

Extract from "Report for the year 1892 on the Trade of the Consular District of Chicago." (F.O. Annual Series, 1893, Diplomatic and Consular Reports, No. 1233.)

FIVE years ago the University of Chicago was not thought of, and now there are twelve fine buildings of English Gothic architecture, either finished and occupied or in course of construction, on twenty-five acres of land owned by the University in the neighbourhood of Jackson Park, near the Exhibition grounds, where three years ago was a marsh. The University has now a large staff of professors, selected from other institutions in the country and Europe, and about 1000 students. Its origin and rapid growth are greatly owing to the generosity of Mr. Rockefeller, who in 1889 offered an endowment of £120,000 if a committee could raise the sum of £80,000; this sum was quickly raised, and about the same time a merchant of Chicago presented the University with twelve acres of the ground on which the buildings now stand. Further gifts came in, and up to the present time the total donations amount to £1,284,000, of which Mr. Rockefeller alone has contributed £754,000. The sums given in 1892 amounted to £711,500, and among the gifts was the offer of a telescope, to be the largest and most powerful in the world, which, with the observatory in which it will be placed, will cost more than £150,000. The University was opened last October with a faculty of 115 professors, men and women. One of the features of its regular work will be university extension and a system for the education of the masses.

A magnificent gift was last year presented to the city, and entitled the Armour Institute, after the patriotic and public benefactor of that name. It consists of a large and handsome building already completed, and fitted interiorly with marble wainscoting on every floor, marble arches and marble bath rooms, and the gift was accompanied with an endowment of £289,000. It is to be used as a manual training school and an institute for every branch of science and art; it is fitted with laboratories, forges, gymnasium, and library, and contains electrical, lecture, and other rooms for domestic sciences. It is intended as a benefit to young men and women of every class to be within the range of the poorest, and is taking the form of a school of technology.

ANTIPODEAN RETRENCHMENT.

LAST week a brief reference was made in these columns to the decrease in the grant to the University of Melbourne—a curtailment only justifiable under very special circumstances, and one that may bring reproach on the Colony that adopts it. Since then we have seen a letter in the *Journal of Education* for July by Dr. E. A. Abbott, late Headmaster of the City of London School. The letter is as follows:—

I venture to ask space for the following extract from a letter I received to-day from the Professor of Mathematics in Auckland College, New Zealand. Prof. W. S. Aldis was Senior Wrangler and First Smith's Prizeman in 1861, and subsequently, for several years, Principal of the College of Physical Science in Newcastle-on-Tyne. The failure of his wife's health induced him, about ten years ago, to accept the Auckland Professorship, at some sacrifice of income, on the understanding, of course, that he was irremovable as long as he could do the work. After nearly ten years of service, here is the result, as stated in the extract, which bears date May 19. I give it with the mere suppression of the name of the chief mover in this business.

"Last Monday ——— succeeded in getting a majority of the Council to give me six months' notice of the termination of my engagement, on the ground that the amount of work I did could be perfectly well performed by plenty of men who could be got for a much lower salary. . . . No charge of incompetence or neglect of duty has been made against me, unless by slander behind my back. I have never been asked to meet the Council; the debates were held with closed doors; and, before I even knew what was being proposed, I was allowed to read the result of their discussion in the *New Zealand Herald*."

Those who know my old schoolfellow, Prof. Aldis, as a man incapable of dereliction of duty or exaggeration of fact, will think that the only way of meeting the necessities of the case is

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to rescind the resolution. Others may reasonably defer their final judgment till they hear what is to be said on the other side; but meantime I would appeal to all University men to defer applying for the professorship. For the present, to succeed a professor thus arbitrarily dismissed by the Council involves not only the possibility of being similarly treated, but also the certainty of contributing to what Sir Robert Stout has justly described as "a grievous injury to higher education." Many teachers, and many University men who are not teachers, will, perhaps go with me still further, and agree that, if Prof. Aldis's statements cannot be denied, no one can take the post without some forfeiture of self-respect.

Dr. Abbott puts the case plainly and fairly enough, and, lacking an explanation from the Council concerned, we conclude that this is another example of the reactionary policy of retrenchment which now fills the minds and dictates the deeds of Colonial officials. Let them retrench by all means, but in the right direction. There could hardly be a more short-sighted and mistaken policy than that of curtailing educational grants in order to redeem a position lost by extravagant expenditure. Wealth-producing power and facilities for obtaining knowledge go hand in hand. In the past many of the Colonies have proved that they recognised the prime importance of their Universities and similar establishments. Indeed, they have often shown the way to the authorities at home. Apparently, however, this wisdom is departing from Colonial Councils, for healthy branches are being lopped off indiscriminately, while obtrusive suckers at the roots of the constitution are left untouched. However, it is not too late to rescind the measures that have been taken—measures that are derogatory both to the good sense and dignity of Colonial Governments. We trust that the next mail will bring us news of the reinstatement of Prof. Aldis and the restoration of University grants.

SCIENCE IN THE MAGAZINES.

THE July magazines contain a few papers of scientific interest. In the *New Review* Mr. E. R. Spearman writes on "Criminals and their Detection." This article is a vigorous protest against the crude methods of identification employed at Scotland Yard. In spite of the thousands of blunders that have been made, our police authorities are stolidly indifferent to their imperfections, and look upon the Bertillon system as a "scientific fad." But this is the way in which the official mind usually views matters of scientific importance. To show the absurdity of the position taken up, Mr. Spearman gives a full description of the Bertillon process of measurement, with the results obtained since the method was adopted in France, and compares it with the haphazard system of identification used in our prisons. But for the fact that officialism never acknowledges itself to be in the wrong, *bertillonage* would have been established in England long ago.

The Bertillon system, says Mr. Spearman, is fast circling the globe. Our great Indian Empire has taken it up, the whole province of Bengal being recently put under its protection, and still more recently the island of Ceylon. Even in still more Eastern Asia, Japan has borrowed M. Bertillon's scheme. In Eastern Europe, Russia (St. Petersburg and Moscow) and Roumania are using the system, which is also practised in Norway and Switzerland. In North America the United States Government has successfully applied anthropometry to deal with deserters in the army and navy; while Chicago not only uses the system for its own purposes, but is the centre of a large field of operations in the States and in the adjoining portions of the Dominion of Canada. Beside this, on the Pacific coast it was successfully used to enforce the Chinese immigration law, the Celestials being able to use each other's permits with impunity, all being alike as two peas to the casual Caucasian glance, but not to the Bertillon compasses. In South America the Bertillon system has also penetrated, the Argentine Confederation making use of it.

The anthropometric system could be established in England at the present time, for Mr. Spearman points out that in the Penal Servitude Act, 1891, it is enacted that

The Secretary of State shall make regulations as to the measuring and photographing of all prisoners who may for the time being be confined in any prison, and all the provisions of section six of the Prevention of Crimes Act, 1871, with respect to the photographing of prisoners, shall apply to any regulations as to measuring made in pursuance of the section.

Dr. S. S. Sprigge has an article on "The Poisoning of the Future." He says:—

There are two directions which the poisoner of the future may take in an intelligent attempt to use superior knowledge in the accomplishment of undetected crime. One of them is the bringing of the older methods of poisoning to perfection by the exhibition of subtler drugs. The other, and by far the more terrifying, is the employment by the poisoner of the results of recent biological research.

Neither of these methods is likely to be very successful, for those who understand the power of such deadly essences as strychnine, atropine, digitalin, and aconitine, or know how to isolate, cultivate, preserve, and inoculate the germs of a malignant disease, will be comparatively marked men, inasmuch as they will belong to a limited class.

The *Humanitarian* appears this month for the first time as a magazine. In it M. A. Bertillon gives a description of the anthropometrical measurements made in France under his direction. The measures taken are (1) height, (2) length of head, (3) maximum breadth of head, (4) length of middle finger of left hand, (5) maximum length of left foot, (6) maximum length of arms extended, (7) colour of the eyes. M. Bertillon describes in detail all the operations, and shows how the measures are classified so that the question as to whether a prisoner has been arrested before or not can be irrevocably settled in a few minutes.

In the *Contemporary Review* Mr. G. J. Romanes, F.R.S., furnishes a postscript to his article in the April number in support of Weismannism against Mr. Herbert Spencer. The points touched upon are (1) the principle of Panmixia, or cessation of selection; and (2) the influence of a previous sire on the progeny of a subsequent one by the same dam. Mr. Spencer briefly replies to Prof. Romanes, and Prof. Marcus Hartog follows with a short description of the works of Weismann, from the publication of the essay on "Heredity" in 1883 to the last conception of the germ-plasm and the theory of variation at present held by the great zoologist of Freiburg.

Prof. Thorpe, F.R.S., contributes to the *Fortnightly Review* a descriptive account of the recent solar eclipse in the form of a reprint of a discourse delivered at the Royal Institution. As the article contains no information of scientific moment that has not been chronicled in these columns, further comment upon it is unnecessary.

The *Century Magazine* contains an article by Dr. Allan McLane Hamilton on "Mental Medicine," or the treatment of disease by suggestion. Though a vast amount of quackery is carried on in connection with hypnotism and mesmerism, there is no doubt that many cases have been successfully treated.

It is only within the past few years that scientific men have really adopted suggestion in a rational way, and the advances in psychology and psychopathology have paved the way for the use of a most potent agent. Our knowledge of disorders of motility and the disturbance of the governing coordinating faculties permits us to determine the pathology of certain convulsive and spasmodic conditions, which until recently were simply looked upon as vague symptomatic states. Writer's cramp, which is a diseased automatism, has been repeatedly cured by suggestion made during the hypnotic state. I have

seen forms of persistent tremor, chorea, speech defects, and other motor disturbances very much ameliorated, if not always cured, by the methods of Luys and Bernheim. In England and elsewhere suggestion has been used for the correction of certain mental states manifested in moral perversion, among which dipsomania and certain varieties of infantile viciousness figure; and my own experience has convinced me that in some insanities it is certainly a most valuable means for combating the development of delusions, and in restoring the equilibrium of an unbalanced nervous system.

"The Galaxy" (seen through a telescope) forms the subject of a short poem by Mr. Charles J. O'Malley. He finely describes the Milky Way in the lines—

"Luminous archipelago of heaven!  
Islands of splendour sown in depths of night."

In *McClure's Magazine* Dr. H. R. Mill describes the Arctic Expeditions of Nansen and Jackson under the title "The Race to the North Pole." The former expedition started from Christiania a few days ago, but Mr. Jackson will not leave England with his companions until about the middle of July, or perhaps the beginning of August. He intends to approach Franz-Josef Land, which will be a comparatively easy task, and then to advance over the ice in sledges, trusting that the land-ice stretches northwards to the immediate neighbourhood of the Pole. If, however, Franz-Josef Land proves not to have a great northerly extent, an advance may be made on the sea-ice, carrying boats for crossing open water. Mr. C. Moffett summarises the programme of Lieut. Peary's expedition, pointing out several important considerations which make it probable that the expedition will attain a considerable measure of success. It remains to be seen whether any or all the explorers will reach the goal. The race is a long one, and will tax to the utmost the energies and pertinacity of those who have elected to run.

"An Expedition to the North Magnetic Pole" is the theme of an article by Colonel W. H. Gilder. About three years ago Prof. Mendenhall wrote to the Secretary of the United States Treasury as follows:—

"The importance of a redetermination of the geographical position of the North Magnetic Pole has long been recognised by all interested in the theory of the earth's magnetism or its application. The point as determined by Ross in the early part of this century was not located with that degree of accuracy which modern science demands and permits, and, besides, it is altogether likely that its position is not a fixed one. Our knowledge of the secular variation of the magnetic needle would be better increased by better information concerning the Magnetic Pole, and, in my judgment, it would be the duty of the Government to offer all possible encouragement to any suitably organised exploring expedition which might undertake to seek for this information."

Acting upon a further recommendation, the Secretary of the Treasury requested the President of the National Academy of Sciences to appoint a committee of its members "to formulate a plan or scheme for the carrying out of a systematic search for the North Magnetic Pole and kindred work," and such a committee was subsequently appointed, with Prof. S. P. Langley, Secretary of the Smithsonian Institution, as Chairman.

The observers will be selected from among the officers of the United States Navy attached to the Coast Survey, who have had special training in magnetic field work, and a scheme of the observations to be made has been drawn up by Prof. C. A. Schott.

It is proposed to charter a steam whaler to take the party from St. John's, Newfoundland, to the northern part of Repulse Bay, which, being directly connected with Hudson's Bay, is the nearest point to the Pole, containing area that is accessible any year. There a permanent station is to be erected, where regular observations will be continued all the time, and from which each spring a field party (perhaps two) will start to locate the geographical position of the Pole.