and Geography. Most of the data in the report were obtained by the sub-committee in a canvass of individuals and institutions interested in marine ecology as related to paleontology. The report attempts to present a picture of current and recently completed activities together with an annotated bibliography of a number of recently published papers. The Division of Geology and Geography wishes to give the report a fairly wide distribution in the belief that it will be found useful by paleontologists. Copies have been sent to individuals and to libraries, particularly those in the geological departments of colleges and universities. A limited number of copies are on hand and will be mailed to those desiring them. Requests should be addressed to the Division of Geology and Geography, National Research Council, 2101 Constitution Avenue, Washington, D. C., accompanied by fifteen cents to cover cost of postage and handling.

DISCUSSION

THE CURRENT LIST OF MEDICAL LITERA-TURE—AN EXPLANATION

LATELY, much has been written of the little planeographed weekly list of medical literature issued by the Friends of the Army Medical Library. One of the latest comments, and a very intelligent one at that from the view-point of its writer, was an article published in the September 26 issue of SCIENCE, in which Joe Hare, of the University of Denver, praised the list as being "potentially by far the most important index" of current literature in any scientific field (italics by me). He called the list an *index*, and criticized its "weird" classification. Since he also expressed his fear that the carelessness of classification committed by the weekly list may reflect badly upon "the excellent classification found in the Index-Catalogue," I think that it is time to throw light upon the historical background of this new bibliographical aid, upon its aims and its accidental relation to the Army Medical Library and its Index-Catalogue. Being one of the midwives assisting at the birth of the weekly list, and, to a certain extent, nursing it through its infancy. I may probably tell more about the difficulties of its birth, the weak constitution of the child, and so forth, than the casual observer.

The rather short history of the Current List is closely connected with the development of microfilm service of the Army Medical Library. This service can be traced back to 1937. In that year, Colonel Harold W. Jones, the librarian, saw the great possibilities of microfilming, and gave permission to the Bibliofilm Service, then operating at the Department of Agriculture, to film the library's books and journals if requested by the customers of that service. During the following two years, Bibliofilm Service copied many books and journal articles in the Army Medical Library, but it was felt that such an external agency would never be a proper substitute for what should be an extension service of the library. Filling out its many orders was always a great burden to the library staff which, since it did not have any supervisory power over the preparation of microfilms, could do little or nothing for the improvement of films delivered to patrons who always considered the library responsible for any defects found in the films received. For this and many other reasons it seemed to be desirable to establish a microfilm service of our own, operated in the spare time of our employees.

About a year ago, Dr. Seidell, who has been one of the early sponsors of the inauguration of microfilm services in public libraries, offered the librarian a microfilm equipment to be installed in the library building. The library being a government operated institution, a microfilm service could not become an official part of the library without a special authorization by Congress and without appropriation of public funds for its management and maintenance. In addition, an official microfilm service was not at all desirable because its operation would require a large personnel for bookkeeping, accounting, and so on.

A group of persons of high professional standing, who later took the name of Friends of the Army Medical Library, decided at this time that, instead of going through the endless maze of official sanction, the microfilm service should operate as a private organization of the Friends, with permission of the Surgeon General of the Army.

The Friends realized that a microfilm service without a sufficient steady patronage sooner or later would have to be discontinued. Of what avail is a microfilm service for a scientist who is not informed about the recent material available in the library? Should he wait until the printed and classified bibliographies call his attention to the recent developments? Or should the man from Texas or Oregon fly to Washington in order to glance through the subject cards prepared daily by the library staff for the Index-Catalogue from the large daily mail of scientific journals? Here seemed to be an opportunity for the Army Medical Library to become a bibliographical source for the medical research of the whole nation and even of the entire Western Hemisphere. Therefore, the Friends sought for means to extend the library's services and to build a bridge between the card file of the library and the study desk of the scientist.

Theoretically, a daily list of medical literature or a

contact by the Teletype system would best answer the scientist's eagerness for quick information, but none of these is practical or economical. The next best solution seemed to be a weekly list of scientific papers. This idea had its chief support in the fact that there was almost no money needed for the preparation of the list. The proposed Current List did not need money in order to subscribe to thousands of medical journals, nor to maintain a large staff of indexers and foreign translators. Neither did it need any to pay an editorial staff. Almost everything was there, ready in the library, ready for a lease-lend. The Friends merely needed to borrow the daily achievements of the library staff, and to allow the references to medical papers to be copied by a typist.

Thus the weekly list took its origin as a private publication of the Friends. It was called a *list* with purpose, and it should not be taken for anything else but a private list, and a very primitive type of bibliographical aid at that.

The method of arrangement was selected in order to avoid even the slightest pretension to being called a classified index, and to prevent any confusion with the official publication of the library, the Index-Catalogue.

It should not be forgotten that in preparing the weekly list, the Friends are just readers of the library, borrowers of its material. The reference cards of the Index-Catalogue are *loaned* to them at the closing time of the library; they are copied at night, and returned next day to the regular subject file of the library. There is no connection whatever between the publication of the Current List and the Index-Catalogue, beyond the borrowing of the cards. The list is prepared outside the library, the arrangement of titles and the grouping of journals by pasting the typed sheets under the 44 arbitrarily selected groups being done at the private home of the typist. Everything is necessarily done hurriedly in order to have the weekly issue ready in time. There is no supervision of the copy prepared for planeographing. The Friends do not supervise. On the other hand, neither the librarian nor the editor of the Index-Catalogue nor the library itself could or should assume officially any editorial supervisory power over such a type of privately issued list; nor under these circumstances can they be held responsible for the "weird cataloguing" in the list.

In fact, it is doubtful if any one should be blamed when in an unclassified list of scientific papers the contents of a whole number of an entomological journal sometimes crawl into the Anthropology class, or if the Archiv für Rassenbiologie slips into the Microbiology group. It would not be possible to arrange half of the contents of a journal under one heading, and the other half under another heading if, by its title, the journal itself happens to belong to the group of Societies and Miscellaneous. The article on "Vitamin K in obstetrics," mentioned by Joe Hare as an example of slipshod classification, was published in the *Journal of the Medical Society of New Jersey*, together with several other articles on various other topics. While the articles themselves may belong to at least nine different groups, the journal itself is correctly put into the group of society publications.

I would prefer to say that there is no classification in the Current List. The arrangement of journals under 44 groups is certainly anything but classification. Such an arrangement has absolutely nothing to do with the highly detailed classification system of the Index-Catalogue. The grouping of journal names can not be more than a very rough approach at separating 1,000 titles into smaller units. The number of groups had to be limited to 44 because there was no place for a larger number on the front cover of the weekly list. The number of groups originally suggested was 71, but I doubt whether even 100 groups of journals could help much in bringing together under the proper subject the miscellaneous contents of such periodicals as the Deutsche medizinische Wochenschrift, the Lyon médical or the Connecticut Medical Journal.

A true subject classification of the articles themselves would cost much more than ten cents per issue. First, a classified and faultless bibliographical index would require a special staff for its preparation, with a wellpaid editor who is both a linguist and a scholar, and with several typists who also know foreign languages. Moreover, the correct classification and the typing would have to wait until the end of the week, when all the references have been gathered for one issue. This would cause a delay of at least two weeks. Even then the classification should be left in a more or less rough preliminary stage because one thousand articles referring from all fields of science to the many aspects of medicine are far too few to permit their being arranged either in a sort of "catalogue raisonnée" or in an alphabet of very detailed subject headings. Also, it would be necessary often to repeat the same reference twice or three times in order to answer the needs of different specialists and to do justice to certain very complex publications. It was calculated that, even if the complex articles would not amount to more than 30 per cent. of all publications, such a weekly issue of the Current List would have to be increased to 60 or 70 pages with all the possible double, triple or multiple cross references. The cost of such a weekly issue would be about \$240.00, and the vearly subscription not less than \$20.00. Even then, an annual index would be still required, because to search fifty-two weekly numbers is a great waste of time.

Is it not better to pay only \$5.00 and to leave the Current List as it is? Is it not better to consider it just a rough register, and not to try to boost it into the higher class of the systematic subject catalogue or of the bibliographical index? As a simple register, it is very useful as an enumeration of the contents of the latest issues of journals received by the Army Medical Library. Its only scope is to fill in the time between the issues of the printed and better classified bibliographical keys to medicine. Yet, even as a simple register, it can be used with much advantage. For instance, I am using it for collecting special bibliographies on various subjects I am personally interested in. As soon as the weekly issue comes to my hand, I read it through from Anatomy to group Zoology and mark all the articles I should like to see immediately or in the future. It is then the task of my assistants to copy the marked titles for my personal card file with the exact reference either to the column number of the Current List or to the original itself. The same method could be adopted by any one having the Current List. Indeed, every one should prepare his own bibliographical subject file from this rough weekly register. Bibliographical search being an integral part of research itself, the Current List should never aspire to become more than a rough register, a source left unclassified and undisturbed to be searched intimately and personally by the scientist.

A few more words on the supplementary lists of Recent Book Acquisitions. Such lists have been issued for the last four years by the library in a mimeographed circular, and mailed to other libraries and institutions for the primary purpose of facilitating interlibrary loans, thereby reducing the inquiries as to the holdings of this library to a minimum. The lists served this purpose well, and they are still chiefly for the use of libraries. Individual scholars perhaps would like to have annotated lists of medical books to show them what is trash and what is treasure. Such lists can never be expected from a public institution because annotations with recommendation or condemnation would reduce the library to the rank of the advertising agencies. The list of books is still prepared by the library, which now receives 150 copies to be mailed out gratis to other libraries. The books are arranged under 71 different subjects, and this number was found sufficient to deal with all types of books which the Army Medical Library has received so far. Since each independent publication is individually catalogued, the list includes more than 90 per cent. of the acquisitions. What is left out is of little importance, belonging rather into the class of reprints (many German theses, typewritten theses, etc.).

With this explanation, I believe that the Current List can take its correct place among the bibliographical tools of medicine, and I hope that nobody will expect more from it than what it can offer to the scholar; that is, an almost up-to-date privately published simple register of a conglomerate of journal articles received by a single large medical library and arranged in some rough groups of journals, with no attempt at a systematic classification or proper indexing of subjects.

> CLAUDIUS F. MAYER, Editor of the Index-Catalogue

ARMY MEDICAL LIBRARY

THE DUPLE: A LOGARITHMIC UNIT

To the current number of *The Mathematical Gazette*¹ I have contributed a little homily on numeration and mensuration entitled "Octonaria" which adumbrates the advantages of reckoning by eights rather than in the scale of ten. These are sufficiently manifest to need no elaboration, but there is a cognate matter which also merits consideration—the question of logarithmic units, which was raised ten years ago by Dr. A. H. Davis.²

It will be recalled that Dr. Davis proposed that a 10-fold change in any quantity should be called a change of one *brig*, a unit which he subdivided to obtain a more convenient *decibrig*. That these units have not become current may perhaps be ascribed not only to the fact that the brig itself is rather large but also to the somewhat involved conception inherent in the decibrig.

In this matter there may be some advantage in being practical and making more use of the simple scale of two: an appropriate name for a binary change would help and the suggestion is now made that the necessary connotation be given to the word *duple* and that the portmanteau-word *toottha*³ might be legitimatized. Eight-fold is 3-duple and a 16-fold change or difference a change of 4 duples. In terms of acoustic intensity, one duple equals 3.01 "decibels": an increase of 15 "phons" is a 5-duple change in loudness.

The readier appreciation of values expressed in the scale of two, which familiarity would engender, might prove helpful in more worldly matters, in the purchase of a horse, for example. In terms of the usual farthing for the first shoe-nail,⁴ two farthings for the second, and so on to the twenty-fourth nail, the price in farthings amounts to toottha 24 less one, that is $\pounds 17,476$ 5s. $3\frac{3}{4}d$., and a bargain for King Richard.⁵

The annexed table of toottha will be recognized by

¹ P. Simple, Mathematical Gazette, October, 1941.

² A. H. Davis, Phys. Soc., 1931, Report of a Discussion on Audition, p. 136.

- ³ Toottha = two to the power of.
- 4 Oliver Lodge, "Easy Mathematics," London, 1905, p. 155.
- ⁵ Will Shakespeare, "Richard III," London, 1597.