Valuable saving of manpower in highly trained troops such as parachutists was also achieved by use of penicillin in cases of gonorrhea that resisted sulfa drug treatment. Many such cases occurred in Tunisia shortly before the men were due to go into battle. With penicillin, they were cured in about 48 hours.

Comparison between penicillin and sulfa drugs in treatment of war wounds was not made because the investigation was limited to learning as rapidly as possible how efficient penicillin might be and how best to use it.

Science News Letter, January 15, 1944

PUBLIC HEALTH

Flu Pandemic Not Likely

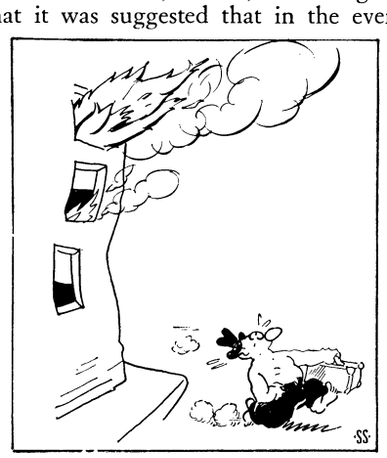
Sulfa drug triumphs over the pneumonia which often follows an attack of influenza are largely responsible for avoiding a repetition of the epidemic of World War I.

➤ THOSE who have been worrying, as most persons have each fall and winter since the war started, over the possibility of a world-wide influenza epidemic as devastating as that of 1918, may be reassured by a statement by the editors of the *New England Journal of Medicine*. (Dec. 9, 1943)

"Any epidemic in the near future is likely to be much less severe than was the pandemic of 1918," they declare. "This, of course, is only speculation," they admit, "but is based on significant observations."

The observations are: 1. The influenza of the last war had a high mortality but the deaths were accounted for chiefly by complicating pneumonias in which the hemolytic streptococcus was the germ most frequently encountered. The same was true of the epidemics of measles in Army camps during the last war.

2. During the 1940-1941 epidemic of influenza, the staphylococcus played an important role in complicating pneumonias but intensive treatment with the sulfa drugs gave quite encouraging results. The results, in fact, were so good that it was suggested that in the event of another influenza epidemic it might be well to use sulfa drugs early in severe cases. This is especially recommended for patients with severe prostration, signs of tracheobronchial and lung involvement and presence of appreciable numbers of hemolytic streptococci and staphylococci in the sputum.



3. Another encouraging omen comes from recent reports concerning measles. Outbreaks of this occurred in the Army during 1943 but, unlike the 1918 experience, deaths were rare. This is attributed to widespread use of sulfa drugs in all cases with lung involvement.

"It is not unreasonable," the medical authorities comment, "to expect a similar low fatality rate from influenza occurring under like circumstances."

For the future, there is even more reason for confidence when supplies of penicillin become large enough for large-scale use, since this chemical from mold is especially efficacious in infections with the staphylococcus. This germ is being found in increased frequency in surgical conditions and in complications of other respiratory diseases, so may be expected to play a considerably greater role in future influenza epidemics than in any previous ones.

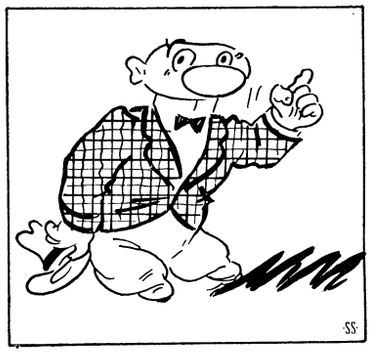
Science News Letter, January 15, 1944

SAFETY

Mexican Don Timorato Teaches Civilian Defense

➤ DON TIMORATO, hero of a popular comic book, has been enlisted in the service of civilian defense and is teaching Mexicans the correct thing to do in case of bombing.

The book was written by Jorge Pinó Sandoval, Mexico's most widely read columnist, and illustrated by Antonio Arias Bernal, Mexican caricaturist whose cartoons have appeared in many American newspapers and magazines. Their idea for using the comic book to give easy, graphic lessons in civilian defense appealed to José Torres Navarrete, publicity head of the National Lottery, and that 160-year-old institution devoted to raising funds for the Department of Public Welfare and Assistance, has published the book.



Its title is *Don Timorato Y Las Bombas,* which translates literally into Mr. Scary and the Bombs. Sixty-four pages in black, red and green and a four-page cover portray the doings and misdoings of Don Timorato during a fictitious bombing of Mexico City.

When he does the wrong thing, it appears in red. In green, he is always correct. Sitting under an open window during an air raid is pictured in red. But when Don Timorato correctly lies on a mattress under a heavy table, with radio, first aid kit, food and water close at hand, the scene is pictured in green.

Much humor and wit appear in the book and Don Timorato has become a very popular character. Copies of the book are in great demand and go from hand to hand.

Science News Letter, January 15, 1944

MEDICINE

Penicillin Found to Help Relapsing Fever Cases

➤ PENICILLIN scored one hit and two misses in latest trials of its diseases fighting power. The hit is a lucky one for mankind, since it is against relapsing fever, a disease found in most countries and likely to become epidemic with the overcrowding and poverty that often follow war.

Hard on the heels of a report from the Mayo Clinic of penicillin's effectiveness against relapsing fever in mice comes a second report to the same effect from Harvard. This report, by Dr. Donald L. Augustine, Dr. David Weinmann

and Miss Joan McAllister, appears in Science. (Jan. 7) The Mayo Clinic experiments were reported last month by Dr. F. R. Heilman and Dr. W. E. Herrell in the clinic's own publication.

The two penicillin failures, reported by the Harvard group, were in trypanosomiasis, one form of which is the deadly African sleeping sickness, and toxoplasmosis, a relatively new but almost always fatal disease.

Science News Letter, January 15, 1944

EDUCATION

Science Talent Search

About 15,000 high school boys and girls entered the third annual contest for $11,000 in science scholarships to be awarded 40 winners.

➤ ABOUT fifteen thousand high school seniors competed in the Third Annual Science Talent Search conducted by Science Clubs of America for the Westinghouse Science Scholarships.

Each contestant took the Science Talent Aptitude examination, submitted scholastic records and personal recommendations. Each contestant also submitted an essay of about 1,000 words entitled "My Scientific Project."

The fortunate forty boys and girls named as finalists are being invited to Washington for a five-day all-expenses-paid Science Talent Institute to be held March 3 to 7. During this time $11,000 in Westinghouse Science Scholarships will be awarded. Honorable mentions will also be awarded by the judges.

The annual Science Talent Search is conducted by Science Service as a Science Clubs of America activity and is open to all seniors in public, private and parochial secondary schools. The current year's contest closed on Dec. 27.

The winners and honorable mentions of the Third Annual Science Talent Search will join with a growing group of boys and girls so honored in the two previous searches. The finalists and honorable mentions in the First and Second Annual Science Talent Searches are already receiving training in colleges, universities and technical schools or in the armed services.

The board of judges of the Science Talent Search is composed of Dr. Harlow Shapley, director of the Harvard Observatory; Dr. Steuart Henderson Britt, now in the U. S. Navy but formerly director of the Office of Psychological Personnel of the National Research Council and consultant to the War Manpower Commission; and Dr. Harold A. Edgerton, director of Occupational Opportunities Service, the Ohio State University. The science aptitude examination was prepared by Drs. Britt and Edgerton.

The forty chosen to be invited to Washington for the March 3 to 7 Science Talent Institute include a number of girls determined by the percentage of girls who completed entries in the competition. Thus girls make their own chances in the Science Talent Search.

In March, two contestants, one boy and one girl, will be chosen to receive Westinghouse Grand Science Scholarships of $2,400 each ($600 per year for four years.) Eight finalists will receive Westinghouse Science Scholarships of $400 each ($100 per year for four years) and $3,000 additional in scholarships will be awarded at the discretion of the judges.

Science News Letter, January 15, 1944

ASTRONOMY

Planet Origin Theory

➤ DISCOVERY of other planetary systems than ours in the universe has given support to the idea that planets are created when a pulsating Cepheid star encounters another star at a moderate distance.

Dr. H. K. Sen, of Allahabad University in India, in a letter to the American Physical Society's *Physical Review* (Dec. 1 and 15, 1943), points out that this theory of planet formation advanced by another Indian scientist, Dr. A. C. Banerji, in 1942 is made more probable by the recent discovery by American astronomers of two planetary objects outside our solar system, but each relatively close to us.

Under the older Jeans-Jeffreys tidal theory of the origin of planetary systems, there would be at most two planetary systems in our Milky Way galaxy created during the existence of the universe, Dr. Sen figures, whereas the Banerji theory allows many more, as seems probable because of the new discoveries.

The presence of planetary systems in binary stars, as discovered first by Dr. K. Aa. Strand in the 61 Cygni system, is very plausible in view of Dr. Sen's Cepheid theory of the origin of binary stars, he believes. In this case a Cepheid star, that periodically swells up and shrinks, breaks up into two stars because of the increase or angular velocity due to radiation of energy. The filament connecting the two stars affords a chance for planets to be formed by condensation.

Science News Letter, January 15, 1944

PSYCHOLOGY

Noises Give Vividness To Talking Books

➤ NOISES of a country fair, songs of birds and ak-ak of guns give vividness to talking books—long-playing phonograph records—for blind youngsters. Unable to enjoy visual illustrations which catch the attention of children able to see, books for the blind are illustrated in sound.

A sound-picture book which tells about life on a farm and country life in general is dramatized by recording the sounds of farm animals, farm machinery and a country fair. Here the sound forms an essential part of the book.

Books about animals lend themselves especially well to sound illustrations. The story of a small boy's visit to the zoo includes in the background the trumpeting of the elephant while he is shown around the elephant's house.

A frontispiece of characteristic sounds is also used. Each chapter of a book about the circus, for instance, may be introduced by the hammering of workmen, cries of barkers, or cheers of the crowd. The text is then presented as straight reading.

During the last few years a considerable number of educational talking books have been recorded under the auspices of the American Foundation for the Blind to demonstrate different ways in which sound effects could be used.

Science News Letter, January 15, 1944