

scriptive than they are and contain information essential to a cataloguer or investigator, frequently obviating the necessity of an examination of the article itself to discover what it is really about. Take, for instance, titles like the following: "A spot disease of cauliflower," "Known species of smut on a new host," "A dangerous potato disease." Each of these titles shows in a general way what the article in question is about, but no one of them gives information essential for assigning subject headings, yet in each case this might have been done, still keeping the title concise and short. The title "A spot disease of cauliflower" omits the very important information that this is a new disease assigned to a new bacterial pathogene which is described in the paper, while "A spot disease of cauliflower caused by *Bacterium maculicolum* n. sp." gives the essential information and is not objectionably long. The title "Known species of smut on a new host" might much better be written "*Cintractia leucoderma* on a new host, *Cyperus gatesii*," and "A dangerous potato disease"—"A dangerous potato disease due to *Rhizoctonia violacea*" or "A dangerous *Rhizoctonia* disease of potatoes."

It may be difficult to assign satisfactory titles for articles on abstract subjects whose terminology is not definitely fixed, but in cases such as those mentioned above it is a simple matter to compose a clear and definite title giving the specific facts dealt with in the paper. The more definite titles would save time in the library not only in cataloging and bibliographical work, but would frequently prevent the necessity of the library's procuring a journal for an investigator on the chance that an article contained therein, whose title may have been seen in a catalog or list, may be on a subject in which he is interested. A clear and definite title shows at a glance whether the article should be read by an investigator working on a certain subject, while an ambiguous or indefinite title puts him under the necessity of looking up many articles only to find that they are not on his subject.

It would seem, therefore, well worth while for the National Research Council, or whatever agency is formulating the directions and rules for the preparation of analytic abstracts, to include with these directions for the preparation of titles for scientific articles. There are many points in addition to those which have been mentioned here, which should be considered, such as, for instance, the relation of the title of a preliminary abstract to the title of the complete paper appearing later, giving the same article in different journals different titles, the publishing of different articles on the same subject with identical titles, or, the continuation of an article with a title different from that of the first installment.

EUNICE R. OBERLY

LIBRARY, BUREAU OF PLANT INDUSTRY,
U. S. DEPARTMENT OF AGRICULTURE

LONGITUDINAL ELECTROMAGNETIC FORCES

TO THE EDITOR OF SCIENCE: Last spring the writer sent a note to one of our well-known and carefully edited scientific journals for its correspondence column, announcing briefly that there are a number of good reasons for concluding that the old belief (expressed by Maxwell) that electromagnetic forces can act only perpendicularly to a conductor and never in the direction of its axis, seems to be wrong, and if so, it should be corrected.

The "advisers" of the editor on subjects pertaining to physics, recommended that the note "ought not to be published" as it was "so subversive of long-established principles." Five weeks later, the editor returned the note unpublished.

Physicists who have a more progressive spirit and may, therefore, be interested in such "heresies," and who are not hide-bound by beliefs whose chief qualification is the age of those beliefs, will find this subject more fully discussed by the writer in an article in the *Journal of the Franklin Institute* for November. This is also a carefully edited scientific journal, and one of its "advisers" on physical subjects (one of our leading physicists) recommended that "it is well worth publishing."

Thirteen years ago, the writer described an experiment in which the result was the direct opposite to that called for by reading on it one of the most prominent of the laws stated by Maxwell. The proposed paper describing it was rejected by one of our leading societies on the ground that if true (which was very easily demonstrated) it was such a serious matter to refute one of Maxwell's laws that it ought to be kept a secret! It is needless to say that the writer published it; broad-minded electro-physicists have accepted this correction of that law.

Let us hope that our younger physicists will be more progressive and will develop the true scientific spirit of desiring to be corrected when it can be shown that what they teach their students is wrong.

CARL HERING

PHILADELPHIA,
November 1, 1921

THE SCIENTIFIC BUREAUS OF THE GOVERNMENT

TO THE EDITOR OF SCIENCE: Since my return to Washington from my summer's field work my attention has been called several times to circulars which have been sent broadcast throughout the country by Mr. Arthur MacDonald, The Congressional, Washington, D.C., recommending the reorganization of all of the government scientific bureaus under the direction of the Smithsonian Institution. While the institution appreciates the confidence in it implied by his suggestion, I desire to point out that his scheme is entirely impracticable and was not suggested or authorized by the Smithsonian Institution, with which Mr. MacDonald is not connected in any way.

I shall be glad if you will have the goodness to publish the above in SCIENCE, in order that your readers may understand thoroughly that the institution is in no way responsible for this propaganda.

CHARLES D. WALCOTT,
Secretary

THE SMITHSONIAN INSTITUTION,
November 5, 1921

QUOTATIONS

MEETING OF THE AMERICAN ASSOCIATION IN CANADA

THE American Association for the Advancement of Science is to hold its annual meeting in Toronto this winter. The rules of the association, recently revised, give the term "American" a Continental instead of a national connotation, so that the visit to Canada will be regarded as a normal rather than as an extra-territorial event. There is thus a departure from the constitutional precedent of the British Association and of its French and German parallels. These bodies are national, although they welcome foreign guests, and have occasionally paid visits to foreign countries. Were the matter political, difficult questions might arise with regard to the proposed visit of the British Association to Toronto in 1924. The former visits of the British Association to Montreal and Toronto, and later to South Africa and Australia, were regarded as not different in kind from visits to Edinburgh or to Bournemouth. The formation since then of a South African Association for the Advancement of Science would certainly not place any obstacle in the way of another British visit to the Cape. The inclusion of Canada in the American sphere similarly should not affect the prospects of future visits of the British Association. It is all to the good that science should prefer geographical to political frontiers. We confess to a feeling of envy, however, when we read of the concessions made by American railways to science. The utmost efforts failed to extract from the British railways such reductions in fare to members of the British Association going to Edinburgh as they readily concede to pleasure parties and week-end excursions. The railroads of America are acting differently. Reduced rates for visitors to the Toronto meeting have been granted by all the railways of Canada and by those covering practically all the New England and Atlantic Coast States down to Virginia, and by those serving Ohio, Indiana, Michigan, and Illinois. Other concessions are expected, and so far as the railway journey