

Fay Van Schoiack Explains Reasons for Four Seasons

By FAY VAN SCHOIACK
"Do you suppose summer will ever get here?" people have asked as they shivered in recent cool temperatures. The reply is an emphatic "Yes." Summer will arrive officially on June 21, at 2:24 a.m. (PST).

The weather? Well, of course, that is another matter. Any resemblance to summer days, past or present, may be entirely accidental. We all know that the official arrival of summer and the coming of warm sunny days may not exactly coincide.

What is the cause of our seasons? How can the astronomers tell the exact moment that a season will officially begin? The earth's yearly journey around the sun together with the tilt or slant of the earth's axis results in seasons for the inhabitants of the temperature zones. Picturing Planet

Let us picture our planet as a huge ball pierced through the center by a long knitting needle with both ends protruding well above the surface of the ball. The knitting needle will represent the axis of the earth and the protruding ends the North and South poles. (Of course we know that the axis and poles of the earth are imaginary.)

Place the earth, South Pole down, on a flat surface, with the axis straight up and down, or perpendicular to the flat surface. If our planet remained in this position, we would have only one season, instead of four, even though it traveled around the sun once each year.

However, the axis of the earth is not perpendicular. It is slanted or tilted 23 1/2 degrees away from perpendicular. In any circle there are 360 degrees, so 23 1/2 degrees is about 1/15 of the length of the circle. If we find the number of inches around the ball and divide by 15, the resulting answer will be the distance to tip the North Pole away from perpendicular or a line straight up and down in relation to the flat surface.

If you tip the North Pole to the right from perpendicular you will find that the South Pole comes up to the left of the perpendicular exactly the same distance.

Never Changes
The earth always remains in this tilted position. The distance of either of the poles from the perpendicular never changes. But, though the earth remained tilted, we would still have only one season if we did not make the yearly trip around the sun.

"How does the earth's journey around the sun influence the seasons?" someone may ask. Shall we try an experiment? Let a lamp on a table or any flat surface represent the sun. Take any straight stick, pencil, or ruler and place a hand at each end of it, hold it near the side of the lamp and perpendicular in relation to the table. Have

the right hand on the top of the stick to represent the North Pole of course the left hand at the bottom of the stick will be the South Pole.

Now tilt or slant the stick, so the right hand is closer to the sun than the left. (The amount of slant does not matter for this experiment but be sure to keep the stick in the same position.) The North Pole being nearer to the sun would get the most heat and the northern part of the earth would be having its spring and summer seasons.

Opposite Side

Carefully maintaining the same slant of the stick, move it to the opposite side of the lamp. The South Pole will now be closer to the sun and so experiencing spring and summer while the northern part of the earth would be having fall and winter.

Due to the slant of the earth, the light of the sun extends past the North Pole during our spring and summer, but does not reach the South Pole. In our fall and winter the condition is reversed.

While it has been proven many times over that the earth travels around the sun, it appears to us that the sun is traveling around the earth. (You have all seen the trees go down the road in the opposite direction from which you were driving, haven't you?)

Due to the yearly journey of the earth and the tilt of the earth's axis, the sun seems to cross the equator (imaginary line around the center of earth) twice each year. After crossing the equator, the sun seems to travel away from the equator, either to the north or south, the exact number of degrees which the earth's axis is tilted away from the perpendicular, or 23 1/2 degrees.

Spring, Summer

On or near March 20, the sun crosses the equator from the south to the north and our spring

Brethren Group Picks Moderator

Eugene—(U.P.)—The national Church of the Brethren, at their 170th recorded annual conference on the University of Oregon campus here, has elected Dr. A. C. Baugher as national moderator.

Dr. Baugher, president of Elizabethtown college, Pa., succeeds Paul M. Robinson, president of Bethany seminary, Chicago.

About 3200 representatives of the church are attending the conference here. The church's delegate body, composed of 650 to 700 pastors and lay workers, elected Raymond R. Peters, executive secretary of the Church Federation of Greater Dayton, Ohio, as alternate moderator. Chalmers E. Faw, professor of

begins. Three months later, on or near June 21, the sun has reached a point 23 1/2 degrees north of the equator and this marks the beginning of our summer.

The sun now travels towards the equator and crosses to the south on or near September 20, which is the first day of our fall or autumn. Again, the sun moves away from the equator. This time to the south until a point 23 1/2 degrees south of the equator is reached. This is the first day of our winter, and occurs on or near December 21. The sun completes the cycle by again traveling toward the equator, which it now crosses from south to north, on or near March 20, and it is spring once more.

On Thursday morning, June 21, at 2:24 a.m. (PST), Old Sol reaches a point 23 1/2 degrees north of the equator and our summer officially begins. This day has been named the summer solstice which means "sun still" as the ancients thought the sun paused for a few moments before starting on its journey back towards the equator.

American Can To Start Production at Salem

Salem—(U.P.)—Production will start next Wednesday at Salem's new plant of the American Can company.

Plant Superintendent J. G. Griffin said cans will start rolling off the line at the rate of 450 a minute after Gov. Elmo Smith throws the switches in a brief ceremony.

the New Testament at Bethany, was named conference secretary and a Northwest man, the Rev. S. Loren Bowman, Wenatchee, Wash., was elected to the General Brotherhood board.

The conference approved by a unanimous standing vote a benevolence goal of \$1,500,000, largest ever voted by the Brethren church.

Standards Ordered For Gas Pipe Lines

Salem—(U.P.)—Public Utilities Commissioner Charles H. Heltzel Friday ordered adoption of standards of service for construction and maintenance of pipe line and facilities to distribute natural gas.

Heltzel said the availability of natural gas this fall will greatly increase the use of gas as fuel and will cause some increase in pipe line pressures. He said in view of this and the development of new materials and designs, a new construction code for gas distribution systems was needed.

The new code will replace regulations prescribed in 1937

Registered Republican Wins Democratic Post

Salem—(U.P.)—Attorney General Robert Y. Thornton said Friday that a registered Republican was the official Democratic candidate for county commissioner after he received the highest number of write-in votes on the Democratic ballot.

The nominee had not filed for and 1942.

Most of the Oregon code was adopted from the American Standard association code on gas transmission, distribution and piping system. Hearings on the code were held in May.

Dead line Sunday Classified in at noon Saturday.

any public office but accepted the election, Thornton said.

The opinion was requested by the district attorney for Hood River county.

A tornado advances across the earth at a speed of 20 to 40 miles an hour.

Washington—(U.P.)—Hearings have been scheduled for June 22 before the Senate Interior and Insular Affairs committee on amendments offered by Sen. Richard L. Neuberger (D-Ore.) to the western water rights bill.

Read and Use Classified Ads

• For a **GUARANTEED GOOD USED CAR** Before You Buy Be Sure To Look the Lot Over at . . .

MORSE MOTORS
1201 N. RIVERSIDE



MEDFORD
PENNEY'S
ALWAYS FIRST QUALITY!

pick up and fly to Penney's! We have

OCEANS OF NOTIONS

special! **4^c** EACH

- Curlers
- Hair Nets
- Combs
- Ash Trays
- China Cups
- Address Books
- Snack Coasters
- Snack Bowls
- Clothes Hangers
- Utility Boxes
- Tomato Slicers
- Pin Cushions
- Snap Fasteners
- Sewing Thread
- Darning Needles
- Thimbles
- Straight Pins
- Hat Pins
- Picture Hangers
- Bowl Covers
- Thumb Tacks
- Make up Mirrors

ONLY A FEW ITEMS LISTED HERE!
HUNDREDS AND HUNDREDS OF WANTED NOTIONS FOR ALL THE FAMILY! CALL UP YOUR FRIENDS . . . GET UP A GANG . . . COME STOCK UP AN ARMFUL AT PENNEY'S UNBELIEVABLE SPECIAL LOW PRICE!

MEDFORD
PENNEY'S
ALWAYS FIRST QUALITY!

ADONNA® PLISSE SLIP--
Completely Peek-Proof

Shadow panels back and front mean you never worry about see-through in this Penney slip! Bodice and flounce are trimmed with pleated nylon and acetate-nylon lace. 4-gore cut for smooth fit . . . no-iron!

298
Sizes 32-44

Fine Cotton Broadcloth
Another Adonna® Classic

4 gore cut, 80 square sanforized cotton broadcloth front shadow panels. With eyelet batiste trim. Now in average and tall lengths. In white only.

198
Sizes 32 to 44

Beautiful Dacron-Nylon
Tricot Slips Styled
Just for You

Beloved Adonna® classic in Dacron® and nylon tricot! Well-fitting 4-gore slip has permanently pleated nylon bodice and flounce, insets of acetate-nylon lace. Washes easily, needs no ironing. White, colors. Sizes 32 all the way up to 44! Always a welcome gift!

398
Sizes 32-44

Your Summer Wardrobe starts with Penney's Foundations

OUR POPULAR 4-WAY BRA CONVERTS TO ANY NECKLINE!

Just switch the shoulder straps. Presto! you can wear this Penney bra off the shoulder, strapless, halter or regular style. It's pre-shaped with foam rubber, U-wired for marvelous support. White broadcloth or acetate satin. AA, A, B cup sizes.

149

PENNEY'S DAINTY NYLON LACE ELASTIC PULL-ON

Ideal lightweight control for the junior, cool and dainty for spring-time wear! Stretchy nylon lace elastic keeps you in good form, won't exert excess pressure. Acetate satin elastic panel for tummy control. White, pink or black. Regular and extra sizes. Sanitized.

girdle or panty with detachable garters **398**

I Dreamed I Moved in the Best Fashion Circles Thanks To Maidenform's Chansonette

You're well rounded in all fashion subjects . . . when you wear circular-stitched Chansonette, with its spoked-center cup design to accentuate your curves. For the lift of a lifetime . . . try Chansonette today! In your favorite fabrics, cotton and satin. Sizes 32 to 40. A-B-C cup.

790

ADONNA HIGH WAISTED GIRDLER, PERFECT FOR THE NEW SHEATHS!

You'll find it only at Penney's—this nylon zipper girdle that molds you to fashion's form! Boned front panel flattens the tummy, up and down stretch back is strict about that derriere! Nylon and rayon leno with satin elastic. White or pink. Sizes 26 to 38, 40, 42. Sanitized.

790

Adonna Sanitized pull-on is proportioned all ways—fits as if made for you alone! Circular knit elastic in short, average or tall lengths. Sizes small, medium, large.

398

Penney's circular stitched bra is budget-priced, Sanitized to stay sweet and fresh. White cotton broadcloth in A, B, C cup sizes.

98c