

MEDICINE

Synthetic Chemical Helps "Ringing in the Ears"

MARKED relief from the familiar condition, "ringing in the ears" was obtained in a series of cases treated with the synthetic chemical, Prostigmin, Capt. A. F. Judge, Medical Reserve, U. S. Army, reports. (*Military Surgeon*)

Capt. Judge also treated cases of deafness, but obtained only a few improvements. He notes, however, that in view of the scarcity of drugs which relieve deafness to any extent, that use of Prostigmin should not be abandoned.

Cause of the "ringing" or other noises in the ear is not always known. Sometimes it is a plug of wax. An overdose of quinine will do it. Sharp explosions such as gunfire and bombs will sometimes cause it. Neither is the action of Prostigmin clear, and there is much controversy over its value in relieving "ear noises."

Capt. Judge, however, treated fourteen cases of ringing-in-the-ears with Prostigmin and gave complete relief to five, marked improvement to four, and some benefit to three. Two patients were in no wise helped.

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PUBLIC HEALTH

Red Cross Ready to Supply Blood Plasma to Civilians

THE AMERICAN Red Cross is prepared to provide a limited supply of life-saving dried blood plasma to civilians, should the enemy strike at American communities, Chairman Norman H. Davis has announced.

His announcement followed consultation with leaders of the Office of Civilian Defense and the Surgeons General of the Army and Navy. The Red Cross has been filling military and naval needs for the past year.

The blood supply service to civilians is made possible by the more than 55,000 persons who have donated blood since the Pearl Harbor attack. Hundreds of thousands of additional donors are needed, however, the Red Cross stressed.

Under the new civilian distribution plan, the plasma will be distributed by the Red Cross to points where the enemy may strike. The plasma will be handled by the disaster relief organization of the Red Cross, and will be issued immediately through medical channels to be jointly determined by the Office

of Civilian Defense, Mr. Davis said.

"Formal understandings exist with the military departments by which the American Red Cross is authorized to call upon the equipment and the supplies of the armed forces in times of catastrophe," he explained. "Through these provisions, the supplies of dried blood plasma held by the armed forces can be drawn upon by the Red Cross in case of civilian casualties caused by enemy action."

The Red Cross reports that more than 85,000 donors have contributed blood since the program was begun a year ago. The blood is being supplied at 17 Red Cross Blood Donor stations in cities near the laboratories processing the blood for Army, Navy and civilian defense.

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ENGINEERING

Stoker Enables You To Burn Heavily Coking Soft Coals

HEAVILY coking bituminous coals can be satisfactorily burned in household furnaces by use of improved underfed stokers developed as the result of a research by Dr. C. C. Wright and T. S. Spicer of the Pennsylvania State College. The research was reported by Dr. A. W. Gauger of Penn State at the meeting of the American Institute of Mining and Metallurgical Engineers in New York.

Bituminous coal, when heated, becomes plastic, gives off volatile gases and solidifies into coke—forming "coke trees" which seriously interfere with combustion in the usual household stoker and may even put the fire out.

Coking can be prevented, the scientists found, by partially oxidizing the coal before it is burned. This they accomplished in the ordinary household stoker by introducing air below the point of burning and also providing means of agitation to cause the air to contact most of the coal. At the temperature there prevailing, 300 degrees Fahrenheit or more, oxidation was rapid and coking during burning was entirely eliminated.

Five typical stokers, improved in this way, tested with nineteen strongly coking bituminous coals, showed increased efficiency in all three kinds of operation—continuous, intermittent, and "hold-fire."

An improved stoker was also tested in the home, operating continuously for three months under wide variations of heat demand with entire satisfaction.

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IN SCIENCE

MEDICINE

Keep Sickroom Away From Home Kitchen

IF SOMEONE in your family gets sick and has to stay in bed, you will have to choose and arrange the sickroom in a way to promote the health and safety of both the patient and other members of the family. The patient's own bedroom may not be suitable for use as a sickroom and in that case he should be moved to another room.

The sickroom should be near the bathroom but not near the kitchen, so that there will be no temptation to empty basins from the sickroom in the kitchen sink, instead of into the bathroom basin or toilet bowl, where they should be emptied. All articles used in the sickroom should, as far as possible, be kept out of the kitchen, so as to avoid the danger of getting germs from the patient mixed with food for the family.

The noise and cooking odors from the kitchen are likely to be very disturbing to the patient, which is another reason for having his sickroom far from the kitchen. It should be located to insure privacy, particularly while he is being bathed or given any kind of treatment or nursing care.

Many homes today have built-in beds, especially in children's rooms. These are attractive and save space, but they are not suitable for sickness. The patient's bed should be placed so that it can be reached by the nurse from both sides, and it should not be so large that the patient cannot be reached from either side.

Keep medicines out of the patient's reach and be sure there is nothing dangerous in the sickroom, such as low, unguarded window sills, unsteady chairs, loose rugs on smooth floors, loose wires and unsafe electrical equipment. Sick people are not themselves mentally or physically, and cannot be trusted to take care of themselves as they can when well, warn Elinor E. Norlin and Bessie Donaldson, teachers of nursing in New York high schools, in their newly published book, *Everyday Nursing for the Everyday Home* (Reviewed, SNL, this issue).

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CE FIELDS

PSYCHOLOGY

Nazis Have No Inside Track on Psychology

TO COUNTERACT the widespread myth that Goebbels and a select group of German super-psychologists have devised unique stratagems for battering whole populations into helpless submission, the Association for the Advancement of Psychoanalysis points out that German psychologists know nothing that is not commonplace to American scientists.

"The German propaganda group has merely tried to disseminate the same aroma of invincibility about their psychologists as they have about their military forces. It is as important to debunk the mythical irresistibility of German psychologists as it is to recognize the actual vulnerability of the Nazi armies."

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WILDLIFE

Fields Turned Fish-Ponds Give High Food Yields

BIG CROPS of fish can be raised on old cotton fields in the South—fields too worked-out to produce paying land crops any longer. The system has been developed by two research men at the Alabama Agricultural Experiment Station, Auburn, Ala., Dr. H. S. Swingle and Dr. E. V. Smith.

All that is necessary is a field and a creek, so situated that a low earth dam will turn the field into a shallow pond. The water, instead of the soil, then receives a fertilizer application and is stocked with fish. Bass, catfish and bream are regarded as most promising.

High food yields at low cost have been obtained in the experiments. As much as 600 pounds of fish per acre, at production costs between three and six cents a pound, have been taken out of the ponded fields. Comparable fields used as pastures yielded only 149 pounds of beef per acre, at much higher per-pound cost.

The fertilizers used are the regular commercial kinds, applied at a rate of 100 pounds to an acre. Results were improved by adding ten pounds of nitrate

to the regular fertilizer mixture. Too much fertilizer resulted in the growth and decay of such an excess of aquatic plant and animal life that the water was robbed of its oxygen and the fish smothered. Moderate fertilizer applications therefore are emphasized as essential to the success of the method.

Fish are not directly nourished by the fertilizer. First result is the encouragement of a good growth of microscopic water plants. These become the food of microscopic animals, and these in turn are eaten by others. The fish are next to the last and largest link in the biological chain of eat-and-be-eaten.

The last and largest link of course is the field owner and his family, who get sport, increase and new variety in daily menu, and cash from sale of surplus fish.

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ANTHROPOLOGY

Ancient China Did Not Invent Its Civilization

ANCIENT China did not invent its own civilization, but borrowed the basic ideas from the Near East, just as Europe did, is the verdict of Dr. Carl W. Bishop of the Freer Gallery of Art in Washington, D. C.

His conclusion, presented with evidence in the annual report of the Smithsonian Institution, makes the Near East with its Fertile Crescent of the Tigris-Euphrates Valley more significant than ever as cradle land of Old World civilizations.

Citing Chinese borrowings, Dr. Bishop says that when Chinese began to raise wheat and ride in chariots in their bronze age, between 2000 and 1000 B.C., the wheat was of precisely the same varieties that farmers grew far to the west. China's chariots were drawn by two horses yoked—not harnessed—abreast, just as in the Occident.

Near 1000 B.C., invaders from the West, the Chous, seized northern China and introduced the seven-day week and the use of eunuchs as palace guards. Dr. Bishop says that these are believed to be Near Eastern traits. Soon after, northern Chinese began to build grave mounds over the illustrious dead, which was an old custom widespread west of China.

While Dr. Bishop traces the makings of China's civilization to other lands, he emphasizes that the Chinese used their borrowings to develop one of the earth's great ancient patterns of living.

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PUBLIC HEALTH

Epidemic of Mumps May Be Military Problem

THIS is the season of the year when epidemics of mumps are most likely to occur. Although generally considered a somewhat comic childhood ailment, this painful and incapacitating disease may become epidemic in barracks and military camps as well as in schools and colleges. During the World War, one out of every 20 white men and one out of every six colored men in the United States Army suffered an attack.

The disease rarely kills anyone. Its chief importance, says the U. S. Public Health Service, is its tendency to occur in epidemics which may disable all at one time a large proportion of children in schools or new recruits.

The fact that the sex glands may be affected when the disease attacks older boys and girls is also a cause of some concern. The importance of this complication as a cause of sterility is still debatable, say Dr. Gaylord W. Anderson and Miss Margaret G. Arnstein in their recent book, *Communicable Disease Control*.

They point out that since no one becomes immune to mumps without having had the disease, some have suggested deliberately exposing a child to mumps before he reaches adolescence in order to avoid the disease later at a time when it might cause serious complications. This is a step which parents should not take without consulting the family doctor. While medical opinion may be divided on this, it is generally agreed that older boys and girls who get mumps should be given special care and should stay quietly in bed until they have completely recovered, in contrast to younger children who are usually allowed out of bed as soon as the fever and acute symptoms have subsided.

The disease is caused by a virus. Its medical name is parotitis, meaning inflammation of the parotid gland. This is the salivary gland which partially surrounds the ear at its attachment to the head. The painful, tender swelling of these glands, without any reddening of the covering skin, usually makes it easy to recognize the condition. Usually it is limited to one side of the face, but both sides may be involved.

The first symptoms generally appear in from 14 to 18 days after exposure, and the disease is "catching" as long as the glands remain swollen.

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