



#### VIVID, FACTUAL EXHIBITS

*It is planned to take the mystery out of medicine at the medical and public health sections of the New York World's Fair.*

MEDICINE—PUBLIC HEALTH

## Story of Life and Medical Research To Be Told at Fairs

### Visitors May See the Story of Birth and Life and May Walk Through Mouth to Learn About Teeth

**Y**OU enter a hall which is like a vast cathedral. At the far end you see a heroic figure—a man 18 feet tall, transparent, his great heart illuminated and visibly beating. You hear a steady, throbbing sound: lubb, dup, lubb, dup, lubb, dup, the constant, continuous 70-per-minute beating of the heart. You are in the Hall of Man, prelude to the medical and public health exhibit of the New York World's Fair 1939. That low throbbing heartbeat whose sound permeates the entire hall symbolizes the wonder of life. This is the theme of the whole huge exhibit, chosen from the words of St. Augustine, that of all wonders of the world, "man himself is the most wonderful."

With the heart beat sounding in your ears, a sort of magnified echo of the beating in your own breast, you may wonder, first, how it started. You can

find out in a special exhibit which tells the story of birth. Here you will find a factual presentation of how conception takes place, how the unborn child develops, what happens to him when he is born.

Or you may wonder how long your own heart will continue its steady lubb, dup, lubb, dup, as it pumps the blood into your body and provides life and nourishment for every one of the millions of tiny cells of which you are made. About 60 years is the longest the average man today can expect his heart to go on beating. But 10 more years could be added to that, medical scientists tell you, if the facts they know about the care of the body were universally applied. As you go through the medical and health exhibits you will learn those facts. The entire medical and health project of the New York World's Fair has been

designed especially to make it easy for you to find out about them. More than 350 outstanding medical and public health authorities have put their heads together to plan and stage this huge, exciting show. They have called on all the arts and technics of stage, screen and radio to tell you the story of life, health and disease.

#### Behind Hospital Scenes

You probably have been to a hospital, as a visitor if not as a patient. At the New York World's Fair you will be able to learn many amazing things you never guessed about hospitals, for one exhibit will take you behind the scenes and show you not only what goes on in wards and operating rooms but how the housekeeping is done, and the activities in other departments such as laboratories, pharmacy, kitchens, laundry and light and power plants.

You will even have a chance to try your own hand at diagnosing, as it were. In the exhibit on tuberculosis, you will be asked to select from a large number of photographs the individuals you think are tuberculous. Many visitors will guess wrong on this, because the sufferer from tuberculosis does not always show the condition in his outward appearance. Doctors use X-ray pictures of the chest and the tuberculin test to help them diagnose the condition. The exhibit will show how this test is made and also will show you a specimen of a normal healthy lung and one showing signs of tuberculosis.

Many people still hate to go to the dentist. In the dental exhibit "living teeth" will be shown as "living tools." If you wonder what good it does to go to the dentist or what will happen to you if you neglect your teeth, you can find out by pushing a button. The answer to your question will immediately flash on the screen. Part of the dental exhibit will be a huge mouth. You will walk into this over a rubbery floor, representing the tongue, and find yourself surrounded by rows of huge teeth above and below.

#### No Commercialism

Commercialism is completely banned from the medical and health exhibits and there will be no exploitation of miscellaneous organizations and products at the New York World's Fair. The exhibits are being planned by committees of health and medical authorities. Various groups—professional, scientific, commercial and voluntary—are cooperating

in financing the exhibits. Cooperators, both commercial and non-commercial, are limited to organizations of the highest standing. The bronze plaque in each exhibit, bearing the name of the sponsor, carries considerable prestige because it indicates professional acceptance of the sponsoring company. A Professional Club will provide a place for representatives of sponsors to meet physicians and other professional visitors and discuss the application of their products to medical practice.

While the New York World's Fair in its medical and public health exhibits will tell the story of man and how he can live longer and better in the World of Tomorrow, the Golden Gate International Exhibition at San Francisco has a different story to tell you about health and medical matters, and will tell it in a different way.

Here you will get a chance to look behind the scenes of some of the world's most famous laboratories, in which chemists, biologists and other scientists are working at medical and health problems. This will be no mere imitation or pretense of scientists at work, but the real thing. Research workers from the leading universities of the West will be working in the laboratories, transferring their activities for the time from the laboratories of their home institutions.

#### Life in the Future

The results of this research which you can glimpse at the exposition will make life for future generations something very different from that we know today. The idea that some day our food will consist of a few capsules or pills of concentrated, scientifically correct nutrients is not new. The day when that dream can be realized is no longer far distant, it appears, and has already dawned for laboratory animals. At the Golden Gate Exposition you will see some of these animals that have been fed nothing but chemically compounded capsules from birth. With them you will see animals reared on a normal diet and the scientists will show you that the chemically fed animals are healthier and happier because their diets are controlled to the minutest fraction.

Capsule feeding of humans would be prohibitively expensive at present, but in the event of emergency such as war or disaster cutting off a population from its food supply, this synthetic feeding could perhaps be resorted to in future. Methods of manufacturing in the test tube the essential fats, sugars and pro-

teins for such a diet will be shown publicly for the first time at the San Francisco fair.

Another unique feature of this exposition will be a demonstration of how drugs work on the human system. From this you can see what happens in your body when you take an aspirin tablet, for example, or when the doctor gives a hypodermic injection of morphine to relieve pain or of digitalis for treatment of heart disease. Mechanical models, charts and a new and improved edition of the transparent man will be used to tell this story of medicine.

MEDICINE—SAFETY

## Drinking Drivers Dangerous As Well as Drunken Ones

### Man Who Does Not Appear Drunk May Nevertheless Have Impaired Coordination That Makes Him a Menace

**T**HE DRINKING driver, as well as the drunken driver, must be convicted by the courts, if the automobile accident toll is to be reduced. Even minor degrees of intoxication may have serious consequences.

Dr. Sydney Selesnick of Boston is the authority for the foregoing statement.

He presents (*Journal, American Medical Association*, March 12) the first of a series of papers from the advisory committee on the study of alcoholism at Boston City Hospital, sponsored by the WPA.

Three Indianapolis scientists announce in the same issue a rapid chemical test for intoxication that is made from the breath. The Boston investigators think blood alcohol determinations are superior.

"Alcoholic intoxication in the biologic sense without any gross manifestations of drunkenness can produce sufficient interference with psychomotor activity and neuromuscular coordination to render such an affected individual a potential public menace," Dr. Selesnick states.

The present accepted fifteen-hundredths of one per cent. blood alcohol as the level above which alcoholic intoxication is definite offers too wide a margin of laxity for the drinking driver, the experiments show. Dr. Selesnick expects to see this level lowered in the future.

Whether or not the driver has been drinking and what is the degree of alcoholic intoxication can best be deter-

The Golden Gate Exposition will have a special section devoted to the prevention of diseases that are transmitted to man from household pets and other animals. Among such diseases are tuberculosis, rabies and Malta fever. The American Veterinary Medical Association is planning this particular exhibit.

The two fairs will not open for over a year, and some details of the exhibits as described here may be altered before the opening days. Many exhibit sponsors, however, are already working with committees of the two fairs on their parts of the shows.

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mined, thinks Dr. Selesnick, by the chemical determination of body fluid alcohol. Such a test can detect degrees of intoxication that ordinarily escape the attention of competent physicians.

What if the accused driver refuses to submit to the extraction of blood for the test on the grounds that nobody can be made to testify against himself?

Blood extraction, contends the Boston physician, does not differ from finger printing. The same objections were raised regarding blood grouping tests in cases of disputed parentage. Several states enacted laws authorizing the court to order blood grouping tests when relevant, and similar laws could be enacted with regard to extraction of blood for the estimation of its alcoholic content.

The Indianapolis investigators—R. N. Harger, Dr. E. B. Lamb and F. O. Hulpieu—can make their test without touching the subject. A tube is held in the breath stream and a pump draws a sample of the breath through the apparatus.

Tests made on 121 subjects showed a good correlation between the concentration of alcohol in the blood and the amount of alcohol accompanying 190 mg. of carbon dioxide in the breath.

The weight of the alcohol accompanying 190 mg. of carbon dioxide in the breath is very nearly equal to the weight of alcohol in 1 cc. of the subject's blood.

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