



Booms and Slumps Laid to Sunspots

Various Crises Are Linked to Solar Activity.

Cambridge, Mass.—In line with the "sunspot theory" of economic and industrial activity, there has come from Harvard's astronomical observatory a declaration by Dr. Loring B. Andrews, astronomer, that sunspot activity can be correlated with such varied phenomena as weather conditions, economic tranquility and distress, wars, floods and international crises.

While admitting the correlation between earthly phenomena and unusually active spots on the surface of the sun, Doctor Andrews, in discussing the subject, states that the actual source of the correlation must be sought in other solar peculiarities which are correlated in turn with sunspot activity.

Especially "amazing," according to Doctor Andrews, is the correlation of economic prosperity and depression with periods of sunspot maxima which has held true over a period of the past two centuries. Using this correlation, the astronomer states that "it would seem that all the king's horses and all the king's men cannot bring prosperity back again; but the sun can."

With a sunspot maxima expected

in 1939, the Harvard scientist tentatively predicts an increase in stock market activity at that time, for "as the number of sunspots mounts, prosperity turns the corner; as the number of sunspots diminishes, prosperity hides itself in a depression."

"It may be pointed out," he continues, "that the last sunspot maximum was in 1928, an epoch in the economic history of the United States to which one commonly refers as the good old days." The last sunspot minimum occurred in 1933. Some one has mentioned an economic depression similarly dated.

The blemishes on the face of the sun, with which Doctor Andrews finds so many correlations, have been demonstrated, according to the scientist, to be huge solar cyclones, whirlwinds in the solar atmosphere, accompanied by pronounced magnetic conditions. Each sunspot, he says, is a huge magnet as a result of the whirling of electrically charged particles within it.

Sunspots have cycles of eleven years. Maximum spottedness has come in 1906, 1917 and 1928 since the turn of the century and minimum spottedness in 1901, 1913, 1923 and 1933.

Since the sun rotates on its axis in a period of 25 days, Doctor Andrews states that it is impossible for the earth to be permanently in the range of a sunspot or a sunspot group, but when the spots are near the earth, such terrestrial phenomena as auroral displays, electric storms and effects on long-distance radio reception are noted.

Sunspot Activity
"All of these phenomena," Doctor Andrews declares, "show a close correlation with sunspot activity and particularly with the passage of an active sunspot group across the central area of the sun's disk; the aurorae, borealis and australis, perform beautifully, magnetic compasses oscillate to and fro over a small amplitude centered in their normal position, and long-distance radio reception is either improved or hampered. In connection with the last of these it should be said that whether reception is improved or hampered depends upon the wave-length of the signals and other factors related to radio transmission."

The explanation of the correlation between sunspot activity and economic prosperity and other items on earth is explained as being indirectly caused by the solar phenomena.

When sun spots are at a maximum, he finds, the earth's receipt of heat from the sun is above normal. Strangely enough, this does not make for warmer weather because it increases the evaporation of water from the earth's surface and therefore the weather is cooler than usual and there is increased rainfall.

UNIFORMITY IN VARIETY

By LEONARD A. BARRETT

No two leaves of the forest are exactly alike. Of the many different kinds of trees, no two have exactly the same dimensions. The beauty of a tree is symbolized in its symmetry; but here again nature publishes itself in many forms, reaching from particles and spicula, through transformations innumerable to the



highest symmetries which are subject to the dictum of variety. Flowers show marked variety. A rose will vary in every one of the same species. Yet we may recognize the different roses by their correct botanical names and give them specific descriptions, both of form and of beauty. Nature is always consistent though she would try to contravene her laws. She equips herself with one thing—old yet ever new—the one thing needful: life. It is from life that nature com-

GAY ENSEMBLE



Gay flowers in red and orange tones with green leaves almost appear to be painted on the white background of this unusual silk print ensemble. The short box-like jacket has square shoulders and accordion pleated sleeves.

pounds her creations and from it that she finds the power of uniformity in variety.

Growth and reproduction are essential characteristics of life, because all living forms are constantly reaching a limit of growth, and dying. Living things reproduce themselves, but one of the facts of reproduction is that the species is alike in form, but always slightly different. We speak of this slight difference as individuality. Every species changes all its individualities in each generation. Thus does "one touch of nature make the whole world kin," and yet is each touch an individual touch revealing variety in uniformity. We may classify dogs according to their breeds and distinguish a German police dog from all other species, and one German police dog from another.

If the law of variety did not function, this would be a very monotonous world. The differences existing in the species itself are a challenge to the spirit of investigation as well as an element of appreciative value. The law of variety is not difficult to understand, since variations are caused by both heredity and environment. The uniformity in nature is also evident when we remember that "ontogeny recapitulates phylogeny"—or the history of the individual repeats itself in the history of the race and vice versa. Every acorn is subject to the laws of growth, development, and disintegration. A forest

The Household

By Lydia Le Baron Walker

IT IS a good idea to go around with a screw driver and tighten screws frequently. It is amazing how many minor repairs can be avoided by doing just this very thing. Mechanical devices for labor saving are apt to have a screw or two somewhere in their mechanism, and unless these screws are kept tightened, trouble is brewing.

Accidents also can be avoided by going the round of the house with the screw driver, and using it as needed.

One of the kitchen utensils that must have the screws in firmly is the coffee percolator handle. If one loses its grip, the person using the percolator, may get badly scalded. Be sure the screws in electric cord end-pieces are secure. I know of one woman who had a rather serious accident when the screws came out of the cord she was using with the electric flatiron. So don't forget to make good use of the screw driver on such screws.

Soap Screws
When a screw has to be renewed, or when the old one comes out and must be put back again, there is a little trick that will make the job easier. Soap the screw! Press

the screw down into soap, and give it a little twist. Or, holding the head of the screw, just beyond the edge of the cake of soap, turn the screw around on the top of the cake, pressing the thread down enough to get it soaped. Now use the screw wherever it is wanted, and you will find that it is much easier to turn, and also it fits more securely. This is good, especially, when the screw has been used in the hole before, and is a bit loose. Screws should be very firm and tightly fitted.

There is no illumination for a dining table that is comparable to candle light. The tapers should be high enough not to intercept the vision of those looking across the table or else the candles should have shades. It is assumed in these instances, that the candles are near the center of the table. Candles that are not high, and are minus shades, can be placed nearer the edge of the table, and be satisfactory.

Number of Candles
It should be remembered that four candles are the correct number. Never use three, for three candles are too closely associated with church significances with a sad trend, to make the number suggest gaiety, and merry meals are good for the digestion. When the table is small, or where the candles are for decoration merely, and not for the sole illumination, two candles are satisfactory.

Candlestick Doilies
To avoid this little annoyance, let me suggest using candlestick doilies. These can be as simple as circles or squares of dull finish damask table oilcloth to match the tablecloth in color. They will be inconspicuous, and are recommended for summertime cottage use, or for dining nooks in city homes, or for eating porch meals.

The Colon Archipelago
Colon is the official Spanish name for the archipelago popularly known as the Galapagos Islands. Colon is Spanish for Columbus and this is the name used by the Republic of Ecuador, to which the islands belong.

Even a Genius Must Eat



Donald McMurray, the thinking machine who completed a four-year course in ten months, and who now races for a master's degree, a year's work, in seven weeks, takes his food and drink from the hands of his bride, the former Evelyn Ehrlich, as he studies.

STAR DUST

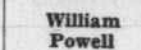
Movie • Radio

By VIRGINIA VALE

JOE E. BROWN has been having a grand time for himself lately. With his latest picture, "Earthworm Tractor," welcomed by the public as one of the funniest he's ever made, he started off on a vacation.

Being a rabid baseball fan, he took in a few games when he reached the East enroute to Europe. In New York he went to a double-header between the Yankees and the St. Louis Browns, and presented to that sensational new Yankee outfielder, Joe DiMaggio, the award for being the most valuable player in the Coast league in 1935.

William Powell has sold his ornate home with the gold door knobs and is living in simpler quarters. Those rumors of a romance between him and Jean Harlow still persist—but apparently everybody who's unattached wants to marry him nowadays, and that includes girls who've never even seen him, except on the screen. Incidentally, Powell is regarded by actors everywhere as one of the most skillful and talented members of the profession—a tribute which is justly deserved.



William Powell

Apparently nobody's happy any more until they've seen Hollywood. Young John Jacob Astor and his wife are the latest recruits of note; they are on their way to the film metropolis in a private car.

Bob Burns (don't tell me you haven't heard him and his bazooka on the Bing Crosby broadcasts!) is having honors heaped upon him. He worked in "Rhythm on the Range" with Bing, so the picture's premiere was staged in Little Rock, Ark., because Bob hails from the Ozarks.

Once upon a time The Revelers were the most popular quartette on the air. From time to time one of the sweet singers would drop out and make a name for himself all alone—Jimmy Melton was one who did it, Frank Luther was another—but somebody else would step in and the result would still be swell. You don't hear so much about them as you used to, but they're still on the air, at 6:35 afternoons—and they're still one of the best.

Cowboys have for years been known as devoted fans when Western pictures are shown, a fact which puzzled one motion picture executive so much that he questioned some of them about it. He wanted to know whether they went because the pictures were so much like their own life. "Oh, no, they ain't like our life at all," one of them explained. "We go because maybe we think that's the way other cowboys go on."

There'll be excitement on the air waves in September, when Major Bowes and his amateurs go into action at the same time as the "Showboat" broadcasts. Nobody's sure which program the great public will prefer—some say the listeners-in are getting tired of amateurs, and others claim that "Showboat" has been sailing too long.

"San Francisco" is a grand picture, and is making money everywhere it's shown, especially in San Francisco. Yet the Chamber of Commerce of that city is still trying to get Metro to take out the earth quake scenes! Very wisely, Metro is refusing—lots of people go to see the picture especially to see them. The picture has added to the popular Clark Gable's following and has demonstrated again that he has a great deal of versatility as an actor.

ODDS AND ENDS . . . Remember "Baby Peggy"? She's a big girl now, making a screen come-back under her whole name, Margaret Montgomery, and you'll see her in a small part in "Girls Dormitory" . . . Ginger Rogers had a birthday party recently, with tiny dancing figures representing herself and Fred Astaire on top of the cake. When "Swing Time" is finished Fred will go to England with his wife and son for a vacation, and Ginger hopes to take a vacation in Hawaii before starting "Mother Carey's Chickens" . . . It looks as if that \$5,000,000 suit which Paramount has brought against Samuel Goldwyn for signing Gary Cooper must possibly be a publicity stunt . . . Surely Gary can sign with anybody he wants to when his present contract expires . . . The Tower of London was the scene of the pre-view of "Nine Days a Queen," an English picture based on the story of Lady Jane Grey.

Foreign Words and Phrases

Abusus non tollit usum. (L.) Abuse is no argument against the proper use of anything.
Auri sacra fames. (L.) Accursed greed for gold.
Bon chien chasse de race. (F.) A good dog hunts from instincts; blood will tell.
Coute que coute. (F.) At any cost.
Esprit des lois. (F.) The spirit of the law.
Favete linguis. (L.) Avoid uttering ill-omened words; maintain silence.
In nubibus. (L.) In the clouds; not clear.
Doux yeux. (F.) Soft glances.
Modus operandi. (L.) A mode of operating.
Pot-pourri. (F.) A hotch-potch; a medley.
Tempus edax rerum. (L.) Time, the devourer of all things.
Lite pendente. (L.) During the trial.

Week's Supply of Postum Free
Read the offer made by the Postum Company in another part of this paper. They will send a full week's supply of health giving Postum free to anyone who writes for it.—Adv.

Grass Overhead
One contented with what he has done stands but small chance of becoming famous for what he will do. He has lain down to die. The grass is already growing over him.—Bovee.

Take Your Choice of FLY PAPER—FLY RIBBON—FLY SPRAY



falling hair
Rub Cuticura Ointment into scalp—leave overnight—then wash with rich lathering, medicated Cuticura Soap. Helps clear out dandruff, relieves itchy scalp and promotes lustrous hair growth. Start the Cuticura treatment today. FREE Sample—write "Cuticura" Dept. 32, Malden, Mass.

HEARTBURN FROM OVEREATING?
Hurried or overeating usually causes heartburn. Overcome heartburn and digestive distresses with Milnesia, the original milk of magnesia in wafer form. Thin, crunchy, deliciously flavored, pleasant to take. Each wafer equals 4 teaspoonfuls of milk of magnesia. 20c, 35c & 60c sizes at druggists.

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Then give some thought to your kidneys. Be sure they function properly for functional kidney disorder permits excess waste to stay in the blood, and to poison and upset the whole system.
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DOAN'S PILLS

HITS FOUR HOMERS



Chuck Klein, slugging outfielder of the Phillies, became the fourth baseball player to clout four home runs in a single game, when he achieved that distinction in a recent game against Pittsburgh.

AMAZE A MINUTE

SCIENTIFACTS BY ARNOLD

INVENTIVE SWISS . . .
SWISS PEOPLE, MAN FOR MAN, ARE MORE THAN THREE TIMES AS INVENTIVE AS GERMANS, FOUR TIMES THE FRENCH, FIVE TIMES THE BRITISH, AND SIX TIMES MORE INVENTIVE THAN AMERICANS.

POTATO WATER—
THOUGH A POTATO APPEARS QUITE SOLID, IT IS COMPOSED MORE THAN THREE-QUARTERS OF WATER.

MY HEART BEATS—
EVERY TWENTY-FOUR HOURS ONE'S HEART BEATS 100,000 TIMES.

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