

1928 North Ave., Bridgeport 4, Conn., and American Cancer Society, Inc., 130 E. 66th St., New York 21, N. Y.

Success in producing sucrose (common table sugar) by chemical synthesis—the "Mt. Everest" of carbohydrate biochemistry—has been reported by **Dr. Raymond Lemieux** and **Dr. George Huber** of The Canadian Nat'l Research Council. As to the immediate commercial use of sugar synthesis, however, Dr. Henry Hass, Chemist-President of The Sugar Research Foundation, comments: "It is as unlikely as some real estate agency having Mt. Everest cut up into lots and sold for development!" The process is now quite expensive, and sugar produced by green plants is comparatively cheap. However, the knowledge promises to make the synthesis of many complicated biochemical substances easy routine. In connection with their experiments, Dr. Lemieux and Dr. Huber were also able to synthesize maltose and trehalose.

Radioactive penicillin-G has been prepared by "feeding" the penicillin-producing mold a compound which includes radioactive carbon-14.

A new compound which has a "relatively high activity against tuberculosis in mice," called **thioisonicotinamide** and a chemical relative of the T B drug isoniazid, has been derived from tobacco.

International Friendship League, 40 Mt. Vernon St., Boston, Mass., has hundreds of teacher-sponsored letters from boys and girls in all countries of the free world. Most of these are written in English, and the writers are eager for pen-friends in the United States. Life science teachers and their pupils can exchange specimens, secure information and enjoyment firsthand, practice communication, make lasting and interesting friendships, and help promote international understandings through exchange letters and packages with these boys and girls in foreign countries. The League is endorsed by NEA, U. S. Office of Education, and the State Department, and sponsored by many foreign Ministries of Education.

Single copies of the following recent **conservation teaching aids** can be had free from Forest Service, U. S. Dept. of Agriculture, Washington 25, D. C.: *Suggestions for Integrating Forestry in the Modern Curriculum*; *The Big Three—Water, Grass, and Trees* (playlet for children); *How Man Starts New Forests*; *Forest Insects and Diseases*; *Materials to Help Teach Forest Conservation* (a new source list); *Forest Service Films* (a listing of films available on loan for educational purposes to schools, civic groups, churches, television studios, etc.); *Suggested Questions for a High School Conservation Quiz*; *What the Forester Does for Wildlife*.

Your Editor has belatedly learned that staunch and active NABT member, **Dr. James M. Sanders**,

Chicago Teachers College, was recently elected **President of NABT Affiliate, THE CHICAGO BIOLOGY ROUND TABLE**, succeeding **Ruby Fremont**. Why doesn't someone tell me these things earlier! Dr. Sanders also presented to this fine group an official NABT Affiliation Certificate earlier this year.

Our **Dr. C. W. Lantz** was Chairman of The General Committee for "**The Fourth Annual Midwest College Conservation Education Conference**." NABT members **Matala, Weaver, Fowler, Milliken, Smith, Whittaker, Bender, Beuschlein**, and others served as leaders or resource persons on the Conference Program.

Be sure to take advantage of the column, "**To Serve The Busy Biologist and The Cooperative Advertiser**," in this and the November issues. Please **be sure to mention** *The American Biology Teacher* when answering individual advertisements, and **be sure to place your orders for equipment and supplies with the fine firms and individuals who advertise in our Journal**.

Will someone volunteer to head a committee to furnish direct help to beginning teachers of biology, and to those first attempting to organize and teach life science in the elementary grades? Perhaps a special column can be started in the Journal, or a separate bulletin service offered. If you have ideas on this, please contact any NABT officer or member of The Editorial Staff (complete list in the November issue).

LETTERS

Dear Editor:

I am in full agreement with Woolever's article, "Animals and Why Children Fear Them," but I feel that it doesn't go far enough. Do we not need an article by a psychiatrist to remind us of the best ways to overcome fear? I feel that we don't know the methods well, but the following are possible steps:

1. Provide correct knowledge to replace fear due to ignorance.
 - a. The snake is not slimy, etc.
2. Know the hazards involved in handling the animal. The "tame" deer which is eating out of one's hand may become impatient and strike with its sharp hoof. Germs may cause illness; so always wash hands before eating, before leaving toilet, etc.
3. Provide pleasurable experiences with the animals feared. Let the child see his classmates enjoying handling, touching, and talking about the specimen.
4. Get the child to talk and write about his fear and how it started, if he can recall.
5. Know what to do.
 - a. Put on a leather glove before handling the bat, chipmunk, rat, etc.

- b. Stop the car. Let the bee go to a window, which can be opened to let her out.
- c. If he is close enough to see the shape of the rattlesnake's iris or the pit back of the nostril, the beginner is too close.
- d. If one is going into rattlesnake territory, go properly dressed and carry a snake bite kit. Know how to use the kit.

Sincerely,
S. M. PATTEE

Dear Mr. Harrold:

Please renew my membership. I certainly have enjoyed being a member for the past year. Had I known the value of membership in The National Association of Biology Teachers, I would have entered it long ago. I am one of the lucky recipients of a Ford Foundation Fellowship for 1953-1954 and shall be away to study and travel much of the time, but shall look forward to reading my copies of the Journal at times when I return home. . . . I am Head of The Science Department in our high school, but my teaching is all in biology. I have been able to convince my Principal that biology should be taught to everyone in our high school, so we allow our pupils to elect either academic or general (practical) biology. . . . I shall appreciate any material on this phase of biology teaching this coming year.

JAMES S. RITTER,
83 Aircoobra St., Bristol, Pa.

Editor's Note: Mr. Ritter has been asked to tell of his subject matter organization and teaching techniques in a future article.

Biology Laboratories

By: "The Old Fossil," at Wells High School, Chicago

Biology Laboratories dies with this issue. The Old Fossil, 15 years ago, was first President of NABT. He, with Alex Herskowitz as Editor and about three dozen other biologists, met in New York City, formulated the organization and constitution, and founded *The American Biology Teacher*. TOF guest-edited three special issues of the Journal. Shortly after this John Breukelman, then Editor, and TOF conceived the idea for this column. It had no specific format. It just grew. The monicker, "The Old Fossil," was used to fill space. It stuck. *Biology Laboratories* had a similar ontological experience. Our new Editor Vance wishes to enhance this evolution by having you **suggest a new name for this column**. Please help us. See the November 1953 issue for details.

Early winter is often an excellent time to collect toadstools and mushrooms. After a series of rains, they may come up in profusion.

They reappear under similar circumstances again in the spring. Many years ago TOF had one specimen brought into the laboratory that was so large it would not fit into a bushel basket. Puff balls may be collected in summer. Look in grain fields a few weeks after harvest. Another fungus, corn smut, may be collected in late July.

If you visited your state fair this year, you perhaps saw an animal-training act by **Jorgensen Christensen**. Years ago he toured the continent of Europe with 90 horses. Today his act is much smaller. However, the palomino horse and burro, which are part of the act, are often on short rations for timothy hay. Timothy hay is a good feed for horses. Farmers do not have horses on their farms any more; consequently they do not raise timothy for hay. Last year Mr. Christensen had an opportunity to take his act into Canada. In his act was a Brahma bull, a black sheep, and a goat. They could not return to the United States because of the hoof-and-mouth disease. The animals were not infected, but the border was closed for all movement of cloven-hoofed animals to the South.

Here are two new occupations of interest to biologists. Dairy organizations have men who devote their entire time to artificial insemination. A farmer may purchase the service for his herd, from most any herd in the United States, Canada, or South America. The second occupation is herd-testing for production. One tester services about 30 herds. The tester comes to the barn of the farmer once a month at both milkings on that day. He weighs the milk and tests it for each cow. At the end of the year the farmer has an accurate check on every critter in his herd. A low-producing cow eats as much as a high-producer. The low-producers are sold and replaced by promising young heifers. Several paraplegics do this kind of work.

Rabbit hutches or animal cages may be made quickly. One-inch mesh chicken wire or quarter-inch hardware cloth may serve to line the box to be used. Lettuce crates or orange boxes make excellent frames. A nest made from a smaller box should be placed inside for the animal to hide, when it prefers not to be disturbed. Newspaper may be used for a dropping board. The latter should be changed frequently to avoid odors in the class room.

The January issue will have an article by "The Old Fossil," in place of **Biology Laboratories**. It will be titled "Biology in Deutschland," same fossilized style. TOF was honored by a visit from a Deutschland biology Professor and lecturer recently. The Chicago Board of Education office referred the Professor to Wells High School and TOF. The article will give this Professor's reactions to biology in the United States, and what biologists are doing in Western Germany.