

# Varied Heat of Sun's Poles Einstein's Latest Theory

Mount Wilson Observatory, Calif.—An interesting theory was presented to astronomers by Dr. Albert Einstein on Jan. 20th after he had looked through the instruments of the world's greatest solar observatory here.

The north and south poles of the sun have a different temperature from that of the equator, or at least a difference in temperature exists between the sun's poles and equator, the world-famous physicist suggested.

This theory may explain some of the mysteries of the gigantic cyclones, the sun spots, observed in the sun's atmosphere.

Dr. Einstein suggested that were the sun's poles either hotter or cooler than its equator the similarity between the sun's cyclones and the storms on the earth might be explained.

Dr. Einstein's visit to the observatory was perhaps the most momentous event in his sojourn in southern California. It was a small group that gathered at the observatory.

There were Dr. Walter S. Adams, director, and Dr. Edwin P. Hubble, one of the world's foremost astron-

omers; Dr. William Wallace Campbell and Dr. Charles E. St. John, astronomers of Lick Observatory; Arthur S. King, astrophysicist; Alfred H. Joy, observer, and Ferdinand Ellerman, photographer of the observatory staff. Accompanying Dr. Einstein was his collaborator and companion, Dr. Walter Mayer of Berlin.

These latest observations were at the 62-foot solar tower in which Dr. Einstein was enabled to seek the effect of the magnetic fields of sun spots. These spots are known to be cyclones in the solar atmosphere.

Dr. Einstein studied the observational methods of plumbing the depths of the sun's atmosphere and measuring conditions at different depths. The observations that the sun spot cyclones were like earthly cyclones, because their apparent origin at the poles and direction of their travel was similar to earthly storms, aroused the curiosity of the German natural scientist.

Based on this, he suggested cooler polar temperatures might exist on the sun and offer the solution to the movements of these cyclones.—The Christian Science Monitor.

# Sunday School Lesson

February 15. Lesson VII—Jesus the Friend of Sinners—Luke 7: 36-50. Golden Text—This is a faithful saying, and worthy of all acceptance, that Christ Jesus came into the world to save sinners.—1 Timothy 1: 15.

ANALYSIS  
I. THE FORGIVENESS OF SINNERS, Luke 7: 36.  
II. THE PHARISES AND SINNERS, Luke, chap. 7.  
III. JESUS AND THE SINFUL, Luke, chap. 7.

I. THE FORGIVENESS OF SINNERS, Luke 7: 36.  
It is often supposed that the penitent woman in this story is Mary Magdalene; but that is not stated, and implied. Mary of Magdala is referred to as a sinner in the parable of the woman out of whom Jesus had cast seven devils; this probably refers to an acute condition of hysteria or demon-possession, whereas the woman in this story was apparently a woman "off the streets."

Much in the story is left to our imagination, and doubtless it had been told many times in different contexts before ever it was written down; hence at first sight it is not quite clear whether the woman is forgiven because she loves much, or loves much because she has been forgiven. The parable of the debtor implies that she loves much, because she has been forgiven much, and this seems to be the meaning of the story as a whole. If this is so, we should perhaps regard the saying, "because she loved much," in v. 47, as somebody's mistaken marginal comment which was not part of the original story, or perhaps the meaning is, "she is forgiven, and you can see that she is forgiven because she loves much." The Pharisee's saying of Jesus at another time have been taken on to the story of the woman. The matter is perplexing, but not of any great importance. Jesus clearly indicates, in the parable of the debtor, that those who have been forgiven much will love much, but he may well have taught, on some other occasion, that love covers a multitude of sins. Christians tend to be fierce in their condemnation of what are called "sins of omission," or sins of neglect, toward the lack of charity and love, sympathy, and towards sins of cold selfishness. The judgment of Jesus came to him from J. Ferret.

II. THE PHARISES AND SINNERS, Luke, chap. 7.  
The incident will probably have occurred early in the ministry, for after Jesus' breach with the Pharisees it is not very likely that one of them would have invited him to a friendly visit to dine at his house. His host, it is true, treats him with more courtesy; perhaps he thinks that the peasant-prophet will not scorn to be entertained in his home. The sort of treatment Simon would offer them vs. 44-46. The party was reclining at the meal; each would be on a couch, with his feet stretched away from the table, and his left elbow resting on it. The second, as has been said, is a history rather to be viewed with a hissing rather than a wailing. The woman must have entered the courtyard, come up the verandah step, and perhaps passed through an ante-room before entering the dining chamber. How she gained admittance was not clear. We can imagine the hush and awkwardness that would fall upon the party as she entered. In silence, as we may perhaps suppose, she knelt and her tears fell on Jesus' feet. Then, though no Jewish woman would willingly do this in public, she let down her hair, and wiped his feet. Then Simon protests. What may have preceded this scene we can only imagine. We do not know what Jesus may have said to her, if indeed he had said anything, but what he had done for her is obvious.

III. JESUS AND THE SINFUL, Luke, chap. 7.  
Much of the teaching of Jesus was akin to the nobler teaching of the rabbis of his day; perhaps the most striking difference between him and them is to be found in his attitude to sinners. They would gather up their skirts to avoid the contaminating touch of such a woman as this; he came to seek out and to save sinners. Jesus never condemned sin or suggested for a moment that it did not matter; he showed at once an utter abhorrence of sin, and an unflinching love for the sinner. Therefore, life was not might be broken-hearted, repentant, transfigured and renewed when she met with Jesus. Today, do such women regard church members as she regarded Christ, or as she regarded the Pharisees?

V. 48. Jesus said, "thy sins are forgiven," more probably than "thy sins be forgiven," but neither translation is legitimate. This may well be a repetition of what he had said to her before, for the parable of the debtor suggests that she already knew she was forgiven. In any case Jesus does not seem directly to forgive sins himself, but to declare that God has forgiven. Similar, God "hath given power and commandment to his ministers to declare and pronounce to the people being penitent, the absolution and remission of their sins. The divinity of Jesus is shown, not in a mysterious divine prerogative to forgive sins on his own responsibility, but in his attitude to the sinner; for his attitude is God's.

Another of Those Laments  
Oh, for the dear dead days that were and the times I used to know.  
As I listened down in Finnegan's place to the tales of the long ago!  
Of the plight of the traveling salesman shy who came to the crowded inn.  
Of the cycling octogenarian; of the oldest elder's sin.  
Of the Scotchman's birthday present; of the piccolo player dumb.  
Of the prosperous Irish immigrant and his refuse-collecting chum,  
Of the clerk and the phonograph record, and many and many a more,  
That kept me arour with laughter till my ribs were strained a sore.  
I take me back to the good old days, when I listened with care free brow,  
To the gay lads telling the barroom jokes that my daughter tells me now!  
—Baron Ireland—London Opinion.

# Bushel of Oats Pays Barber



"I see by the papers," says Orrin Gould, farmer of Fairmount, Minn., to Albert Westergaard, barber, "that a bushel of oats is good for a haircut." "O.K.," replied the scissors expert.

# Planets Mars and Venus Possess Form of Life, Scientist Thinks

Cambridge, Mass.—At least two planets besides the Earth, Mars and Venus, may have life in some form, in the opinion of Leon Campbell of the Harvard Observatory staff.

It was absurd, he said in an recent interview to suppose that the earth was "the only peopled planet."

"Atmospheres as determined on Mars are found to be livable," he said. "The temperature in the middle of the day is 60 degrees above zero Fahrenheit. It ranges downward 100 degrees. The same range exists on our planet, but the temperature does not drop 100 degrees in a single day here as it may on Mars."

Campbell emphasized that while it was quite possible that there was some form of animal life on Mars, it was uncertain if that planet was suitable for the development of "intellectual" life.

It was equally probable, he thought, that there was life on Venus. Though the telescope, he explained, had seen both these planets markings, formerly believed to be canals, but now regarded as natural waterways lined with foliage.

# Live Normally And Avoid Colds

Medical Association Gives Nine Rules to Escape a Cold

Nine rules for avoiding colds have been published by the American Medical Association, as compiled by James J. King. Colds in America probably cause, Mr. King asserts, a loss of more than a billion dollars a year; something which would arouse instant alarm if it happened in the stock market but which the country allows to go on year after year virtually unchecked. The first rule for avoiding this enormous loss, Mr. King states, is to "keep all the organs working normally," and it is to help do this that his other eight rules are devised. "Get plenty of sunshine and fresh air," is the second rule. The third is to "eat sufficient and proper food." The fourth is to dress properly but not in clothes that are too thick or heavy. The fifth is to keep the body clean, especially the hands, as this tends to avoid infection by germs. The sixth rule is to "eliminate the body poisons through bowels, kidneys and lungs." The seventh, probably best known of all to the average layman, is to get rid of any chronic gum infections of mouth, teeth, gums or throat. The eighth principle is that the special vaccines recently developed for preventing colds may be useful for people who are especially susceptible. The ninth rule is to consult a physician promptly and frequently in the early stages of a cold so that the infection may be kept as mild as possible.

# Long Trousers Will Usurp Plus-Fours

Caps Making New Bid For Popularity — Panamas Still Rank First in Hats

New York—Kalekers, according to the Fifth Avenue stylists, are slipping out of the golfer's wardrobe. Long trousers are said to come back to the links. That is to say, those who like to be different. The whole idea (the stylists' idea) is that the massive waders don't really need knickers now.

The rough, for which they were designed, on most courses, no longer is so rough that trouser legs are likely to emerge with shin guards of tawny burrs and dry twigs.

Already plus-fours are not as baggy as they used to be.

Caps are increasing in popularity, especially in white or natural linen. White flannel trousers are by long odds the current Florida resort fashion. Here again there is a neat distinction. Most white flannel pants wearers probably will appear in the striped variety—the hotel trade, as one Fifth Avenue clothier called it. The really well-dressed man (meaning, presumably, the chap who has a villa), will wear them pristine plain. In Panama hats are first in popularity, chiefly in the optimum shape, with plain black bands. White felts are limited but smart. Semits will remain in the perennial standard among straw hats.

Men's spring suits, says Amos Parrish, fashion counselor, will rank thus:

Coats—Two button, plain full back, from 28 to 30 inches long, with notch lapels; the same in three button style, worn by many with only the middle button at the waist buttoned; six-buttoned double-breasted, with peak lapels, worn by many with only two buttons buttoned, the middle outside and the invisible inside dress button.

Colors—Light and medium grays outstanding; tans and chocolate browns next, and, of course, blue. Light blues, greens and pastel browns and tans are a limited fashion.

# World to Pay 3 Billions For Roads in Year

Programs Will Be Extended to Utmost by Many Nations to Aid the Jobless

A writer in the N.Y. Herald Tribune makes the assertion that 1931 will be the greatest year on record for road building. He further declares that "not only will the United States extend the highway construction program to the utmost, but other nations throughout the world are planning to make vast extensions to roads. It is estimated by the United States Department of Commerce that more than \$3,000,000,000 will be expended.

Among the nations that will take part in the construction works are Argentina, Canada, Japan, Mexico, Yugoslavia, Algeria, Greece, Hungary, Bulgaria, Italy, Belgium, the United Kingdom, Porto Rico and Austria.

According to the official report, Argentina will pay out \$200,000,000, Canada and Japan a least \$10,000,000 each, while Yugoslavia is prepared to expend \$12,000,000. To relieve unemployment in the Philippines there is \$6,000,000 ready for road work.

One hundred and ten nations and political subdivisions of the world will spend at least \$2,000,000,000 on roads and road construction during 1931, according to an estimate made by the motive division of the Bureau of Foreign and Domestic Commerce," says the statement by the Department of Commerce bulletin. "World-wide investigations disclose the fact that in the majority of countries of the world road building has been stimulated as a measure of unemployment relief, and as a consequence world highway budgets were larger in 1930 than in 1929, and are expected in 1931 to be larger than ever before.

"That history repeats itself in this respect at least is attested to by recent findings in India, Asia and other places where ancient roads have come to light built many years ago."

# Dr. Robb Advocates Tomato Juice Diet

Contains Vitamin C, Which Protects Scurvy, Minister of Health Points Out

Ontario's Minister of Health, Hon. Dr. John Robb, is a firm believer in the healthfulness of tomatoes—particularly in the efficacy of the juice of canned tomatoes in the winter season when the average diet is deficient in Vitamin C as a protection against scurvy and kindred conditions.

"The tomato," pointed out Dr. Robb, "is composed of an outer covering called the skin. It contains pulp, seeds and a large quantity of juice. The valuable properties of the tomato from a dietary and medicinal point of view, are contained in the juice, and the most important element in these dietary properties is a large proportion of the vitamin which protects against scurvy as Vitamin C.

"During the winter months Vitamin C in the ordinary human diet, especially that part represented by cereals, is considerably reduced, and therefore it is particularly essential that our dietary deficiency be taken care of by supplementing our regular diet with some food or food extract rich in Vitamin C. Nothing in this connection is superior to tomato juice," declared the minister of health. "A fortunate fact in this connection is that vitamin C in tomato juice is adequately protected by the presence of fruit acids, so that the heat required in the process of canning is not sufficient to materially reduce the vitamin C content of the juice.

"Orange juice has long been recognized as an excellent protective against scurvy, and its use during the winter months for infants artificially fed, has become common. We know now that tomato juice is equally as good as orange juice for this purpose and it has the advantage that the required amount of juice may be taken for the infant and the balance of the can, when we serve canned tomatoes, may be used as an excellent food for the family.

"The important point to be noted is that our regular diet requires a supplement to provide in the winter for the deficiency in vitamin C. Tomato juice adequately supplies this deficiency."

# Chinese Children Grade 95 Per Cent.

Toronto.—Five members of a Chinese family, children of the Rev. T. K. Mah, a minister of the Church of All Nations, here, newcomers to Canada, learned the English language, and then headed their respective classes at public school. Joseph, the eldest, not only headed his class but was the only pupil out of 200 who wrote departmental entrance examinations to get 100 marks in every subject. The four other members of the family secured 95 per cent. each in their examinations.

In the presence of 400 parents of the pupils, Joseph was presented with a gold medal signifying his attainment at the examinations. "They studied intensely," said Principal Little. "They did not go out as much as the average Canadian boys and girls. In short, they put every bit of energy into their school work."

It was only two years ago that the family came from China to Toronto. The rapidity with which they learned the English language is still a matter of gossip in the Humber Bay district of Toronto.

# Eating of Starchy Foods on the Wane

Urbana, Ill.—Prof. P. D. Coffey of the University of Illinois finds that from 1899 to 1927 the per capita consumption of wheat and rye flour, corn meal, and rice declined from 234.2 to 209.3 pounds. The consumption of meats is up from 156 to 159.2 pounds.

A great increase has been noticed in the use of canned goods, that of fruits from 2.3 pounds in 1899 to 9.9 in 1927, and canned vegetables from 10.3 to 28.1. Fresh fruits are now used in greater quantities, due mostly to the better methods of refrigeration which are now available.

A decline in the amount of butter used is more than made up by the increase in the consumption of oleomargarine.

# Sun Pays Surprise Visit To Northern Regions

Seattle, Wash.—The natives and white people of Point Barrow on the extreme northern coast of Alaska were in a high state of excitement on January 21st, when a fiery, red ball poised hesitantly on the horizon for 10 minutes and then disappeared.

Most of the town's population crowded to the house tops or to the summit of the nearest snow drift to catch the first sight of the sun they had had in about two months. A blizzard of several days' duration stopped at the approach of the sun and there was an immediate moderation of temperature.

# A Rack for Covers

It is very annoying to have to waste time hunting for the cover you want for a sauceman, but many housewives have just this trouble. There is nothing to hang covers by. Sometimes they are arranged against the wall on the back of a shelf, but a large assortment of covers will take up considerable space and this is not always available.

There are cover racks to be had which can be hung on the closet door or on the side wall of the closet and these will hold all the covers, making it possible to get the cover you desire without the loss of a minute. One woman never used the rack in the range oven intended to be placed under the roasting pan, so she put this in one corner of the shelf and she finds it a space and time saver as a cover rack.

# British To Patrol Transjordan Border

Jerusalem.—A step toward bringing to an end intertribal raids along the frontiers of Transjordan and the Nejd is seen in the formation of a special desert police force under the direction of Captain Glubb, who had successfully maintained order in the large desert areas of Iraq.

The scheme involves the construction of three new frontier police posts which will be garrisoned by the desert police and serve as the bases for the mobile force.

# Prince to Visit Santiago

Santiago, Chile.—The Prince of Wales will spend two days in Santiago and two days in Vina del Mar during his South American tour. It was announced recently. President Carlos Ibanez will welcome the Prince of Wales and Prince George at Los Cerros Aldrome when they arrive here by airplane from Antofagasta on February 23.

# Talkies Give British Films New Incentive

Arthur E. Lee Claims Britain Is Hollywood's Most Serious Competitor

Toronto.—Increased consumption of British films throughout the British Empire would, almost immediately, place British and Hollywood producers on an absolutely equal footing, from the financial and every other viewpoint, said Arthur Lee, American representative of two of the largest British studios, Gaumont-British and Gainsborough, in an interview here.

Introduction of sound in motion pictures, said Mr. Lee, had greatly restricted Hollywood's export markets in non-English speaking sections of the globe. This gave British studios, forging ahead in recent months till they are today the American's most serious competitor, the best chance they have ever had to break the Hollywood hold on film entertainment in British countries.

As far as Canada is concerned, there have never before been as many good pictures available as there are at the present time. Their quality is demonstrated by the fact that a dozen British films have already been booked in New York and more are to follow. Some of these have not yet been shown generally in Canada.

Mr. Lee is a former Canadian who has for years been engaged in the development of British film distribution.

# Banker Claims Dominion Will Recover First

A. W. Austin Says Depression Has Affected Canada Least of All

Toronto.—"Notwithstanding all adverse happenings, Canada has suffered less during the past 13 months than almost any other country and will recover more quickly," said A. W. Austin, president of the Dominion Bank of Canada, in the course of his address at the sixtieth annual meeting of the shareholders of the bank recently held here.

Mr. Austin referred to the soundness of the Canadian banking system and the adaptability of branch bank service to the Dominion's limited and scattered population. The president dealt exhaustively with agricultural conditions, especially in the prairie provinces, and urged the extension of mixed farming operations.

C. A. Bogert, vice-president and general manager, in his address dealt with the cause of shrinking grain prices and referred to the return of Russia as an exporter. The speaker pointed out that the shrinking of grain prices was largely due to the policy of European countries, formerly importers, in increasing their own output and placing prohibitive tariffs on foreign wheat.

Dealing with the question whether gold shortage is the root cause of the world's difficulties as many authorities assert, Mr. Bogert said: "Undoubtedly a shortage exists and the accumulation of over 50 per cent. of the insufficient total stock in the hands of two countries works to the detriment of others."

# Swamp Water Is Changed To Guard Birds' Health

Salt Lake City, Utah.—Changing the water occasionally to keep the occupants healthy is as essential in a bird refuge as in a gold-fish bowl, it has been discovered.

Soon it will be possible to "change the water" at will over 30,000 acres of marsh land in the Bear River migratory bird refuge. An elaborate system of dikes and spillways costing \$350,000 is being built to enable game wardens to release stagnant water and fill marshes with fresh water from the Bear River.

Thousands of birds died in the refuge previously from disease that developed because the swamps were not drained.

# Late Trains Clocked For Paris Commuters

Paris.—When Paris commuters tell the boss their train was late they have to produce documentary evidence in support.

Every time a train from the suburbs is delayed, officials give out slips on which are shown the time and place of departure and the exact time of arrival at the terminus.

# Birds Roost on Housetops, Dogs Yawn at Rabbits

Tanana, Alaska.—This is the winter of much game. Ptarmigan are so plentiful that the birds fly into town and are found roosting on housetops in early morning. Snowshoe rabbits romp in the streets too common for the sled dogs to bother to chase. Pot pies and roast game are regular entertainers here.

Ill fortune is often an incentive to genius.—Ovid.

# C.P.R. Net Earnings Exceed Last Year's

Montreal.—An increase of \$1,008,251 in the net profits of the Canadian Pacific Railway for the month of December, 1930, as compared with the corresponding month of 1929, is shown in the earnings report issued recently. The gain in profits was made up partly by an increase in gross earnings and partly by a cut in working expenses.

# "The Gorgeous East"

Truth Magazine (London): Speaking in the House of Lords on the evacuation of Kandahar, just a month before his death, Lord Beaconsfield said: "My Lords, the key of India is London. The majesty and sovereignty, the spirit and vigor of your Parliament, the inexhaustible resources, the ingenuity and determination of your people—these are the keys of India."

They were the last public words of a statesman who was conscious that England was the trustee of an inheritance bequeathed to her by Olive and Warren Hastings, by Wellesley, by Dalhousie, by Canning, by Lawrence, by Havelock, by Metcalfe. Having poured into India for over two centuries the wealth of London to float the loans and build the railways; having sent out to the Peninsula our greatest soldiers and most sagacious statesmen, England is now told to stand aside, and leave questions of vital importance to the safety and prosperity of the whole Empire to be settled by a handful of Indian delegates, whose authority to speak for the Indian masses has not even been examined.

# Unknown Elements Traced By X-Ray

Washington.—Confirmatory evidence of the existence and identity of "rhenium," one of the missing elements, has been discovered and checked at the Bureau of Standards.

Dr. W. F. Meggers, a government specialist in optical work, has brought out proof of the presence of the substance by application of the X-ray and the analysis of the spectral light it reflects.

The substance, provisionally set down as "rhenium 75" on the list of 92 or more basic elements making up the physical universe, is one of those whose existence has been hitherto predicted rather than discovered by natural science.

At present, rhenium is rarer than radium in the earth's stock of common modifiers, and is too young to have any known usefulness. However, like many another of the elements purposefully sought since the structural plan was laid down indicating their existence, rhenium may attain value and be put into service after natural science has more fully established its character.

# British Films

H. S. Oakley in the Fortnightly Review (London): For the first twenty years of its brief life, the industry has been controlled from the United States. . . . Today all this is in process of change. The Legislature took the first step when it passed the Films Act (1927). Science completed the process when it invented the "talkie." The British audience stood the American picture, much as it laughed at times over the grotesque mistakes that were made, but it cannot stand the American voice. It wants English as it is spoken in England, and slowly but surely it is getting it. A great industry is in process of being born. British-made films are already finding their way into every corner of the English spoken world, and they are being welcomed.

# Children Rush to School In Czechoslovakia

Prague.—School children hurry on their way to school in the villages and hamlets of Czechoslovakia, eager anticipation written on their faces. Why? They are to hear the most interesting lessons to-day by the greatest teachers of the nation, right from Prague.

Getting noted teachers has long been a problem in rural schools. Radio now brings their voices to every part of this country. Loudspeakers have been installed in even the smallest village schools and thus the children look forward to their lessons.

England's results with radio in the schools inspired this step in Czechoslovakia. At present only one hour a week will be devoted to this type of education, covering history, geography, nature study and music. A central board working with the broadcasting stations of Prague, Brno, Bratislava and Kosice will control the work and prepare special monthly bulletins for the teachers outlining preparatory work for the programs. Every state school will be equipped with sets and loudspeakers.

Not only will children benefit from these installations but adults also as the school buildings are used for extension work. Incidentally this plan is expected to stimulate a great deal of interest in radio generally. Czechoslovakia has only 235,000 listeners—out of a population of 12,000,000, compared with 455,000 in Austria with a population of but 6,000,000.

# Kaye Don To Attempt Speed Record



Miss England II, which has been reconditioned and repaired at Derby, England. Craft is ready for Kaye Don to make speed attempt on Lough Neagh.

# Women pause to reflect—when they see a mirror.

The history teacher noticed that young Smith was back in class after a long absence through illness. "I'm glad to see you here again," he said. "You'll have a lot to make up. How long have you been away?" "Since William the Conqueror landed," replied Smith.