

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

World Convention Sees  
Greater Conquests  
for Future.

BY DAVID DIETZ  
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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 of 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 of the same association, 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 in 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 on 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  
Departments 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:  
W. G. Sutton, Warren, Ind., Chevrolet coach, 14-18, from Warren, Ind.  
Sidney Phillips, 2124 West Tenth street, Auburn sedan, from Eagle creek and Sixteenth street.

## BACK HOME AGAIN

Stolen automobiles recovered by police belong to:  
Clive Karer, 129 North Delaware street, Nash sedan, found on Chestnut street, near East street.  
Gaylord Hankins, 518 Holly avenue, Ford roadster, found on White river boulevard near Washington street.  
G. Marlett, 1716 North Meridian street, Ford sedan, found at 636 Highland drive.  
G. Marlett coupe, no license plates, no certificate of title, motor number 1628374, 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.



SATURDAY, JULY 1st

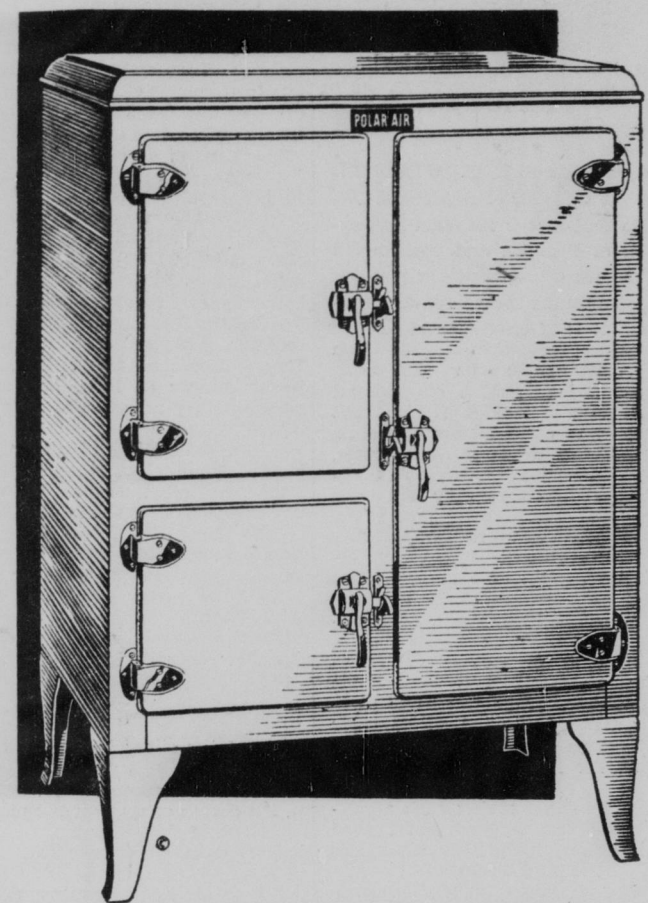
A Times Want Ad starts in the very FIRST EDITION and appears in every edition on the same day.

TWA RI. 5551

LOWEST RATES IN CITY

# A Style and Value Scoop at Sears

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



\$16<sup>95</sup>

50-Pound Size

In Green and Ivory

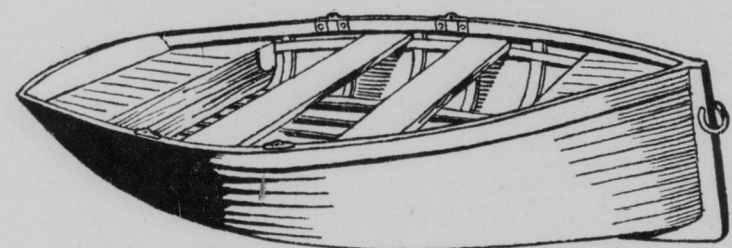
The saving you make when you buy one of these roomy, enamel-finish, all-steel refrigerators isn't the only one—the approved insulation saves you real money in ice bills. Nickel-plated hardware.

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<sup>c</sup>

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

### Baseball Glove



\$1<sup>98</sup>

Approved and autographed by Lefty O'Doul. Tan oil treated horsehide, leather lined, welted seams.  
Basement

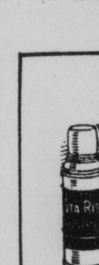
### Artificial Bait



4 for \$1<sup>98</sup>

Top water, under water, semi-surface and spoon type—you'll find the bait you swear by at Sears.  
Basement

### Vacuum Bottles



\$1<sup>49</sup>

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

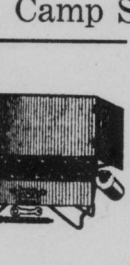
### Tennis Balls



3 for 98<sup>c</sup>

"Big Bill" Tilden's "Big Bill" Tilden tennis ball. Equal of any ball, perfectly balanced, permanent seam.  
Basement

### Camp Stoves



\$2<sup>98</sup>

Instant light, 2-burner style, with built-in pump and non-rusting gasoline tank. 9 1/2 x 16 1/2 inch cooking surface.  
Basement

## FOOD VALUES

### SUGAR

PURE CANE \$1<sup>25</sup>  
25 LB. BAG

### Soap Chips

CLEAN 5 Lb. Box 23<sup>c</sup>  
QUICK

### Avondale FLOUR

24-Lb. Bag 51<sup>c</sup>

### Bananas

Golden Ripe 4 Lbs. 25<sup>c</sup>

### LARD

100% PURE. 5 lb. Limit, lb. 6<sup>c</sup>

### OLEO

EATMOR NUT 1b. 7 1/2<sup>c</sup>

### POT ROAST

Tender, Juicy Lb. 8<sup>c</sup>

### Ground Beef

3 Lbs. 25<sup>c</sup>

### FRANKFURTERS

3 Lbs. 25<sup>c</sup>  
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.

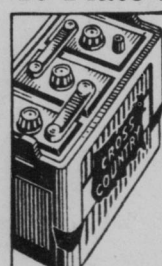
### Motor Oil



13 3/4<sup>c</sup>

Quart  
5-gal. quantities in your container.  
Treat your car's motor to CROSS COUNTRY and it will repay you with better performance.

### 13-Plate Batteries



\$5<sup>60</sup>

and Your Old Battery  
A CROSS COUNTRY battery costs but little more than a penny a day, considering service and initial cost.

### Wax Your Car



29<sup>c</sup>

CROSS COUNTRY wax will give a high, lasting gloss. CROSS COUNTRY cleaner removes grime quickly. Can, 29c.

### Auto Lamps



60<sup>c</sup>

Box  
Keep a complete set handy in your car. Two headlight bulbs and two for tail-light or dash.

### Spark Plugs



44<sup>c</sup>

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

### Brake Lining



34<sup>c</sup>

Foot  
CROSS COUNTRY 8-type flex molded brake lining won't shrink or expand. Treated to turn water and oil. 2" x 3-16".

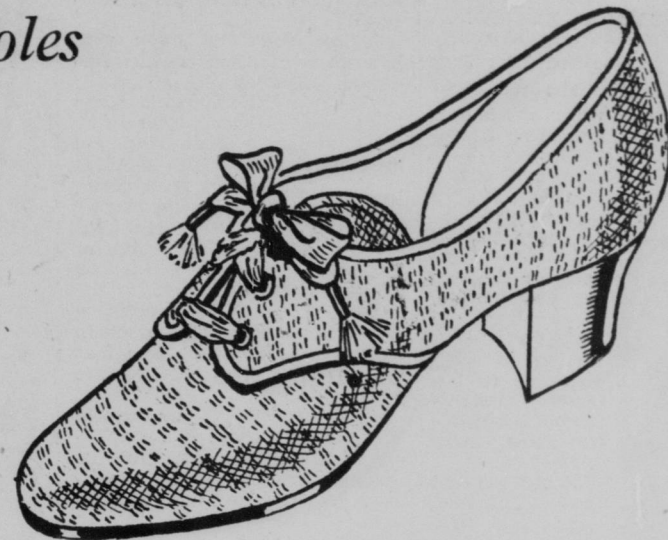
Sears, Basement.

## Waffle Weave Oxfords

With Hand-Turned Soles

\$1

Pair



There's no doubt about the newness, the smartness or the coolness of these oxfords for women. They're all white, to wear with summer dresses, sports and street clothes, and they have hand turned soles and Cuban heels. Sizes 4 to 8.

Sears, First Floor.

## "Smart Style" Prints Are Gaye Than Ever

9<sup>c</sup> Yard

These soft, fine, percale prints are in the colors you'll want this summer—all tubfast, of course; 36 inches wide.

Sears, First Floor.

### Mosquito Net

12<sup>c</sup> Yd.

Good quality, close mesh, for use wherever protection from insects is needed.

### Rayon Taffeta

29<sup>c</sup> Yd.

39 inches wide in a variety of pastel colors. For underwear, tots' things, draperies.



### 8-Ounce Canvas, 20c Yard

Two crosswise, long-staple cotton yarns are woven as one to make Sears canvas unusually strong. 36 inches wide.

Sears, First Floor.

## Cool, Comfortable Men's Sport Shirts

79<sup>c</sup> Ea.

- Fast Colors
- Mesh Weave
- Low Collar



They're just the thing for golf and sports wear—with short sleeves, in plain colors and white. Sizes 14 to 17.

Sears, First Floor.

## Run-Resistant Rayon Shirts and Shorts

39<sup>c</sup> Ea.



Regular 50c values—full cut, fast color shirts and shorts in plain colors and white, with contrasting trimming. The shorts have elastic waist bands, wide leg openings, full cut seats. Sizes 30 to 42.

Sears, First Floor.

### Men's Linen Caps



39<sup>c</sup>

Just the thing for golf and other sports. Cool light-weight linen with crash cloth caps. Sizes 6 1/2 to 7 1/2.

First Floor

### Washable Neckties



3 for 50<sup>c</sup>

Light weight, full length neckwear with lined ends, in stripes, checks and the new figures. All shades.

First Floor

If Bought at Today's Prices  
They'd Sell for \$16 to \$20

## Men's Suits

\$10<sup>88</sup>



- Hockanum flannels
- Tropical worsteds
- Basket weaves
- All-wool worsteds
- All-wool chevots
- All-wool cassimeres
- Light, medium or dark shades
- Sizes 35 to 46

Wear them now, and on through the fall and winter—their fabrics are just right for year round wear. Wool was 54c a pound when we bought these suits. It's 93c a pound now. A lot of men will buy two or three at this price.

Sears Convenient Men's Store, First Floor.

Hours Tomorrow: 9 to 5:30  
★ Also at Sears Irvington Store  
5628 E. Washington St.

SEARS, ROEBUCK AND CO.  
SATISFACTION GUARANTEED OR YOUR MONEY BACK

Park your car at Sears, free, or take the free bus to Sears from the Circle.