

Chicago, the University of Chicago is to receive \$200,000, the Field Museum and Yale University \$25,000 each.

DR. WILLIAM MATHER LEWIS has resigned the presidency of George Washington University to become president of Lafayette College, at Easton, Pa.

DR. B. M. DUGGAR, of the Missouri Botanical Garden and Washington University, St. Louis, has been appointed professor of applied and physiological botany at the University of Wisconsin. Dr. Duggar will take up his residence at Wisconsin in September.

DR. SAMUEL R. DETWILER, associate professor of anatomy at Harvard University, and Dr. Philip E. Smith, associate professor of anatomy at Stanford University, have been appointed professors of anatomy in the College of Physicians and Surgeons of Columbia University.

DR. FRANK E. BURCH, St. Paul, has been appointed head of the eye, ear, nose and throat department, University of Minnesota School of Medicine, to succeed the late Dr. William R. Murray.

HOWARD O. TRIEBOLD, formerly holder of the American Cracker Manufacturers fellowship under the direction of Dr. C. H. Bailey, in the division of agricultural biochemistry at the University of Minnesota, has been appointed instructor in the chemistry of milling and baking in the department of agricultural and biological chemistry at the Pennsylvania State College.

DISCUSSION AND CORRESPONDENCE

THE INCREASE IN SCIENTIFIC PERIODICALS SINCE THE GREAT WAR

IN looking back to the period of the great war, it seems for the most part like a nightmare, but there were some bright spots, one of these being the peacefulness in the field of publication of scientific serials. Many journals took a vacation, some slowed up publication by dropping out or combining numbers, others ceased altogether. Even in 1919 when the war was supposed to be over, the amount of such material coming into the library of the Department of Agriculture was so small, that one person could look over the current mail and make all the necessary cards from which the "Botany, current literature" lists were compiled; and there was still plenty of time for other matters. Now in 1926 the indexing for the list consumes practically all the time of one person and a large part of the time of a second, and as for review and abstract journals, they are a task in themselves.

The growth in size of the "Botany, current literature" lists may, I think, be fairly taken as a measure of the increase of publication in that particular field using that phrase to include scientific serials contain-

ing botanical material. In 1919 when the issuing of the lists began, the average size was eight to nine pages, fourteen pages being an unusually large list. In 1924-25 the average was twenty-two pages and with the shorter page now in use, it runs to thirty-three pages. Such an increase in publication would hardly have been looked for as a result of the war, in fact one would have expected quite the contrary. Some journals have changed name or form, and there are of course some casualties, but new recruits have, I think, more than filled up the ranks.

When I look over the mail that comes into the Department of Agriculture library each day, in its motley array of languages, I begin to doubt the wisdom of the principle of self-determination and almost to wish that the war had left the map of Europe as it found it. There are not only new publications from the older countries, but all these newly established states are plunging into publication, seemingly in all fields of science and what is more appalling to the indexer, each in its own language. Sometimes they are considerate enough to publish summaries in some of the well-known languages, as German, French or English, but just as often they do not. Translators are not available and dictionaries are woefully inadequate, particularly for the scientific terms. Some one has asked how we manage with these unfamiliar languages. One method used reminds me of a story. A small colored girl was being taught to read by means of a picture primer, her teacher placing her hand over the picture, pointed to a word and asked, "What is that, Sally?" Quick as a wink Sally replied "Ox." The teacher was suspicious as Sally had been rather slow in the uptake. "How do you know it's ox, Sally?" she asked. "Seed its tail," was the reply. That is often the method one has to pursue, one translates the title as best one may, looks over the text for old friends, rusts, smuts, weed flora, and familiar names of plants or sometimes familiar scientific terms taken over bodily from some better known language and decides that it belongs in the botanical catalogue and therefore in the "Botany: current literature" list. Every day one gives thanks for Latin. If it were not for the Latin scientific names and Latin descriptions, where would one be? As a listener at the discussion on nomenclature at the International Conference of Plant Science at Ithaca, I felt like protesting against the recommendation to give up the requiring of Latin in descriptions of new species, for, in many cases, the Latin is the only lifesaver one has in this flood of foreign languages. Do not encourage them to describe their plants in Russian, Czecho-Slovakian, Bulgarian, etc.!

In looking over the list of scientific serial publications indexed for "Botany: current literature," I find

that beginning with 1920 there are one hundred and fifty new titles of publications in sixteen different languages, twenty-three of these are Russian and eight Czech-Slovakian. The activity of a country like Russia is astonishing when we consider through what an upheaval it has been and how hard have been the days of its reconstruction. One wonders how scientists have been able to work and publish under such conditions. In my impressions as to the amount of publications from Russia I am borne out by Miss Katherin G. Upton, who handles the Russian material for the library. These come not only from Russia proper but from Siberia, Central Asia, Turkestan, White Russia, Caucasus and Ukraine. The Botanic Garden at Leningrad besides continuing to publish the *Acta Horti Petropolitani*, *Bulletin and Bolezni rastenii* (its journal of plant pathology) has begun two new publications, the "Notulae systematicae" from its Herbarium and "Notulae systematicae" from the Cryptogamic Institute. When I mentioned the large number of publications coming out of Russia to Mme. Haffkin-Hamburger, the Russian delegate to the American Library Association Conference held at Atlantic City in October, her modest reply was "But we are so pig (big)." But their bigness, another handicap taken in connection with other conditions, makes the fact the more surprising.

Then one has to consider the publications which we have not been able to get hold of which are of interest to the indexer of botanical literature. There are some fourteen of these which have been announced in various review journals.

If the increase of publications is to continue what is to become of the maker of catalogues and lists such as the "Botany: current literature"? Shall we be swamped and have to give up entirely, or can we work out some selective method which will yet be satisfactory to the omnivorous user of such catalogues and lists?

We have heard much recently of the necessity of Americans becoming more internationally minded. I should suggest as one means to that, the indexing of foreign scientific publications.

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HOOKE'S LAW AGAIN

A CAREFUL reading of Dr. Paul E. Klopsteg's rejoinder¹ fails to show me the need of modifying my statement that the instruction sheet referred to "conveys the impression that accurate measurements should show strict proportionality between strain and

stress." In fact my claim is virtually admitted in Dr. Klopsteg's own statement, "This graph, which is a straight line, shows that the elongation is, *within the limits of experimental error*, proportional to the stretching force."

It may be that my view of laboratory instruction is "unusual," but I hold that laboratory instruction should instruct and not tolerate inaccurate information. Science demands truthful statements. A scientific statement that is nearly true is about as valuable as an egg that is nearly good. I accept the opinion that my objection "must for the sake of consistency apply also to the measurement of acceleration of gravity by means of the simple pendulum." Yes, let the instructor warn the student that the vibrations are not isochronous and that the obedience of gases to Boyle's law is about as perfect as the obedience of our citizens to the Volstead law.

It is fairly obvious that if the tested wire is taken from a spool the initial increment of length when a stretching force is applied is partly an elastic lengthening and partly a result of straightening the wire. This latter effect *diminishes* with increasing loads while the elastic lengthenings produced by equal increments of load *increase*, as I have demonstrated. The net result is that the lengthenings are very nearly proportional to the forces. This is not mere hypothesis, this I have observed.

Since some may think that all my measurements were made with fine wires, I quote the following from my original paper:

In order to be perfectly sure that the phenomena which I have described were not confined to fine wires, I made careful measurements with larger wires. The loads placed on these were gradually increased to a maximum of 18 kg and without exception the results obtained were similar to those which I have reported. The reasons, however, why I preferred to use fine wires are first, because in these the thermal effects vanish more rapidly, and second, because the loading and unloading can be done in shorter time, and thus the after-effect is more completely eliminated.

The measurements with a steel wire will be found in my original paper and are similar to those made with brass and copper. Iron told the same story. Since the figures with brass and copper with diminishing load are interesting I give here the ratio of elastic lengthening in mm to load in kg in the case of a brass wire .66 mm in diameter:

kg	Ratio	kg	Ratio
10	6.135	5	6.050
9	6.121	4	6.033
8	6.106	3	6.023
7	6.084	2	6.015
6	6.065	1	6.010

¹ SCIENCE, November 5, 1926, p. 449.