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SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE • OCTOBER 31, 1942



Indian Summer

See Page 285

A SCIENCE SERVICE PUBLICATION

Do You Know?

War and war work will require 30 million people by the end of 1943.

Some *slime-molds* are known to crawl at the rate of two centimeters per minute.

The *duck hawk* has been clocked flying at from 165 to 180 miles per hour.

Arsenic applied to the skin acts as a caustic and causes a violent inflammation.

In pre-war days the U. S. fishing industry ordinarily used about 1,600 long tons of *tin* annually.

Pyrethrum, the widely used insecticide, kills by contact but is not generally effective as a stomach poison.

It has been found that intensive *Vitamin A* treatment relieves nystagmus, an occupational disease which affects miners.

Five-sixths of the *gasoline* used in an automobile sedan speeding at seventy miles an hour is spent to overcome wind resistance.

Cornstalks, wheat straw, banana skins, and peanut shells can be subjected to bacterial decomposition and serve for *fuel* on the farm.

Lacking gasoline or motor cars, Chilean nitrate miners are now *sailing* on wheels to work and back; the desert wind, blowing east at dawn and west at sunset, fills the sails hoisted on their cars and wagons.

Question Box

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What good news has come slowly out of Finland? p. 276.

BOTANY

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CHEMISTRY

From the root of what tree can a natural dye now be obtained economically? p. 279.

ENGINEERING

How can buses be rid of their foul odors? p. 287.

GENERAL SCIENCE

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Who is sending science books to war prisoners in Japanese hands? p. 286.

METEOROLOGY

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NUTRITION

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In what dish can you get a full day's supply of protein and vitamin B for three cents? p. 277.

On what are restaurant eaters "short-changed"? p. 277.

What vitamin is found abundantly in walnuts? p. 276.

Why should expectant mothers eat beef? p. 277.

Why should "filled milk" not be used for feeding children? p. 275.

PHARMACY

From what hoards might quinine be released for emergency use? p. 286.

PLANT PATHOLOGY

What creature makes its attack against plants by jabbing with the tongue? p. 279.

PUBLIC HEALTH

In what community service can physicians be relieved by salesmen? p. 283.

What makes hearing aids expensive? p. 287.

What measure is considered essential to control of venereal disease in the Army? p. 278.

What plans have been made for handling metals safely? p. 276.

Most articles which appear in SCIENCE NEWS LETTER are based on communications to Science Service, or on papers before meetings. Where published sources are used they are referred to in the article.

White Leghorns require less vitamin B than the other known breeds of chickens.

Shortage of drinking glasses in England has brought 17th-century-style *pottery mugs* back into favor.

Death from *heat prostration* was recently judged by a court as a "compensable injury," for which insurance must be paid.

Brown-shelled eggs have a higher breaking strength than those that are white-shelled.

Dwarf forest trees in many mountainous regions are two to three hundred years old but only a foot high.

The odor of *apples* is due chiefly to their content of amyl esters of formic, acetic, caproic, caprylic acids, and acetaldehyde and ethyl alcohol.

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MORE THAN \$14,000 IN SCHOLARSHIPS AND TRIPS TO WASHINGTON

THE SECOND ANNUAL

Science Talent Search

Conducted by Science Clubs of America for the
WESTINGHOUSE SCIENCE SCHOLARSHIPS

Forty boys and girls will win all-expense trips to the Nation's Capital and scholarships in the Science Talent Institute. Of these, one boy and one girl will be selected as winners of the two \$2,400 WESTINGHOUSE GRAND SCIENCE SCHOLARSHIPS, eight more of the forty boys and girls will be selected to receive WESTINGHOUSE SCIENCE SCHOLARSHIPS of \$400 each, and \$3,000 more in WESTINGHOUSE SCIENCE SCHOLARSHIPS will be awarded at the discretion of the judges. Every one of the 40 boys and girls will, when in Washington, be awarded the Gold Emblem of Science Clubs of America.

HIGH SCHOOL FACULTY MEMBERS AND SENIORS WILL APPRECIATE RECEIVING THIS ANNOUNCE



Rules and Regulations

THE SECOND ANNUAL SCIENCE TALENT SEARCH CONDUCTED BY
SCIENCE CLUBS OF AMERICA, FOR THE
WESTINGHOUSE SCIENCE SCHOLARSHIPS

ELIGIBILITY

Any boy or girl who is now a senior (12th grade) in a secondary school (public, private, parochial) in continental United States is eligible to enter this competition. Anyone who competed in the First Annual Science Talent Search is ineligible.

Age—There are no age limits in this competition.

Science Clubs of America—It is not necessary to be a member of Science Clubs of America to enter this competition, although creative activity in a Science Club will aid a contestant's record.

Scholastic Record — Each contestant must be able at graduation to meet college entrance requirements.

REQUIREMENTS

1. Each contestant must take the "Science Talent Search" examination administered in his school on or after Friday, December 4, 1942.

2. Each contestant must submit an essay.

3. Certifying teachers must fill out in each examination blank a scholarship record and personal record.

4. All entries must reach the offices of Science Clubs of America, 1719 N Street, N. W., Washington, D. C., not later than midnight Monday, December 28, 1942.

Science Talent Search examination and record blanks are furnished free of charge to any school official requesting them.

The essay shall be of about 1,000 words in length on the subject: "Science's Next Great Step Ahead." It should be original and creative in character.

AWARDS

Forty contestants with highest talent as judged by a judging committee on the basis of Science Talent Search examination, scholastic and personal records, and essays, will be awarded scholarships in the Science Talent Institute and invited on all-expense trips (transportation, hotel and other arranged expenses paid) to the place the Institute is to be held, and return. The Science Talent Institute will be held at Washington, D. C., February 21-25, 1943, unless in the judgment of Science Service it should be held elsewhere due to war conditions. All contestants invited to the Science Talent Institute will receive the Gold Emblem of Science Clubs of America.

Two contestants, one boy and one girl, coming to the Science Talent Institute will be selected by a board of judges, on the basis of examinations, to receive four-year scholarships of \$2,400 each (\$600 per year). Alternates will be named.

Eight additional contestants coming to the Science Talent Institute will be selected by a board of judges to receive four-year scholarships of \$400 each (\$100 per year). Three alternates will be named.

Additional scholarship awards totaling \$3,000 will be awarded at the discretion of the judges. Honorable mentions will be awarded.

Committees of judges designated by Science Service will judge the contest, and the decision of these judges shall be final in all cases.

Conditions of Scholarships

Each scholarship may be applied toward a course in science or engineer-

ing at a degree-granting institution of higher education selected by the winner and approved by a Scholarship Committee named by Science Service. Science and engineering courses that may be pursued are those encompassed in the fields of activity of the National Academy of Sciences and the National Research Council.

Should any winner be unable for any reason to enter upon the use of a scholarship, the highest ranking alternate named by the judges shall become entitled to receive it under the same conditions as the original winner and the original winner shall thereupon have no further rights in the scholarship.

The use of a scholarship shall begin within a year of the date of award.

One-half of each year's scholarship will be paid at the time of entering upon each year's college work and one-half at the middle of each collegiate year, provided that payments may be accelerated at the discretion of the Scholarship Committee.

If a winner is prevented from using his scholarship award because of entry into governmental service, the award will be held in abeyance and be made available to him or her upon his or her being able to return to the pursuit of his or her collegiate work. In the event that the holder withdraws from collegiate work for any other reason, or the continued use of the scholarship award is disapproved by the Scholarship Committee upon report from the college that progress is deemed unsatisfactory to the college, the right of the scholarship holder to receive any further payments shall be forthwith terminated.

The approval or disapproval and decision of the Scholarship Committee shall in all its respects be final.



ASK YOUR SCIENCE TEACHER

or write Science Clubs of America, 1719 N Street, N.W., Washington, D. C.

Every High School has received full information