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

bulkheads stop this erosion at a level fairly even with their tops, and in conjunction with groins are believed to provide the most efficient protection.

The whole problem of beach protection is so influenced by financial considerations that although it is generally possible to predict what structures will best preserve a given beach, it is often impossible to adopt them, because of the cost which may be prohibitive to a small community. In such cases a cheaper substitute must be used. At Long Beach more expensive structures might have obtained better results, but those erected performed valiant service in cutting down the destruction to a minimum.

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SCIENTIFIC BOOKS

A HISTORY OF OUR TIMES[1]

IT has been suggested that the universities should establish a new series of courses, dealing with the additions to human knowledge and experience within the past decade or twenty years. Such a plan, if fully and adequately developed, would serve the needs of innumerable busy people who wish to keep in touch with at least certain aspects of the progress of the world. To some extent the universities already minister to such needs, especially in their summer schools and extension divisions. But after all, comparatively few can take advantage of what is offered, and there is no comprehensive organization of the whole field of modern knowledge in any school.

What the schools have not done, and perhaps can not do, has been attempted by the editor and staff of the Encyclopaedia Britannica. The volumes before us purport to describe what has been significant in human affairs during the last fifteen years. Not only material events, but also the stuff that dreams are made of: those aspirations of the mind, vague or well defined, which motivate our lives. In this gigantic undertaking the editor has certain advantages over even the largest university. He can command a faculty so eminent that it represents on the whole the present competence of our species. Instead of requiring attendance in the classroom, he sends his message to the people of the world, and the most isolated student may have it all at his service. He offers a mirror to mankind, reflecting good and evil, success and failure, hope and despair. We have toiled and struggled, these fifteen years; what has it all amounted to? Well, here it is: let each man sit in judgment on himself and his kind.

[1] The Encyclopaedia Britannica. The Three New Supplementary Volumes. London and New York. 1926.

Surely the educational consequences must be very great. Whatever faults may be found, and they are doubtless many, it must be said that a vast mass of essentially accurate information is made the common property of all peoples. That, at least, ought to make for better understanding and more willing cooperation. It is perfectly true that in the perspective of time present values will be strangely altered. Posterity will criticize our judgment of many things. But judge we must, and whatever imparts wisdom to this judgment is worth our earnest attention.

It is not very difficult to discern wherein the present volumes will appear ill-proportioned to later generations. They really constitute a sort of newspaper *in excelsis*, a summary of what may be expected to interest the readers. Hereafter it will be said of many matters that they were properly subjects of popular concern at the time, but their significance was mainly ephemeral. Of others it will be said that they never deserved the attention they received. In his prefatory note the editor states that one of his main purposes has been "to escape from the passions and prejudices and shattering discords of the war period—to revive and enhance that intellectual cooperation between distinguished authorities of every nation, that civilized community in the sphere of intellect, which the war temporarily destroyed, but which throughout the century before 1914 it was the increasing object of the Encyclopaedia Britannica to nourish." Nevertheless, in looking through the volumes, one is struck by the inordinate space given to the various details of the war, and to methods of warfare. Such titles as "Victory, Advance to" and "Western Front" are intelligible only because recent events dominate our minds. Probably this excessive dominance of the war motive and war interest will be distasteful to a large number of readers, and yet it may be defended on the ground that it has to do with the prime concern of a large part of the civilized world during the period under review. As a contribution to history, it is of great value to have the events of the war accurately described as they could not be during the conflict. Not only are the facts now given with reasonable completeness, but the temper of the articles is fair and well considered. It may well be that the principal effect will be to create, not a warlike spirit, but a sense of humiliation and disgust that such things should have been possible. The personal biographies also depart widely from encyclopaedic standards, and stand rather on a journalistic basis. There are detailed accounts of many politicians, moving picture actors, and the like, who will be quite forgotten after a few years. Thus Mary Pickford gets three inches of space, Fabre only an inch and a half. This is not