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 Czecho-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 rejoinder[1] 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.

The load had previously been increased from 0 to 10 kg with similar results.

Although Dr. Klopsteg expresses the belief that the apparatus for which the instruction sheet was written "would fall far short of sufficient precision to show the lack of proportionality," I find it is capable of giving results similar to mine. For, using the data of the first half of set number 2 of measurements made under laboratory conditions and given on page 8 of the instruction paper, I get the following ratios of strain to stress as the load increased from 1 to 10 kg. Since there is evidence that the load of 1 kg was needed to make the wire straight 14.7 was taken as the zero reading.

Added load in kg	Ratio	Added load in kg	Ratio
1	6.50	6	6.63
2	6.60	7	6.63
3	6.60	8	6.638
4	6.60	9	6.644
5	6.62		

It is gratifying to see the apparatus argue on my side.

It is quite true that at present the champions of Hooke's law are "in good company," but let us not forget that we are here concerned with a question of fact, and that those men are in the *best* of company on whose side the facts are arrayed.

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SEYMOUR SEWELL ON "SALPS OF INDIAN SEAS"

IN this careful paper, which treats all but six of the recognized species, two errors of nomenclature made (and later corrected[1]) by Metcalf[2] are perpetuated, two wrong subgeneric names, *Apsteinia* (instead of *Ihlea*) and *Ritteria* (instead of *Ritteriella*), being used. As Professor Cockerell pointed out to me, *Apsteinia* and *Ritteria* were preempted for other groups, so I withdrew them and substituted other names, as above. My SCIENCE paper evidently did not reach Sewell's hands.

Sewell describes, but does not name, a clearly distinct form of *Salpa* (*Cyclosalpa*) *pinnata*, showing resemblance in its musculature to *pinnata* but in the aperture of its ciliated funnel being much simpler even than *pinnata* subspecies *polae* though not so simple as *affinis*. I would recognize Sewell's form as a subspecies, the subgenus *Cyclosalpa* including thus *pinnata* (Forskal), *pinnata polae* (Sigl), *C. pinnata sewelli, affinis* (Chamisso), *floridana* (Apstein), *bakeri* (Ritter) and *virgula* (Vogt).

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[1] Metcalf and Bell upon Salphidae: SCIENCE n. s. Vol. 6, No. 1278.

[2] Metcalf and Bell. "The Salpidae: A Taxonomic Study." U. S. National Museum Bulletin 100, Vol. 2, part 2.

STORM DAMAGE AT LONG BEACH, N. Y.

THE unusually severe storm of Sunday, February 22, furnished a striking example of the value of well-constructed beach protective devices. The shore at Long Beach is protected for the greater part of its length by a series of fairly heavy wooden groins extending into the ocean at right angles to the shoreline; the landward ends of these groins are not tied to bulkheads, as is usually the case, but are extended into the slightly higher sand bank at the rear of the beach. On a short unprotected portion of the beach the waves undermined twelve or fifteen houses, which toppled forward on their faces and then frequently collapsed. No houses were destroyed on any portion of the shore protected by groins, so far as visited by the writer.

In a number of places the groins themselves were partially or completely destroyed by the pounding of the waves, but apparently had borne the brunt of the attack long enough to save the buildings under their protection. The destruction of the groins seemed to be due in some cases to the removal of sand from around their bottoms, whereupon they were floated by their own buoyancy often swinging around nearly parallel to the beach in such a position that the waves soon tore the floating part from the still firmly imbedded portion. In other cases it seemed that they were too weak to withstand the smashing onslaught of the waves, and were broken off like toothpicks. The frequent destruction of timber groins at Long Beach and elsewhere along the Atlantic coast causes doubt as to the advisability of using anything but the heaviest riprap for structures exposed to storm waves from the open ocean.

In one or two places on the western portion of the beach erosion had already started around the landward ends of the groins, and had cut a considerable channel. Fortunately no buildings were situated right at the ends of these groins, or an excellent example of the danger of omitting bulkheads would have been afforded. Due to the danger of such erosion around the inner ends of groins, it is usually unsafe to use them alone unless they can be extended so far into the shore that no apprehension need be felt about scouring around their ends under the combined attack of an unusually high tide and a severe storm. Tight