Chapter III.—On the Definition of Class Headings, and the Natural Limit to the Extension of Book Classification.

We are now brought face to face with the real crux of book classification, viz. the nature of class headings and the principle upon which their scope or area is to be determined. Class headings are definitions of specific areas of the literary field. Our immediate problem is to ascertain the principle upon which the plotting of these ultimate areas of literary matter is to be determined. Can definition, in this respect, be based upon method and reduced to rule? On this point the textbooks are silent. The published systems give no assistance, for they have hitherto expressly refrained from disclosing the principles of their construction. These systems, therefore, are purely arbitrary, and rest for their sanction upon the authority of their compilers. The dictionary subject cataloguers, it is true, have formulated a few rules on the subject of definition, but these rules admittedly lack scientific foundation. Yet we have seen in our introductory chapter that the efficiency of all index classifications depends primarily upon the definition of their ultimate groups or classes—the order of the classes being a matter of quite secondary importance. This being the case—to discover a method in definition is essential. Without it we can neither hope to secure uniformity in practice, or to frame with any degree of accuracy our definition of the nature and function of book classification itself. But if definition can be reduced to rule we shall have furnished ourselves with criteria by which the value of existing systems can be tested, their head-
ings be amended, extended, or pruned back to their proper proportions. Moreover, if once the principle upon which definition is to proceed be ascertained, a positive limit to the extension of book classification can be assigned in respect of the literature of any given period, and the dawn of uniformity in book classification will be seen over the hills. In short, the mapping of the field of literature will be able to proceed with a certainty akin to that of a topographical or geological survey.

What, then, is to be the warrant for the areas of class headings? To simplify matters we shall deal with the question from the standpoint of subject-matter alone; for in the field of the literature of form the unit of registration is more easily recognizable.

To the problem thus stated there are two possible answers. The warrant must be based either (a) upon considerations of the nature of the subject-matter to be divided, or (b) upon the physical fact of the aggregation of subject-matter in books.

(a) According to Mill ("Logic," 6th ed. Vol. I, p. 135), subject-matter is almost indefinitely divisible. For the power of the mind to frame distinctions is practically without limit. From its nature, therefore, subject-matter is singularly ill-adapted to our purpose. A classification based upon this principle would in practice lead to a universal index of minutely divided subject headings and to the abolition of all general headings—a scheme revived from time to time by indexing enthusiasts, but which for library purposes may be safely dismissed as an economic absurdity.

However, all distinctions framed, or framable, by the mind are not of equal philosophic value. Hence it is possible to conceive of a system of book classification, the class headings of which should be selected by a consideration of the philosophic value of the distinctions underlying the headings. The objections to this principle of definition may be summarized as follows:

(a) Tentative and lacking in finality.
(b) Will exclude all provision for earlier and superseded scientific generalizations.
(c) Will be represented by quite an insignificant quantity of literature.

Let us apply these dicta to the literature of Chemistry, which consists largely of purely formal divisions, such as Journals, Transactions, Dictionaries, Histories, and Systematic Treatises. These, of course, can find no place in a system professedly based upon purely fundamental distinctions. Waiving this objection on the ground that a table of formal divisions could readily be attached to a scientific classification, we must proceed to rule out such headings as Alchemy and the Phlogistic Theory; Metals and Metalloids; Organic and Inorganic Chemistry. For these generalizations, while retained for convenience, are no longer regarded as conveying distinctions of real scientific value. In Inorganic Chemistry what has philosophy to offer? Merely a classification by the names of the elements for which practically no literature in book form exists. No monograph, for instance, has yet been published on the Chemistry of Iron or of Gold. If it be urged that a "Periodic Classification of the Elements" exists, our reply is that this Classification has not been incorporated in the scheme of the International Council, and that no literature in book form has yet appeared upon the Chemistry of the Elements in their periodic groups. It has merely effected a change in the method of presenting facts in the General Treatises on Inorganic Chemistry for which no additional provision is required.

What is true of Chemistry is true of all other sections of literature, viz. that their division is determined mainly upon formal and non-philosophic lines. Books, in short, are concrete aggregates of facts selected from the common stock of knowledge, and are produced under the laws of supply and demand to meet the wants of the various bodies of the community. The result is a welter of cross classifications and of overlapping areas of definition, for the reception of which the frame-work of philosophic classification is quite insufficient.

(b) Hence we must turn to our second alternative which
Principles of Book Classification

bases definition upon a purely literary warrant. According to this principle definition is merely the result of an accurate survey and measurement of classes in literature. A class heading is warranted only when a literature in book form has been shown to exist, and the test of the validity of a heading is the degree of accuracy with which it describes the area of subject-matter common to the class. Definition, therefore, may be described as the plotting of areas pre-existing in literature. To this literary warrant a quantitative value can be assigned so soon as the bibliography of a subject has been definitely compiled. The real classifier of literature is the book-wright, the so-called book classifier is merely the recorder. Hence there is a definite limit to the extension of book classification in respect of the literature of a given period; for the extension of a classification is merely a reflex of the degree in the specialization of literature.

This theory, however, of definition stands in need of some qualification; for a blind adherence in practice to the principle laid down would unquestionably lead to confusion. For instance, if every area represented in literature were to be transferred automatically to the Headings List there would be a bewildering number of headings of imperceptibly differing areas, together with others combining fanciful and evidently inappropriate associations of unrelated subject-matter. We must, therefore, arm our classifier with certain limited discretionary powers:—

(a) To amalgamate under a common definition works of slightly differing areas.

(b) To register by duplicate or plural entry works containing subject-matter, the association of which in books is shown, as a result of survey, to be infrequent, accidental, or purely fanciful. The admission of these qualifications, however, does not materially affect the function of definition, the warrant for which is essentially literary and quantitative—the strength of the warrant varying with the number of works conforming to the type of each class definition.

We may now therefore take stock of our position for the purpose of drawing certain conclusions. Definition is the charting of literature by the physical aggregation of matter
in books. Hence since definition is based upon the survey and measurement of book classes, it follows that registration under the above system will secure the following results:

(a) A maximum economy of entry; for exact classification will be effected at the cost of approximately single entry for each work registered.

(b) Entries under a given heading will be approximately of equal definition; for things equal to the same thing are equal to one another.

(c) The unit of registration will be the unit of library service generally; for works are usually purchased, accessioned, and distributed to the public as units. In other words, class and shelf list will tend to coincide.

In conclusion it will be observed that no code of rules for definition whether for the dictionary or class subject catalogue can provide for the permanent, efficient, and economical registration of subject-matter by the simple inspection of single works. This end can only be attained by the co-operative compilation of standard lists or systems of headings, the definition of which has been based upon an exhaustive survey of the literature of each heading.

The rules regulating the choice of entry in the author and title catalogue are based upon convention, and as such can be applied indifferently to past or present literature. But the warrant for the definition of subject-matter is, in the case of each heading, a question of fact, which can only be effectively ascertained by those through whose hands the body of National Literature passes, viz. the National Copyright Department, or the National Libraries. In view, therefore, of the attitude consistently maintained by the authorities of the British Museum towards scientific book classification, coupled with the recent rejection of compulsory registration of copyright by our legislature, the prospects of co-operative book classification in this country would appear to be sufficiently remote. In this matter our hands are tied. We must be content to stand and wait.

One word with regard to "Analytic Entry"—which has been deliberately excluded from the present chapter. In a sense, every work which cannot be efficiently classed by
single registration, may be said to be entered analytically in respect of its additional entries. But the term "Analytic Entry" is here used in the accepted sense of a method of duplicate entry applied to certain composite works, which, in addition to the principal entries covering the classification of the works as a whole, are entered in duplicate by their several parts under their proper headings. This method of entry is in its nature supplementary to every general system of book classification. Its application is conditioned, partly by the requirements of each institution, and in part by consideration of the extent to which the field of analytic entry has been already covered by co-operative effort. This subject, therefore, may properly be deferred for subsequent consideration.

(To be continued.)