2. It would be worth while, perhaps, if a trial was made to obtain negro labor for the rice plantations. The negro is proof against malarious influences in a considerable measure. Might not colored laborers be imported from Georgia and the Carolinas ?

CURRENT NOTES ON ANTHROPOLOGY. - XI.

[Edited by D. G. Brinton, M.D., LL.D.]

Canadian Archæology.

UNDER the efficient superintendence of Mr. David Boyle, curator, the archæological collection of the Canadian Institute, Toronto, has grown to be the largest in existence, illustrating the prehistoric condition of man in the province of Ontario. His excellent reports, which have appeared annually since 1887, describe with great accuracy and sufficient fullness the yearly accessions to the collection of antiquities.

Objects which can properly be called palæolithic have not yet been found in Canada. This is the opinion of Mr. Boyle as expressed in his last report. Of course, forms simulating those of the old stone age occur, but this is not conclusive. Stone is the principal material, and in its shaping and dressing the Canadian Indians were not behind their neighbors to the south. The collection also contains many specimens of their pottery. It is well burned, ornamented with designs in scroll and line, and some of the vases are "almost classic in outline." The pipes, both stone and clay, are a prominent feature in the reports, and evidently were the objects of solicitous workmanship. Copper specimens are by no means unusual, some being knives, others spear-heads, with planges and sockets, others ornaments, as beads, bracelets, etc. Examples in bone, shell, and horn are also figured. About a hundred of the crania unearthed have been examined. They indicate a people with moderately dolichocephalic skulls, averaging a cranial index of 74.5.

It is to be hoped that the government of the Dominion will continue to lend assistance to this creditable effort to illustrate the archæology of Ontario.

The Question of the Basques.

As some readers of *Science* have manifested an interest in the Basques, they will doubtless be pleased to learn that at the next meeting of the French Association for the Advancement of Science, to be held at Pau, from the 15th to the 22d of September next, the Anthropological Section intends to devote most of its energies to settling "La Question Basque." According to an announcement of the President of the Section, Dr. Magitot, the question is to be attacked on all four sides: first, the history and origin of the Euskarian people; next, their anthropological characters: third, their language; and finally, their traditions and folk-lore. From such an onset as this we may hope for some positive results.

Not much can be expected from a study of the language. There is probably no other living idiom which has had its vocabulary so completely foreignized as the Basque. At the Congrés Scientifique International des Catholiques last year, the Comte de Charency, who is a good authority on the tongue, stated that at least nine-tenths of its words were borrowed from the Latin and Romance languages, and then proceeded to point out that a considerable percentage of the remainder were Celtic, Greek, or Germanic in origin. There is almost nothing left of the original Euskarian but its grammar; and this, it may be added in passing, shows no relationship to that of either Ural-Altaic or American tongues, in spite of various statements to the contrary.

On Left Handedness.

Why are most people right-handed? Why are a few left handed? These are questions which have puzzled all physiologists who have attempted their solution. The various theories put forward are compactly presented by Sir Daniel Wilson in his recent work, "The Right Hand: Left-Handedness" (London, 1891). His final conclusion is that left-handedness is due to "an exceptional development of the right hemisphere of the brain." But it must be acknowledged that his evidence, consisting of a single autopsy, is far from sufficient.

Sir Daniel calls attention to the fact that the forms of some ancient stone implements prove that palæolithic man was sometimes left-handed, and distinctly was not ambidextrous, as some have maintained. He does not refer to De Mortillet's tables in the Bull. Soc. D'Anthopologie, 1890, which show that at that time in France the men averaged more than twice as many left-handed individuals as at present; and at certain localities, as at Chassey, on the upper Rhone, the left-handed were in the large majority.

In Sir Daniel's generally very thorough volume there are but few references to this phenomenon in the lower animals, and no mention of its occurrence in snails. It may, indeed, sound like a "bull," to talk of animals as left-handed who have no hands, but the physiological phenomenon is plainly present. It is shown in the direction in which they construct the spiral of their shell. With the ordinary vine snail this is from left to right; but once in about 3,000 times it is from right to left. They are then known as *sinistrorsa*. In the genus *Partula* far more frequent examples occur, and indeed species have been named from this peculiarity. Whatever its cause, in mollusk and in man the same law is operative.

The Mentone Cave-Burials.

Near Mentone, but on the Italian side of the frontier, there are several caves in the cretaceous sea-cliffs, whose contents have long attracted the lively attention of archæologists. Unluckily, they have been worked over so much that the original stratification is no longer apparent; but throughout the mass, flint chips and rude bone implements have been abundantly found, of such a character that they have been unanimously referred to palæolithic man, to that period of his existence in western Europe which De Mortillet has called Solutreen.

Thus far, all is harmony; but in this deposit, at various depths, skeletons have been unearthed, and a lively discussion ensued as to whether these should be considered also of palæolithic time, or of later date. This debate has been renewed by fresh discoveries of such remains in February last, a good description of which, by Mr. A Vaughan Jennings, appears in Natural Science for June. They are said to be of unusual size, relics of men from six and a half to seven feet tall; but it is well known how easily one is deceived in measuring skeletons. With them were worked ornaments of bone and shell, necklaces, and finely-chipped arrowheads. These indications point conclusively to the fact of deliberate interment at a period when mortuary ceremonies were definite and solemn rites, and unquestionably, therefore, to neolithic times. In spite of the depth at which they were found, perhaps twenty-five feet below the modern level of the cave floor, they must be accepted as endorsing De Mortillet's rejection of the human remains as palæolithic.

Ethnology as Philosophy.

Among the most thoughtful writers on the meaning and mission of ethnology must be named Dr. A. H. Post of Bremen. He is the author of several important works, and an essay of his, on "Ethnological Jurisprudence," was translated and published last year in the *Monist*, at Chicago.

In a recent number of the *Globus* he publishes some "Ethnological Reflections," which are intended to set forth the true position of ethnology with reference to other sciences. He defines ethnology as "the natural history of social life," and he believes that the time will come when all the so-called "social sciences" will be taught as its branches. He points out with force that this will bring about a revolution in all traditional methods of education, for there is a fundamental and irreconcilable antagonism between the two methods. Natural science denies absolutely the free will of man, the validity of a priori reasoning on any subject, the possibility of a "categorical imperative" in ethics, the abstract truth of any doctrine of religion or morals, the supremacy of any individual. All is an endless and unavoidable chain of cause and effect.

It appears to me that such a view of ethnology is true so far as it relates to the growth of societies under natural surroundings. The social unit is cribbed and confined by iron laws, and its development is in a measure subject to these; but in a measure only. It is even less true of the individual. For to deny free-will to man not only leads at once into logical contradictions of the grossest kind, but is contrary to the soundest maxims of inductive philosophy. As John Stuart Mill, whom no one will accuse of prejudice, pointed out, we are certain of nothing so surely as of our own feelings, and of these the strongest is that of our own individuality, and of it as a free agent.

Dr. Post has here committed the same error as another distinguished ethnologist, lately mentioned in these columns (*Science*, June 3), that of seeking to make ethnology synthetic, when its study should be objective and analytic. Where it leads him, his article curiously shows. On one page he says that to the ethnologist no social condition is good or bad, but merely present as a subject for study; and on the very next page he falls to bewailing the egotistic strife in modern society as threatening the ruin of the social edifice!

NOTES AND NEWS.

THE next meeting the American Association for the Advancement of Science, to be held in Rochester, N.Y., Aug. 17-24, will be of unusual interest and importance, especially to the members of the Section of Biology. At this meeting will be considered the place of meeting for 1893, and consequently the attitude of the association toward the Columbian Exposition. But even of greater importance to biologists will be the consideration and probably the decision of the question of the division of the section into two, --one for the botanists, and one for the zoologists. It is hoped, also, that there will come up for discussion the report of the American Branch of the International Committee on Biological Nomenclature. This report has nothing to do with the naming of species, but will consider the terminology to be employed in anatomy, embryology, etc. In view of the matters of general interest to the whole association, and those of vital interest to Section F, it is expected that there will be a large attendance of botanists and zoologists and a long list of papers to be presented before the present section of biology.

- Bulletin No. 23 of the West Virginia Agricultural Experiment Station, entitled "Illustrated Descriptive List of Weeds," contains a considerable amount of information in a condensed form. It is written by Dr. C. F. Millspaugh, botanist of the station. Illustrations of all the important families, as well as of a number of species, enable one unfamiliar with the weeds to recognize them. Short descriptions are given of each, with mention of any special medicinal value they may possess as household remedies. Some two hundred species are mentioned. One might reasonably question the justice of considering the locust (*Robinia pseudacacia*), the honey locust (*Gleditschia triacanthos*), or the wild hydrangea (*Hydrangea arborescens*) as weeds. The list would naturally not be the same for all States, but it is a little surprising not to find *Potentilla norvegica* mentioned. In southwestern Ohio, and doubtless other localities, whole fields have been overrun by this plant, and it is much worse in this respect than *P. canadensis*, which is mentioned in the Bulletin. A number of typographical errors show carelessness in proof-reading.

- At a meeting of the Paris Geographical Society on May 20. according to The Scottish Geographical Magazine, M. Venukoff gave a sketch of the surveys executed in Russia during the year 1891. After referring to the exploration of the Black Sea continued by MM. Spindler, Andrussof, and Wrangell, of which an account was given on page 154 of this volume, he turned to the geodetic and topographical work executed in the Crimea, which has been the means of ascertaining that the Roman Kosh (5,601 feet high) is the culminating point of the mountains of the peninsula, and not the Tchatyr Dagh (5,002 feet), as has hitherto been supposed. The phenomena of terrestrial magnetism and the local attractions of the mountains of the Crimea have also received attention. Among the geodetic works produced is a large map of the triangulation between Kishineff and Astrakhan, along the parallel of 47° 30' N. This arc extends over nineteen degrees of longitude. It is remarkable that this triangulation, though quite independent, agrees exactly with that of the 52d parallel in regard to the anomalies observed in the length of different degrees of longitude (see vol. vii., p. 494). Between the same meridians the differences of the lengths of degrees of longitude, as measured geodetically and calculated astronomically, have always the same sign.

- For several years the chemical division of the U.S. Department of Agriculture, under H. W. Wiley, has been giving considerable attention to the subject of adulterants, and in part seventh of bulletin No. 13 is reported a series of investigations made on the adulterations of tea, coffee, and cocoa preparations. The conclusion reached is that teas are not now adulterated to so great an extent as formerly, and that the adulterants used are, as a rule, not such as may be considered prejudicial to health. In the case of coffee the use of adulterants seems to be on the increase. Of the samples of ground coffee examined, 90 per cent were found to be adulterated in some way, some of them containing no coffee whatever. Chicory is largely used as an adulterant of coffee, as well as wheat, rye, corn, peas, acorns, molasses, etc. Not only is ground coffee adulterated, but numerous imitations of unground coffee are on the market, a few imitating green coffee, but the larger number intended to be mixed with roasted coffees. The following description of some of them is taken from the bulletin: "8,951. Coffee pellets, molded, but not in the form of coffee beans. When mixed with ground coffee would escape the notice of the purchaser, also probably in mixture with whole coffee. Composition; wheat flour and bran, rye also probably present. Manufactured by the Clark Coffee Company, office 156 State Street, Boston; factory, Roxbury, Mass. Price, 6 cents per pound, or $5\frac{1}{2}$ cents in 10-barrel lots. The manufacturers claim that an addition of 33 per cent of these 'pellets' to genuine coffee will make 'an equal drink to the straight goods.' The manufacturers, after making extravagant claims for their product, state, with evident intention to further a fraud, that 'it is uniform in color, and can be furnished with any desired color of roast.' 8,955. Imitation coffee beans. Composed of wheat flour, light roast. Manufactured by the Swedish Coffee Company, New York. 8,956. Similar to 8,955, and of the same manufacture. Composition; wheat flour and probably saw-dust. Dark roast; two kinds of 8,957. Imitation coffee beans. Composition; wheat berries. flour. Manufactured by L. H. Hall, 1,017 Chestnut Street, Philadelphia, Pa." Another method of sophisticating coffee is to treat it for the manufacture of coffee extract, after which the grains are roasted a second time, with the addition of a little sugar to cover the berries with a deceptive glazing.