THE Peking Union Medical College, Peking, China, which has been built under the direction of the Rockefeller Foundation, will be open for the instruction of students in October, 1919. The school will be coeducational. There is also a premedical school offering a three years' course which was opened in 1917.

DR. HENRY KRAEMER has been appointed dean of the college of pharmacy of the University of Michigan.

C. E. NEWTON, acting dean of the school of mines at the Oregon Agricultural College since the resignation of Dean E. K. Soper several weeks ago, has been made dean of the school. He was graduated from Michigan School of Mines in 1916, and was assistant professor of engineering at the University of Washington for several years before going to the Oregon College in 1917 as associate professor of metallurgy.

DR. SUMNER C. BROOKS, of the department of tropical medicine of Harvard University, has been appointed associate professor of physiology and bio-chemistry at Bryn Mawr College.

AT the University of Virginia Dr. Graham Edgar, who was associate professor of chemistry from 1910 to 1917, has been made professor of chemistry. He received the B.S. degree from the University of Kentucky and the Ph.D. degree from Yale University. John H. Yoe has been made adjunct professor of chemistry. He holds the degree of bachelor of science from Vanderbilt University and that of master of science from Princeton University. He will receive his doctor's degree this year at Princeton.

MAJOR A. J. ALLMAND has been appointed to the chair of chemistry at King's College, University of London. Prior to his engagement in war work he was demonstrator in physical chemistry at the University of Liverpool.

COLONEL J. G. ADAMI, Strathcona professor of pathology and bacteriology in McGill University since 1892, has accepted the vice-chancellorship of the University of Liverpool.

DISCUSSION AND CORRESPONDENCE

METCALF AND BELL UPON SALPIDÆ[1]

PROFESSOR T. D. A. Cockerell has called my attention to three errors in my[2] recent discussion of the taxonomy of the Salpidæ. He writes:

> There are a few points which seem to need elucidation or correction, and I venture to present them for your consideration.
>
> 1. *Apsteinia* was used by Schmeil in Crustacea in 1895.
>
> 2. *Brooksia* is uncomfortably like *Brookesia* Gray 1864 (Reptilia), but the difference of a letter saves it in my opinion.
>
> 3. *Ritteria* was used by Kramer in Arachnida in 1877.
>
> 4. You *call* the above *subgena* but treat them as *genera*, using binomials. This is inconsistent: you surely should get down one side of the fence.
>
> 5. You make *Salpa fusiformis* the type of *Salpa*, but this can not be, as Forskal named *maxima* in 1775, and although he recorded *fusiformis* without name, Cuvier in 1804 described it as a species. It surely is necessary to consider *maxima* the type of *Salpa*.

1. For *Apsteinia* substitute *Ihlea*, after J. E. W. Ihle, a most accurate student of the Salpidæ, who has worked upon most of the species of this subgenus.

2. The fact that two zoologists had similar names, Brooks and Brookes, should hardly prevent naming genera or subgenera after each, especially when the names so given do not resemble each other in pronunciation.

3. For *Ritteria* substitute *Ritteriella*, Dr. Cockerell's suggestion with which I concur.

4. I do not see objection to using the subgeneric name in binomial reference in a paper which deals only with one genus. Such usage aids brevity and is not in danger of being misunderstood.

5. The reference to *Salpa fusiformis* as the *typus* instead of *Salpa maxima* is clearly an error, and I do not understand how it crept into my manuscript, for in the synonymy

[1] "The Salpidæ, A Taxonomic Study," U. S. National Museum Bulletin, 100, Vol. 2, Part 2.

[2] The paper was written by me and the errors are mine, not Miss Bell's.

paragraphs under the two species I show *maxima* named in 1775 and *fusiformis* in 1804.

I wish very cordially to thank Professor Cockerell for his kindness in calling these errors to my attention and giving me the opportunity to correct them.

Dr. Ellis L. Michael questions a statement in the same paper (page 139) in which I say: "The solitary individuals (of *Thalia democratica*) lie at a considerable depth during winter, spring and early summer, coming to the surface with the aggregated zooids in the fall." He writes that the records of the Scripps Institution show "the almost complete restriction of both generations to the months of June and July. I have gone through our list of deep water collections again, and find that the statement made in my (published) report to the effect that, when all depths are considered, the species is still almost entirely restricted to the months of June and July, stands as given."

My statement quoted above was somewhat inaccurate. *Salpa* (*Thalia*) *democratica* has been found at the surface every month in the year, but in North Atlantic waters it is most abundant at the surface from July to September. When not at the surface the animals must be in deeper water. A more accurate statement than the one quoted would be that both solitary and aggregated forms of *Salpa* (*Thalia*) *democratica* are less frequent at the surface during the colder months, becoming more abundant as summer advances, and being most abundant in the late summer and early fall. The conditions off the California coast seem a bit exceptional, the time of maximum frequency of this species at the surface of the ocean being about a month earlier than in North Atlantic waters, and the species being less frequent in the winter, spring and fall than in many regions. Dr. Michael's report of its abundance in June and July and its scarcity at other times, reminds one of Agassiz's reference to the sudden appearance of this species off the New England coast and its equally sudden disappearance.[3] In few, if any, other localities have so full records of distribution of pelagic organisms been made, as off La Jolla, and it may be that similar complete records for this species for other localities would show somewhat closer agreement with the records of the Scripps Institution.

[3] "Three Cruises of the *Blake*," *Bull. Mus. Comp. Zool. Howard Univ.*, Vol. 14, 1888, p. 190.

Maynard M. Metcalf

The Orchard Laboratory,
Oberlin, Ohio,
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"WORKING UP" IN A SWING

A child sitting or standing in a swing can "work up" until he is swinging through a considerable distance. How is it possible for him, without touching his feet to the ground, to increase the extent of his swinging? As I do not recall ever seeing any discussion of this matter, the following note may not be out of place.

What the child does appears to be this: Near the end of an excursion he shifts his position so that he is on the whole farther from the axis of rotation [limb of tree, or other support], and when he is near the middle of his path he brings himself back again toward the axis. Now a shift of matter either away from the axis of rotation or toward it changes the moment of inertia about that axis, and therefore tends to change the angular velocity. In fact, unless a large torque is acting, a sudden shift must necessarily change the angular velocity. If the shift is made at a time when the angular velocity is small the change in angular velocity is small, but if the shift is made at a time when the angular velocity is large the change in the angular velocity may be considerable. Thus by moving toward the axis when near the middle of his path the child increases his velocity, whereas by moving away when near the end of the path he produces little change in his velocity.

This action may be imitated by a pendulum. Instead of keeping the length of the pendulum constant, the upper end of the suspending cord is passed over a hook and is held by a hand. The pendulum is set swinging with a small