

—Dietz on Science  
**SCIENCE MARKS  
 'VICTORY WEEK'  
 AT EXPOSITION**

World's Convention Sees  
 Greater Conquests  
 for Future.

BY DAVID DIETZ  
 Scripps-Howard Science Editor

CHICAGO, June 28.—Last week was one of triumph for the world of science. In a setting provided by two great universities, the University of Chicago and Northwestern university, and with magnificent Century Progress fair as a background, savants from two continents have reported victory after victory over problems which had previously baffled them for decades, and, in some cases, centuries.

Half a year ago, when the American Association for the Advancement of Science was in session at Atlantic City, one had the feeling that the savants were a little bewildered by the wealth of experimental data that was accumulating in the field of physics, chemistry, and astronomy.

At the present meeting, now in session here, one feels that in the last six months, scientists have found the path out of the tangle and that science is marching forward with rapid strides to greater and greater conquests.

**Forge New Branch**

A new branch of science is being forged. It deals with the heart or the nucleus of the atom. Perhaps it will become known as nuclear physics or nuclear chemistry. It may be that both terms will come into use.

Until the present meeting, the structure of the nucleus was a puzzle which became more complicated with each new discovery in the field of atomic physics.

At the present meeting, it was demonstrated that all these discoveries fit into the simple theory of nuclear structure formulated by Dr. W. D. Harkins of the University of Chicago, a theory so simple, as Dr. Harkins himself puts it, that it required only "arithmetic and common sense."

His theory also explains the fact that each chemical element consists not of a single kind of atom but of a variety of atoms, chemically alike, but different in weight. Technically, these are known as isotopes.

**Shows Atom Has Nucleus**

Dr. Harkins showed that the lightest atom of each element has a nucleus composed of deuterons or heavy hydrogen atoms, and that the isotopes are formed by the addition of one or more neutrons.

Equally important advances were reported by other branches of sciences. Dr. A. V. Hill, famous British physiologist, told how with apparatus so delicate that it would measure a millionth of a degree of temperature, he had succeeded in measuring the heat produced when an impulse traveled over a nerve.

Other savants, American physiologists who had received their training in Dr. Hill's laboratory, told of experiments to measure the electrical and chemical changes which accompany nerve action. It was shown that the nerves recover and get ready for the next impulse by a process of breathing, absorbing oxygen and giving off carbon dioxide.

**Enumerate Accomplishments**

This work, it is expected, will lead eventually to an understanding of the processes which go on in the brain and link the outer world of things with the inner world of consciousness.

In the field of astronomy, new discoveries reported included the following:

That oxygen in the atmosphere of Mars is sufficient to support life as we know it.

That there is no such thing as empty space, a thin cloud of calcium extending everywhere.

That within our own galaxy the amount of the stuff in the calcium cloud is equivalent to the amount concentrated in the stars.

The recent measurements of distant spiral nebulae contribute additional evidence to support the theory that the universe is expanding like a gigantic soap bubble.

Physical and biological science held the center of the stage at this week's meetings. Engineering and the social science will be the centers of interest at next week's sessions here.

**GINGER ALE, NO COOKIES**

Labor Secretary Bans Pastry for Departures as "Economy" Step.

By United Press  
 WASHINGTON, June 28.—Miss Frances Perkins, labor secretary, served cookies and ginger ale for three weeks at press conferences. For "economy reasons" she now is leaving out the cookies.

**Gone, but Not Forgotten**

Automobiles reported to police as stolen belong to:  
 Mrs. E. Sutton, Warren, Ind. Chevrolet coach, 74-193, from Warren, Ind.  
 Sidney Phillips, 2124 West Tenth street, Indianapolis, from Eagle Creek and Sixteenth street.

**BACK HOME AGAIN**

Stolen automobiles recovered by police belong to:  
 Clyde Karr, 128 North Delaware street, Indianapolis, from Massachusetts avenue and East street.  
 David Ward, 318 Holly avenue, Ford road, found on White river boulevard near Washington street.  
 Ford sedan, 1932, no. 407, Meridian street.  
 Marion coupe, no. 100, no license plates, no certificate of title, no tags, found in Indianapolis, found at Senate avenue and Washington street.  
 Ford model T coupe, no license plate, no certificate of title, found in rear of 1022 South Senate avenue.

**THE EARLY BIRD**

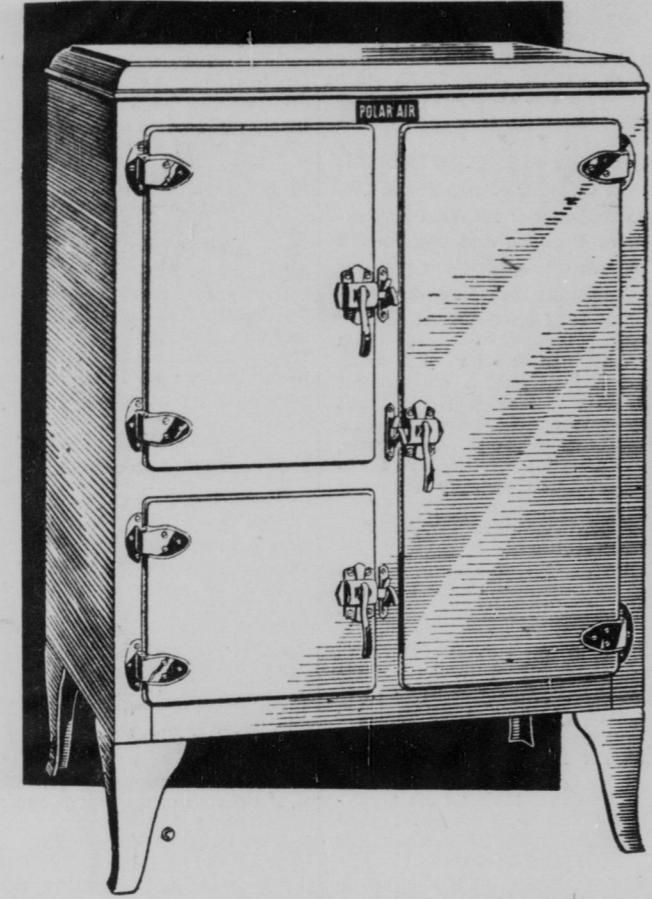
SATURDAY, JULY 1st  
 A Times Want Ad starts in the very FIRST EDITION PUBLISHED in the morning and appears in every edition on the same day.  
 TWA RI. 5551

LOWEST RATES IN CITY

# A Style and Value Scoop at Sears

## Waffle Weave Oxfords With Hand-Turned Soles

### Save With a New All-Steel "Polar-Air" Refrigerator



**\$16<sup>95</sup>**

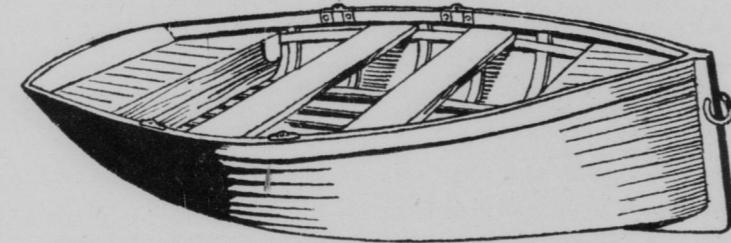
50-Pound Size  
 In Green and Ivory

The saving you make when you buy one of these roomy, enamel-finish, all-steel refrigerators isn't the only one—the approved insulation saves you real money in ice bills. Nickel-plated hardware.

75-Pound Capacity ..... \$19<sup>95</sup>  
 100-Pound Capacity ..... \$22<sup>95</sup>

Sears, Second Floor.

### Think of the Fun You'll Have in a 14-Foot Non-Sinkable Row Boat



**\$49<sup>50</sup>**

\$5 Down and \$6 a Month  
 Plus Small Carrying  
 Charge

The semi-round bottom makes it easy to row, and the air chambers are built separately for added protection. The outside is 20-gauge steel, there's a wood grille flooring, and a pair of copper-tipped oars is included.

Sears, Sporting Goods Shop, Basement.

### Casting Line



**59¢  
 Each**

50-yard spools  
 of the famous  
 "Black Hawk"  
 brand. 18-  
 pound test.  
 hard braided  
 and water-  
 proofed.  
 Basement

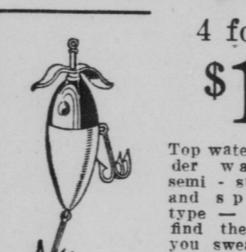
### Baseball Glove



**\$1.98**

Approved and  
 autographed by  
 Lefty O'Doul. Tan  
 oil treated  
 horsehide  
 leather lined.  
 well-worn  
 semi-  
 spoon  
 type. You  
 will find the  
 bait you swear  
 by at Sears.  
 Basement

### Artificial Bait



**4 for  
 \$1\***

Top water, under  
 water, semi-  
 surface and spoon  
 types. You  
 will find the  
 bait you swear  
 by at Sears.  
 Basement

### Vacuum Bottles



**\$1.49**

Qt. Size.  
 Maroon finished  
 Sta-Rite metal  
 case, with aluminum  
 cup. Also  
 pint size, 79c.  
 —Basement.

### Tennis Balls



**3 for  
 98¢\***

"Big Bill Tilden"  
 champion's  
 tennis ball.  
 "Big Bill" Tilden's  
 champion's  
 tennis ball.  
 "Big Bill" Tilden's  
 champion's  
 tennis ball.  
 "Big Bill" Tilden's  
 champion's  
 tennis ball.  
 Basement

### Camp Stoves



**\$2.98**

Instant light,  
 2-burner stove,  
 with built-in  
 pump and  
 running  
 gasoline tank.  
 9½x16½ - inch  
 cooking surface.  
 Basement

### FOOD VALUES

#### SUGAR

PURE CANE **\$1.25**  
 25 LB. BAG

CLEAN QUICK **5 Lb. Box 23c**

AVONDALE FLOUR **51c**  
 24-Lb. Bag

BANANAS **4 Lbs. 25c**  
 Golden Ripe

LARD **100% PURE. 6c**  
 5 lb. Limit, lb.

OLEO **EATMOR NUT**  
 lb. **7½c**

POT ROAST **8c**  
 Tender, Juicy Lb.

GROUND BEEF **3 Lbs. 25c**  
 3 Lbs. **25c**

FRANKFURTERS **3 Lbs. 25c**  
 Sears, Basement.

### This Pledge Backs the Name Cross Country

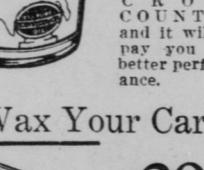
The CROSS COUNTRY name on any article is your assurance that it is the highest quality obtainable, regardless of price.

#### Motor Oil



**13¾c**

Quart  
 5-gal. quantities  
 in your  
 container.  
 Treat your  
 car's motor to  
 CROSS COUNTRY  
 and it will re-  
 pay you with  
 better perform-  
 ance.



**29c**

CROSS COUNTRY  
 auto wax  
 will give  
 a high, last-  
 ing, gloss.



**44c**

No better  
 plugs at any  
 price—Sears  
 proved it by  
 miles and  
 miles of real  
 tests. 42c ea.  
 in sets of 4 or  
 more.

