practically shut off from the help of the U. S. Public Health Service, and confined within the Indian Bureau scheme of service, the Pueblo Indians are neglected just as the other tribal Indians are neglected. Their infant death-rate is extravagant, their eyesight is in jeopardy, and their racial tissue is being destroyed through venereal diseases.

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THE BROWN'S PARK FORMATION

AMONG the paleontological material discovered during the summer of 1925 by Mr. J. LeRoy Kay of the section of paleontology, Carnegie Museum, is the remains of a long-jawed proboscidean most closely related to *Tetrabelodon osborni,* described by Professor Ervin H. Barbour.[1]

The above-mentioned specimen was discovered approximately six hundred to seven hundred feet above the base of the Brown's Park formation on the southern slope of Douglas Mountain, Moffatt County, Colorado. Mr. Kay has informed me both orally and by letter that this specimen referred to above is from the Brown's Park sediment; that there is no evidence that it was found in a later formation superimposed upon the Brown's Park; and that the find is from approximately the middle horizon of the vertical section of the Brown's Park strata in this locality.

Having these facts before us the question remains as to the age of the Brown's Park formation. In an earlier publication[2] this formation was cautiously referred to the lower and middle Miocene. From our recent discoveries this is no longer tenable. We must now regard the series as pertaining to the upper Miocene and lower Pliocene.

In the near future, when a complete study of the material obtained and more data on the geology of the region is at hand, a complete report will appear in the Carnegie Museum publications.

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THE QUOTATION OF SCIENTIFIC REFERENCES

I HAVE been much interested in the correspondence concerning the methods of quoting references. In my work as lecturer on research in the Philadelphia College of Pharmacy and Science I have impressed upon my students the importance of giving both the year and volume, when such are available. Some German publications have no regular volume number, simply giving the "Jahrgang." I have advised that if there were a series number it should be placed in brackets as the first item, then should follow the year, the volume and the page. It is to be hoped, I think, that the practice of using Roman numerals for the volume will be entirely disregarded. In the smaller figures there is but little inconvenience, but in the higher numbers the system is very confusing. It has occurred to me that there might be an international agreement by which each journal in a certain department of science, say chemistry, should be given a number which might be in order of its seniority of its establishment—this would save the irregularity of abbreviations that are noticed in the literature and also ambiguity; for instance, "Ber." is now frequently used for the publications of the German Chemical Society, but there are other "Berichte."

Biblical critics, who possibly have a smaller number of journals for references, have adopted a simple method, at least for the more important: thus, BDMG is the sign of "Berichte der Deutschen Morgenländischen Gesellschaft"; PSBA, "Proceedings of the Society of Biblical Archeology." I think, however, the numbering system would be preferable.

I recall a case in which the reference was iv as the volume; the year was also given. I knew that volume four could not have been in that year but must be a much higher number. The real number was lv, the mention of the year saved me from a long search through the files. I see no particular objection to the use of a heavy faced type for the volume number and habitually employ it.

The subject is one of considerable importance, as the enormous extent of scientific literature obligates a writer to many references.

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LITERATURE CITATIONS

I HAVE read with interest a number of letters which recently appeared in SCIENCE which dealt with the subject of simplified literature citations. All this is timely. References to volume number *ought* to be given in bold-face Arabic numerals instead of Roman numerals. But scientific writers are sometimes guilty of worse faults than giving references in cumbersome form; sometimes they exasperate their readers by omitting essential parts of their literature citations or even by leaving the references out altogether.

To take an almost random sampling from my reading of the last week or so: (1) Dr. A. has written a brilliant article on the validation of mental tests,

[1] *American Journal of Science,* Vol. XLI, No. 246, June, 1916, p. 522.

[2] Ann. Car. Mus., Vol. XV, 1924, p. 299.

but his references lose themselves in a mass of *"op. cit."* at the bottom of the page; (2) Dr. B. has written an excellent text on certain aspects of psychology, but he consistently omits the initials of the writers whose books he quotes, leaving one the annoying task of going through a whole drawer of "Smiths" at the library before finding the particular Smith whom Dr. B. had in mind; (3) Mr. C. conducts a very fine abstract department in his magazine, but his references to periodicals are by month and year without the volume, while the remainder of the magazine uniformly cites by volume and year without the month; (4) Dr. D. has written the best book yet on behaviorism, but the only references he gives are the surnames of the authors quoted inserted in the text in parentheses. Dr. D. remarks jauntily in his preface that the student who desires exact references "cannot be too early trained to use the Psychological Index."

There is something to be said for the *auto da fé*. It gave an exasperated public a chance to get even with scientific men who lacked a sense of responsibility.

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SCIENTIFIC BOOKS

Annals of Eugenics: a Journal for the Scientific Study of Racial Problems, Vol. I, Parts I and II, University Press, Cambridge, 1925, pp. 256.

THE Francis Galton Laboratory for National Eugenics has issued the first two parts of a periodical entitled the *Annals of Eugenics: a Journal for the Scientific Study of Racial Problems.* It is edited by the director of the Galton Laboratory, Professor Karl Pearson who, with Miss E. M. Elderton, contributes a foreword outlining the scope and aims of the new journal. Those who are familiar with the writings of Professor Pearson might be reasonably certain as to several things which would be said in this introductory statement. The journal is to be rigidly scientific, containing "the work of trained scientists rather than of propagandists and dilettanti." Emphasis is laid on the fact that the worker in the field of eugenics requires a fundamental training in mathematics as well as in genetics and anthropology. "By whatever manner we approach heredity and selection in man," the authors tell us, "we still meet the dominating fact that probability lies at the basis of our knowledge; and that snare-besprinkled area of mathematical science—where the greatest have been impaled —justifies us when we assert that the study of eugenics requires now, and will require still more as it advances in the future, the most highly trained scientific minds. Little real progress will be made by popular discussion, and by dilettante work."

There is a real need for a journal which publishes technical and mathematical papers on eugenics, a need which is scarcely met by such periodicals as *Biometrika* or *Metron.* The papers comprising the present issues of the *Annals of Eugenics,* for instance, do not quite fall within the scope of any other journal.

The first paper of the *Annals* is by Karl Pearson and Margaret Moul on "The Problem of Alien Immigration into Great Britain, Illustrated by an Examination of Russian and Polish Jewish Children." The English, like ourselves, have their immigration problems, and one of the most serious of these is occasioned by the influx of Russian and Polish Jews. The authors take the very reasonable position that "the law of patriotism for a crowded country surely must be to admit not those who merely reach our own average—and *a fortiori* not whose who fall below—but only those who can give us, either physically or mentally, what we do not possess or possess only in inadequate quantity." The endeavor is therefore made to find out whether the people of Jewish origin compare favorably with the average of the native British population. The data for the study of the Jewish population were obtained largely from school children, together with what information could be secured in regard to their parents. These findings were compared with those obtained from the Gentile school population living under various conditions. Nearly three fourths of the foreign-born Jewish parents were unable to make any really effective use of the English language, and about a third of the parents were illiterate even in their own language. The alien Jewish population has something like 50 per cent. more bad health than the corresponding native population. Notwithstanding the presumed immunity of the Jew to tuberculosis, the statistics seem to indicate a greater prevalence of tuberculosis among the Jewish children than among the average children of the London elementary schools. When it comes to bad tonsils and adenoids, heart disease, defective teeth, diseases of eyes and ears, and in fact most physical characters except stature and weight, the Jewish population is inferior to the average of the Gentiles. In cleanliness of clothes and person, the Jewish children are behind the average of the Gentiles, even of the poorer districts, and they have an unenviable record also for the toleration of pediculi. From the standpoint of physique, the available evidence does not indicate that the Russian and the Polish Jews are apt to raise the level of the British population.

Part II of the paper is devoted to an investigation of intelligence. The data were secured by teachers who graded their students into a number of classes ranging from very able to mentally defective. No