

Doctors Can Know Nitroglycerin Role Inside Human Heart

By DELOS SMITH
UPI Science Editor
New York (UPI)—Every doctor knows nitroglycerin can do big things inside human hearts. But now, for the first time, all doctors can know just how this working chemical compound of dynamite does them.

This news from inside human hearts belongs to Drs. Norman Brachfeld, John Bozer, and Richard Gorlin who got it by running instrumented tubes through arteries and into hearts.

The technique is quite safe, relatively new, and is piling up more and more inside knowledge of the most publicized and sentimentalized of our organs.

The hearts belonged to 10 men. Four were normal and the other six had only minor defects. Once the tiny-diameter tubes were in place, the men let a nitroglycerin pill dissolve under their tongues.

Almost immediately their heart muscles began taking more oxygen out of the blood. The flow of blood through the hearts increased and the scientists "presumed" this was caused by the increased oxygen consumption.

At the same time, the heart blood vessels enlarged and thus offered less resistance to the flow of blood. But the work rates of the hearts remained unchanged which meant the work was done less efficiently.

Nitroglycerin is one of the most commonly prescribed heart medicines. It relieves the choking sensation of angina or "coronary insufficiency" and the crises of very high blood pressure so quickly that persons given to those conditions carry the pills with them, just in case.

About three-fourths of the states engage in growing tobacco crops.

medicine, very little was known about how it worked. The scientists, who work at Harvard Medical School and the U. S. Navy hospital at Portsmouth, N. H. were the first to study nitroglycerin in its direct impact on human hearts.

Stretches Blood Vessels
Since its effect on the heart was discovered in 1867, it has been classed as a stretcher of heart blood vessels, and that it is, of course. However, Brachfeld, Bozer and Gorlin showed this was a secondary effect and its big effect was to increase oxygen use by the heart muscle.

From the medical standpoint the importance of this was the demonstration that nitroglycerin is not a "pure dilator" of heart blood vessels, because a "pure dilator" would enlarge the arteries without changing the heart's rate of using oxygen. Under many circumstances, that's a useful thing for doctors to know.

Previous studies were handicapped by less exact methods and the necessity of using animal rather than human hearts. As a result, their findings were often contradictory.

And so the picture was anything but clear and many unsupported assumptions were being made as to what nitroglycerin didn't and did do inside hearts. The scientists reported their clearing of the picture to a technical organ of the American Heart association.

LEGAL NOTICES

NOTICE TO CREDITORS
IN THE CIRCUIT COURT OF THE STATE OF OREGON FOR JACKSON COUNTY
PROBATE DEPARTMENT
In the Matter of the Estate of Frank A. Dufek, deceased.

NOTICE IS HEREBY GIVEN that I have been appointed Executrix of the above estate by an order made therein on April 28th, 1959; all creditors having claims against said deceased are hereby notified to present the same, duly verified and with proper vouchers attached, to me at the office of Roberts, Kellington & Branchfield, 201-3 U. S. National Bank Building, Medford, Oregon, within six months from the date of this notice.
Dated at Medford, Oregon, this 30th day of April, 1959.
Lesta Dufek
Executrix

MAIL TRIBUNE, Medford Or.
Thursday, May 21, 1959

LEGAL NOTICES

No. 10351
NOTICE OF HEARING ON FINAL ACCOUNT
IN THE CIRCUIT COURT OF THE STATE OF OREGON FOR JACKSON COUNTY
In the Matter of the Estate of JOSEPH FRANKLIN, Deceased.

NOTICE IS HEREBY GIVEN that the undersigned has filed her final account as administratrix of the estate of Joseph Franklin, deceased, with the Circuit Court of Jackson County, Oregon, and that said Court has set the 15th day of June, 1959, at the hour of 10:00 o'clock in the forenoon of said day in the Court Room of said Court in the Court House Building at Medford, Jackson County, Oregon, as the time and place for hearing objections thereto and the settlement thereof.

DATED and first published this 14th day of May, 1959.
Jean L. Franklin,
Administratrix
HARRISON AND PIAZZA
Attorneys for Administratrix

NOTICE OF SALE
Notice is hereby given that on the 29th day of May, 1959, at 10:00 o'clock A.M., at the front door of the Jackson County Courthouse in Medford, Oregon, I shall sell at public auction for cash to the highest bidder, all the right, title and interest of Joseph Ellsworth Darnwood and Edna M. Darnwood, in the following described real property, to-wit:

Beginning at the Southeast corner of Lot 2, Block 1 of the Riverside Addition to the City of Gold Hill, Jackson County, Oregon, according to the official plat thereof now of record; thence North 77° 20' East 141.9 feet; thence South 77° 20' East 81 feet to the Northeast corner of said lot; thence South 12° 40' West along the Easterly line thereof 141.9 feet to the point of beginning.

Said sale is made pursuant to an execution issued out of the Circuit Court of the State of Oregon, for the County of Jackson on the 22nd day of April, 1959, in a matter wherein Charles B. Beck is Plaintiff and Joseph Ellsworth Darnwood and Edna M. Darnwood are Defendants.

Dated this 28th day of April, 1959
Joseph B. Walsh, Sheriff
Jackson County, Oregon.

No. 10,111
NOTICE OF HEARING ON FINAL ACCOUNT
IN THE CIRCUIT COURT OF THE STATE OF OREGON FOR JACKSON COUNTY
PROBATE DEPARTMENT
In the Matter of the Estate of Fionnie M. Woodridge, deceased.

NOTICE IS HEREBY GIVEN that the undersigned has filed its Final Account and Report in the above entitled estate, and that by order of the Circuit Court in and for Jackson County, Oregon, Probate Department, a hearing upon the same has been set for Monday, June 22, 1959, in the Circuit Court Room at the Court House in Medford, Jackson County, Oregon, at the hour of 9:30 o'clock A.M. All persons having objections thereto are hereby notified to present the same on or before such time.
Dated this 14th day of May, 1959.
THE FIRST NATIONAL BANK OF OREGON, PORTLAND
Executor
Roberts, Kellington & Branchfield
Attorneys for Executor

Centennial Offers Something for Everyone

Exposition, Trade Fair Scheduled to Open on June 10

Portland—Oregon's Centennial celebration this summer expects to have something for everybody.
In Portland, the 65-acre Centennial Exposition and International Trade Fair opens June 10. It will run for 100 days until Sept. 17.
Throughout the state traditional events, such as the Pendleton Roundup, the Ashland and Shakespearean festival and the Portland Rose Festival, will be expanded. Hundreds of other events are being held in communities for the first time.
Culture and history are being marked in every county. The Portland Symphony, along with other musical



groups, will tour the state. The San Francisco Opera company will perform in Portland.
State-Wide Contests
State-wide art, sculpture, poetry, music and literature contests are being sponsored by the state. Much of the best of the states culture will be on display at the Exposition.
A major feature of the Exposition, much of which is being held in an 11-acre building, the second largest in the world, is the International Trade Fair, which runs for two weeks.
The fair has under contract nearly 30 nations, making it the largest such fair ever held on the west coast and the second largest yet held in America. After the trading at the fair ends, the exhibits will

state's built-in assets, will occupy a wing of the Exposition hall in a huge panoramic display.
Most of the counties in Oregon, along with the state of Alaska, are planning displays to show off special features of their areas.
Connecting all these points is a communication system, large enough to take care of the telephone traffic of a city of 4,000 people. In addition special microwave towers are being erected to relay television shows, such as the Art Linkletter's House Party that will originate at the Exposition for a week during the summer.

In order to coordinate all of the hundreds of events, special information centers have been set up around the state on the main highways entering Oregon.
Oregon expects 6 to 8 million visitors this summer. Housing them will be a gigantic job. A housing information center has been set up in Portland. When hotels, motels and trailers are filled, some 5,000 private homes will be made available for the overnight guests.
Spend Two Days
It is estimated that an average family will need to spend more than two days just looking at all of the exhibits at the Exposition and International Trade Fair in Portland.
Downstate, each county and more than 165 cities have special Centennial committees who have completed programs ranging from gold panning expeditions to rebuilding the business district as a replica of the Old West. A state coordinator who handles all of these activities estimates that \$2 million in directly raised funds or donations has been spent on local celebrations outside the Exposition in Portland.
Centennial commissioners estimated the Portland Exposition value at \$20 million, including the value of the 11-acre livestock Exposition hall that was renovated at state expense and leased from a non-profit group.
History has not been neglected. Most communities have marked historical sites never before posted with signs. Every classroom is Oregon — an estimated 18,000 — received a special Centennial lesson plan kit to help teachers put over the story of the state. Three special plays about Oregon's history have been written and distributed for classrooms.
Schools Set Up
Schools have been set up by restaurant owners, motel operators, police forces and taxi firms to teach their employees more about the history and facts of Oregon so they may intelligently answer tourist questions.
Most major magazines have run special features on either Oregon history or the Centennial. Thousands of stories have been published by the nation's leading newspapers. Special radio programs have gone out over the country's networks. Outdoor advertising has been used extensively.
The latest publicity stunt is the trek of a wagon train that began a 100-day journey from Independence, Mo., historic starting place of the Oregon Trail, to Independence, Ore.
Advertising Budget
Overlaying all the publicity, is a quarter of a million dollar Centennial advertising budget for ads in national publications. This is in addition to advertising done by the State highway department and private firms.
All this effort has not come easily. Oregon had no one with experience in putting on a Centennial. Persons were hired from other areas who had taken part in various exhibitions and trade fairs.
As in all such undertakings, there have been disputes, disagreements and shifting of personnel. But now the big jobs are done. All that remains are hundreds of details, being handled on a daily basis by a management committee of the Centennial commission and by a staff of some 507 employed Centennial workers and planners. (John Snider, Medford mayor and a commissioner, is a member of the

management committee.)
Construction phase of the Exposition, now running ahead of schedule, will finish by May 15, when exhibitors will start moving in displays already designed and a building for erection at the Exposition.
A huge mural, covering some 500 feet of the face of the Centennial building, will be erected June 1. It, along with five major sculpture

pieces, is being done by professional artists under direction of architects who have planned the Centennial layout.
The commission has let contracts for concessions with an eye toward holding down prices. Also special effort is being made to provide rest areas for the Exposition visitors.

Midget Prices

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Thursday Friday Saturday

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PORK SAUSAGE	Country Style	3 lbs.	\$1.00
LAMB SHOULDER STEAK		lb.	59c
SWIFT'S PICNICS	Fully Cooked	lb.	39c

WE GIVE S & H GREEN STAMPS

LETTUCE	Large Solid	2 Heads	25c
CELERY	Fancy Green	2 Stalks	25c
BANANAS	Golden Hands	2 lbs.	29c
ORANGES	California Valencias	4 Doz.	89c
AVOCADOS		each	10c
POTATOES	U.S. No. 2 Klamath	50 lbs.	\$1.25

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JEWEL OIL	For Salads or Cooking	qt.	49c
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We haven't taken all the work out of window-washing. But you will find it's easier and faster than ever before—with this new wonder-working Glean-Up Team: Pink Clearx Window Spray and lint-free Zee Towels.

Here's how easy: Start with Pink Clearx with its new sprayer top. Press down and presto! dirt and grease dissolve right before your eyes. Best of all, Clearx never streaks and you need just one application! Next, zip off a Zee Towel and wipe off the film. Then—and here's the secret to the gleamiest windows ever—polish with a second towel. These thoughtful Zee Towels never leave a shred of evidence behind—they've given up lint forever! Zippy Zee, your windows will be spanking clean. You'll have a real Window-Wonderland—thanks to Clearx, you and Zee!



PICK UP THIS WINDOW GLEAN-UP TEAM TODAY!

In addition to hundreds of commercial exhibits, ranging from a \$160,000 exhibition home to a vast General Motors exhibit, there will be dozens of educational shows.
International Garden
Along with an International Garden of Tomorrow, containing 5000 of the newest rose hybrids and thousands of rare and exotic plants shipped from around the world, there will be an atomic energy exhibit, a Frontier Village, an Adventureland and a Gateway of rides.
Through Adventureland will be a narrow gauge railroad, over which will run three full trains, one a model of a mid-19th century steam train.
A new expanded-shale wall, built of blocks designed for the Centennial, will enclose Adventureland.
The Exposition site is just across the Interstate Bridge from Vancouver, Wash., on Highway 99. Here is enough parking to handle 17,000 cars, plus additional space for any overflow.
Special Trains
Special trains will haul Centennial visitors free from the parking area to the Exposition, a quarter of a mile away.
Handling the crowds will be a police force large enough for a city of 10,000. Firemen will be quartered on the Exposition grounds for the duration.
An Aqua Center, across the street from the Centennial, will be the scene this summer of the National Outboard Motor Boat Races. Special sight-seeing trips may be made from the center and other points.
Watershowers are planned on the week ends. Nearby will be a Navy exhibit, along with defense department exhibits of the latest missiles and other modern weapons.
A huge natural resources exhibit, showing off all of the

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ANSWER: THE DAILY NEWSPAPER IS THE GREATEST ADVERTISING MEDIUM for many reasons. One of them is that it carries the power of the printed word. People believe in a message that is permanent; one that is written. They understand it better. Also, the newspaper because of its permanence lets the reader choose his own time for absorbing the message. And once put down it can always be picked up again. The message that lives is the message that is written in the newspaper.