In neolithic times the fauna was much the same as it is now. The reindeer had disappeared, but the wild bull and bison survived, as they did for some time afterwards. On the other hand the flora, especially as regards forest trees, was somewhat different from that of the present time.

We may now proceed to the diet of the neolithic man of Europe, as evidenced by his relics.

The *Danish kitchen middens* occur all round the shores of Jutland and neighbouring islands, and are of large dimensions, some of them being as much as 1,000 ft. by 200 ft. and 10 ft. high. These middens probably antedate the pile dwellings. They contain rude flint implements, coarse pottery, and many varieties of bones, though none of the domesticated animals, save the dog; nor do they show any evidence whatever of agriculture having been pursued.

Shells of the oyster, cockle, mussel, periwinkle occur in abundance, those of the whelk and snail in smaller quantity. The bones of certain fish also occur—for example, herring, dab, cod and eel; also the remains of the turtle. Inasmuch as neither herring nor cod are found near the coast, it is clear the inhabitants of the kitchen middens must have possessed seaworthy craft.

The chief mammalian relics found are those of the stag, kid and wild boar; others belong to the wild ox, bear, wild cat, lynx, fox, wolf, domesticated dog, otter, beaver, water rat, seal and porpoise. The absence of bones of the reindeer and musk ox indicate that the middens belong to a time when the climate was temperate, like that of the present day. The dog was apparently sometimes eaten, for the bones of this animal sometimes show traces of having been intentionally broken.

The bones of several varieties of bird are found, many of them aquatic—for example, wild duck, geese, swans and the great penguin. All the long bones containing marrow are split, evidently for the object of extracting it.

It is evident that these kitchen-midden folk lived chiefly by fishing and hunting, much in the same way as existing Fuegians live. How far they supplemented their animal by vegetable food we cannot say. That they cooked their food is shown by the existence of circular hearths made of flat stones covered with cinders and charcoal.

In some *caves*, notably in the South of France, remains of neolithic man are found, but in most if not all of these there is evidence of the domestication of animals, though Taylor contends that certain sepulchral caves of France and Belgium prove that at the beginning of the neolithic period the inhabitants lived by the chase, and had no domesticated animal.

In one of the neolithic caves the bones of the urus, a smaller ox, the stag, sheep, goat, antelope, chamois, wild boar, wolf, dog, fox and badger have been found. The bones were split lengthwise, after the custom of paleolithic man. Large quantities of snail shells were found in this cave, and there were remains of hearths.

Tumuli and barrows, etc., were built from the beginning of the neolithic period to the introduction of Christianity. Thus some belong to the neolithic, others to the bronze, and others, again, to the iron age, and it is not always possible to say to which of these three any given specimen belongs, because stone implements were extensively used throughout the bronze period. The long barrows are looked upon as always belonging to the neolithic age, as metal has never been found in any of these, but even the oldest of them show evidence of the domestication of animals. No cereals have been found in British barrows, mealing stones and querns have, however, been met with, but whether these were used for crushing corn or wild vegetable produce it is not possible to say.

The *lake dwellers* of Switzerland and Italy passed through the three stages of stone (neolithic), bronze, and iron. It has been thought by some that the earliest of them were pre-

cibicultural, though there can be little doubt that even they possessed domesticated animals, including the ox, sheep and goat, as well as, at a later period, the pig and the horse, and had already begun to cultivate the soil, growing, among other things, wheat, barley, millet, as well as flax. But while the lake dwellers increased their food artificially, they subsisted to a large extent on wild animals, such as the deer, boar, bear, wolf, beaver, otter and squirrel, and upon the produce of the uncultivated vegetable kingdom, as shown by abundant finds of crab apples, beech nuts, hazel nuts, water-chestnuts and acorns, some of them still adhering to the vessels in which they had been cooked.

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THE GENERAL ELECTION.

LONDON BOROUGH.

THE lists so far published of candidates for London boroughs at the general election contain the names of three medical men.

In Bermondsey, the sitting member (Mr. H. J. O. Cust), who seeks re-election as a Unionist, will be opposed by Dr. G. J. Cooper, who is standing in the Liberal interest. Dr. Cooper has represented Bermondsey on the London County Council since its formation, and has for some years done valuable work as Chairman of its Public Health Committee. The constituency has been inconstant, as a Radical candidate was returned in 1885, was defeated in 1886, was again successful in 1892, but was defeated in 1895 and 1900.

In West St. Pancras, Sir William Collins, who has contested the constituency before in the Liberal interest, is standing again. Sir William Collins, who is an ophthalmic surgeon, has also achieved distinction as a member of the London County Council, of which he was chairman in 1897-8. On the formation of the London Education Committee he was appointed its chairman, an office which he still holds. He is a member of the Council of the King's Hospital Fund and Honorary Secretary of the League of Mercy.

Mr. F. Rutherford Harris, who is standing again at Dulwich, for which constituency he was elected as a Conservative at a by-election two years ago, is a member of the medical profession, holding the Licentiate of the Royal College of Surgeons of Edinburgh; he has, however, we believe, long ceased to practise, and has not heretofore shown much interest in medical questions in Parliament.

UNIVERSITY CONSTITUENCIES.

There will be a contest for the representation of the University of London, the candidates being Sir Michael Foster, M.D., K.C.B., F.R.S., and Sir Philip Magnus. A circular has been issued, signed by the Chairman (Sir Thomas Barlow) and the Vice-Chairman (Professor Carey Foster) of Sir Michael Foster's Committee, stating that he seeks re-election primarily as a representative of science and higher education. He was first elected in 1900 as a Liberal Unionist and supporter of the Unionist Government; if re-elected he will take his seat on the Liberal side of the House. He is a Free Trader, and believes that the state of the country is to be bettered not by interfering with external trade, but by carrying out much-needed internal changes, by remodelling old laws which hamper, and promoting new laws which will advance, commercial, social, and agricultural development and interest. The circular letter in support of Sir Michael Foster's candidature is signed by members of both political parties. His opponent, Sir Philip Magnus, who is the candidate of the University Unionist Association, is Superintendent and Secretary of the department of Technology in the City and Guilds of London Institute; he is a graduate and a member