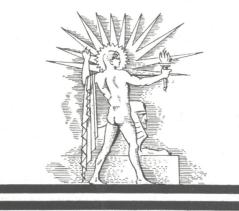
# SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE.





April 25, 1942



Giant Stopper

See Page 264

A SCIENCE SERVICE PUBLICATION

# Do You Know?

Adult male gorillas may weigh as much as 600 pounds.

At the outbreak of war, the total shipping tonnage of the world was 60 to 65 million tons.

Ocean waves have been known to lift blocks of stone weighing hundreds of

The African elephant is bigger and stronger than the Indian—he can be distinguished by his larger ears.

The "glass snake," in reality a legless lizard, can drop its tail when seized, grow another in a few weeks.

Stealing is almost unknown among the Eskimos, and punishment of any thieves apprehended is merely to laugh whenever the name of the culprit is mentioned.

Approximately one person out of 25 has difficulty in hearing in the average auditorium, as compared with one out of 125 who has trouble in hearing a direct conversation.

Pages from old telephone directories are placed over airplane engine molds to keep out dirt; when the molten metal is poured in the mold the paper is burned away without residue.

World's largest user of baby nursing bottle nipples is an airplane companythe nipples are slipped over small openings in engines to prevent foreign objects from falling in during manufacture.

# QUESTIONS DISCUSSED IN THIS ISSUE

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

#### BOTANY

How can poison ivy be eliminated from your picnic grounds? p. 264.

#### CHEMISTRY

What has made possible practically non-toxic paints with little odor? p. 262.

What new use has been found for whey?

What organic chemical will kill water hyacinth? p. 265. Who received the Eli Lilly \$1,000 prize? p. 265.

Why may "dated" vitamins become necessary? p. 262.

#### ENGINEERING

What savings are possible through measuring oil as it flows through the pipes? p. 261.

#### GENERAL SCIENCE

Who can compete for the Westinghouse Science Scholarships? p. 259.

#### CENETICS

How does natural selection differ from that of man? p. 269.

#### GEOLOGY

What will Brazilian diamonds contribute to U. S. war production? p. 261.

How do the sulfa drugs affect the thyroid gland? p. 265.

How fast did American hospitals grow last year? p. 265.

What advantage has an identical twin in case he is badly burned? p. 264.

What is affected by arthrit's besides the joints? p. 265.

What happened to the teeth which were found in a patient's stomach three years after they were swallowed? p. 271.

#### NUTRITION

How has butter been made heat resistant? p. 264.

#### PHYSICS

How can meteorites be discovered when buried 12 feet below ground? p. 265.

#### PHYSIOLOGY

How do the teeth of the Chinese compare with those of Americans? p. 268.

Under what circumstances is fluorine accumulated in the body? p. 262.

#### PSYCHIATRY

How should air raid wardens be selected?

#### PUBLIC HEALTH

What evidence is there that the German people are becoming over-fatigued? p. 268.

How big is a pygmy whale? p. 267.

As light nears the red end of the spectrum it becomes less visible from the air.

Perhaps the first chemical process which man employed for his own service was combustion.

During the first eleven centuries of her recorded history, Japan was engaged in only one war abroad.

After the discovery of the use of fire, the next great step forward by man was the taming of plants and animals.

The foot of the hippopotamus is the smallest in the animal world in proportion to weight.

Commercial carbon dioxide is consumed mostly in soft drinks and as "dry ice" in shipping ice cream.

A world *population* increase of 250 million people in the next 20 years is expected despite the present war.

The horse has the most highly specialized foot in the world—he walks like a toe dancer, on the tip of a single toe.

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# THE FIRST ANNUAL Science Talent Search

CONDUCTED BY

SCIENCE CLUBS OF AMERICA, SPONSORED BY SCIENCE SERVICE, 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.

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, May 15, 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 Service, 1719 N Street, N.W., Washington, D. C., not later than midnight Monday, June 1, 1942.

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

The essay shall be of not more than 1,000 words on the subject: "How

Science Can Help Win the War." It may describe a project in which the pupil has engaged or desires to engage, or it may contain an *original* idea, suggestion or invention of possible use to our armed forces, industry, etc. Sketches or photographs may be submitted but are not required.

#### 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 invited on all-expense trips (transportation, hotel and other arranged expenses paid) to Washington, D. C., and return. All contestants invited to Washington will receive the Gold Emblem of Science Clubs of America.

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

Eighteen additional contestants coming to Washington will be selected by a board of judges to receive one-year scholarships of \$200 each. Six alternates will be named.

#### **JUDGES**

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 engineering 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 scholar-ship, 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 ber 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.

# To help teachers answer the questions of pupils

Who may compete? Any senior of secondary schools in the continental United States who at graduation time can meet college entrance requirements.

Can scholarship winners use the money for any purpose? Yes, as long as it applies to their scientific education in any college approved by the Scholarship Committee. It can be used for tuition, room rent, board, clothes, books, laboratory fees, etc.

When will the money be paid to the

When will the money be paid to the winners? Checks will be sent semi-annually or oftener, subject to the above rules.

If a pupil already has a scholarship is he eligible to compete in this contest? Yes, any scholarship a pupil has or may be awarded can be added to any scholarship received in this contest.

Must trip winners come to Washington? Yes, if they wish to be considered for the scholarships. The scholarship winners will be selected by a board of judges at the Nation's Capital. Expenses to Washington and return will be paid.

Will girls have as much chance as boys? Yes. The trips to Washington will be distributed between girls and boys approximately in proportion to the number of girls and boys entering the contest, and so, in general, will the \$200 scholarships.

Does the place a contestant lives make any difference? No. This is a search for science talent, and it is to be expected that in general the winners will be distributed over the nation.

May contestants start work on their

essays at once? Yes, the earlier the better. The essays must be original and creative. Add any sketches, pictures and other data needed. Send essays along with examinations.

What sort of an examination will be given? The examination will test ability rather than information. It will take about two hours.

When will the examination blanks be sent? Beginning May 1 examination blanks will be mailed as rapidly as possible to school officials only.

Suppose the examinations can not be given on May 15? May 15 is National Examination Day but sponsors may give the examinations at any later convenient time just so they are completed in time to reach Washington not later than June 1.