

J. V. Harrison has himself found an explanation for the salt glaciers.<sup>3</sup>

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# A SYSTEM FOR SUBJECT REFERENCE FILES FOR SCIENTIFIC LITERATURE

IN the course of a recent investigation, which has necessitated reading a portion of the extensive literature relating to anaerobic bacteria, the authors have devised a simple system for the routine cross-indexing of topics covered in the scientific articles reviewed. It is believed that the system proposed may be applied with benefit for any field of science, either in listing current publications or as a basis upon which may be built a permanent bibliography for a particular field. The system is intended for personal use, and it will probably be found to work best if applied to a limited field, in which its user is himself working.

In setting up the system it is first necessary to outline carefully the field which is to be covered by the bibliography. A portion of the system which we have found useful in our field may be given in detail to more fully explain the key. For illustration, three general divisions of our present file will serve:

- |                               |  |                          |
|-------------------------------|--|--------------------------|
| A. Source of isolation        | E. Products of metabolism (other than toxin, etc.)                   | G. Serological reactions |
| a. Soil                       | a. Acids   | a. Agglutination         |
| b. Dairy products             | 1. Acetic  | b. Precipitation         |
| c. Food products other than b | 2. Butyric   | c. Complement fixation   |
| d. Intestinal tract or feces  | 3. Lactic  | d. Toxin anti-toxin      |
| e. Body other than d          | 4. Propionic   | e. Miscellaneous         |
| f. Water                      | 5. Others  |                          |
| g. Miscellaneous              | b. Alcohols  |                          |
|                               | 1. Butyl   |                          |
|                               | 2. Ethyl   |                          |
|                               | 3. Isopropyl   |                          |
|                               | 4. Others  |                          |
|                               | c. Acetone   |                          |
|                               | d. Intermediates of fermentation                                     |                          |
|                               | f. Gases (CO <sub>2</sub> , H <sub>2</sub> , H <sub>2</sub> S, etc.) |                          |
|                               | g. Miscellaneous   |                          |
|                               | ous  |                          |

The outline key, part of which is shown in Fig. 1, is printed in skeleton of letters and numerals on the lower half of unlined 4" by 6" index cards (we have found it useful to provide for expansion of the outline by extra divisions of each section). The right half of the card is lined for notes.

At the time the original article is reviewed a master card is made, giving complete citation of the author or authors, title of the article and reference. Check marks are then made on letters or numerals, which

<sup>3</sup> J. V. Harrison and N. L. Falcon, *Geological Magazine*, 71: 537, December, 1934.

Welch, W. H.  
Morbid conditions caused by *Bacillus aerogenes capsulatus*  
Johns Hopkins Hosp. Bul. 11: 185-204, 1900  
A abedefgh G abedefgh  
E abedefgh  
1234567  
1234567

FIG. 1. Showing a convenient arrangement of reference and part of the key.

indicate the topics considered. For each section so indicated on the master card a separate card is to be typed with author and title citation; these cards are marked to indicate only the section in which they are to be filed. Notes or short direct statements of results may be added to the appropriate subject card, if desired. Two files are then maintained, an author file of the master cards and a subject file of the cross index cards.

An advantage of the system is that it eliminates the need for routine briefing of articles. For the average paper, a quick reading or only checking of subject-matter is all that is necessary; it is thus possible to cover several papers or even volumes in one evening. It will be found also that the key is unconsciously memorized and that there is little trouble in checking off topics rapidly and accurately, particularly if the field is limited and is of major interest to the bibliographer himself. The system is a time-saving device, for once the master card is prepared and the correct number of subject cards indicated, ordinary stenographic help can be used to copy the reference to the cross cards. If extended to cover in a systematic fashion all the back volumes of journals containing pertinent papers, it becomes a permanent file from which at least two types of questions may be answered in a minimum of time. These are: (1) what topics are covered by a particular paper (the author of which is known), and (2) what articles deal with any one specialized topic? This latter use is possible only through the multiple filing, and that is possible through elimination of abstracting, always tedious and inadequate.

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## ELECTRODES COME IN PAIRS

FOR some years there has been evident on the part of physiologists a tendency to call a pair of electrodes an electrode. Perhaps the tide of this gross misuse of physical language has gained so much momentum that nothing can stop it, but every effort should be made to do so if possible.