

HEAT OF SUN IS SLOWLY LESSENING

With the Passing of Old "Sol's" Warmth Humanity Will Cease to Live

The sun is a mass of blazing heat gases 1,300,000 times larger than the earth. Its temperature varies between 8,000 and 12,000 degrees. However vast its heat may be, it can be no exception to the common law of matter. Every day it loses some of its heat and is gradually growing colder. A moment will come inevitably when its radiation will grow weaker, and after that will cease altogether. That will mean death for us in cold and darkness.

There is nothing surprising in this deduction. Millions of extinct suns which were once like our luminary are known to exist in the heavens. Every star is born and lives to die. The problem is to fix the date of its extinction.

In the opinion of many scientists, the American astronomer who has threatened us with death in 5,000,000 years has added nothing new to this subject, which scientists have discussed with good arguments for some 50 years.

The first question we must ask is, where did the sun obtain the heat with which it maintains our life in a manner so constant? Without doubt we can observe in the sun certain variations of heat. Our winters and summers are not exactly alike, but these variations are comparatively small. They are subject to a periodic flux, which brings back nearly the same condition after a certain lapse of time. The climate of the earth has not changed within historic times. Before long we shall experience exceptionally severe winters and torrid summers. What colossal source of power keeps up the sun in this manner? With what mysterious substances is this enormous furnace fed?

The physicists, Mayer and Helmholtz, have given the best answers to this question. The sun was originally much larger than it is at present. In obedience to the laws of attraction, gaseous masses contract and become smaller. The laws of physics teach us that under these conditions a gas may recover the heat which radiation carries it to lose and which is distributed in surrounding space. Calculations show that a contraction of 25 inches a year in the diameter of the sun would cause its heat to remain constant for thousands of years. The sun has a diameter of 928,964 miles. Even supposing the diminution mentioned occurred, no instrument could reveal the change in its diameter in a period of ten centuries.

Thus, according to the mechanical theory of heat, astronomers who may live in the year 12,000 of our era will be able to know what the sun's diameter has diminished about five miles since the beginning of telescopic observation.

In 7,000,000 years the sun will still radiate the same quantity of heat, but its disc will appear to man one-fourth of its present size. From that moment nothing will be able to check the loss of heat which it will undergo through radiation. The average temperature of the earth will show the effect. In our northern countries vegetation will lose a large part of its vitality. The crops will no longer ripen, and the people will press toward the equatorial region. A few million years after that all earthly life will become impossible. The sun will be covered with dark spots, which will gradually grow larger and larger.

Sun Will Lose Light

In a few tens of millions of years after that the sun will have lost its place among the light-giving bodies of the heavens. It will become a black and invisible body, a dangerous derelict of the millions of stars moving through space, but it will still continue its course through space.

From these facts and arguments we may conclude that humanity will still exist for 10,000,000 years, or perhaps 15,000,000 at the utmost. We must, however, remember that accidents may occur to shorten this life. A healthy man may reasonably expect to live to 80, but an automobile may end his career in an hour or a day. So it is with our earth.

If the earth dies in the fulness of time it will die from cold in, say, 10,000,000 or 15,000,000 years from now, but there is a host of other dangers that menace humanity. In the ceaseless journey which the earth makes around the sun at the rate of 90 1/3 miles a second, may it not some day come into collision with the heart of a colossal comet? In such a case humanity may witness a frightful spectacle, a dreadful prelude to universal death. What astronomer can assure us that a collision will not occur within a few years? Barring such an accident, however, the end of the earth from cold must be regarded as fixed.

MEXICO'S FAMOUS ROMANTIC SEAPORT

Tampico the Noted Harbor Has Many Prosperous Industries

Until the trouble arose between the United States and Mexico, the average person probably knew little about Tampico. Nevertheless, it is a town which provides one of the most remarkable of modern romances of industrial investment.

Tampico became famous in the money market at the beginning of the great oil boom, and some idea of its importance in connection with that industry may be gathered from the fact that in about ten years nearly two hundred and fifty million dollars have been invested in the oilfields in the State of Tamaulipas to which Tampico belongs.

Of this total over \$75,000,000 represents British interests, and the amazing growth of oil properties in the corner of the world is illustrated by the fact that from the 1,000,000 barrels of oil secured in 1907, the figure has grown to 16,000,000, which was last year's total.

Apart from oil, however, Tampico, which shares with Vera Cruz the greater portion of the foreign trade of Mexico, has quite a number of other prosperous industries, which have been greatly developed of late years by British and American residents, who are more numerous in Tampico than in any other part of Mexico. The excellent harbor accommodation of the town makes it the chief port for the exportation of coffee, sugar, rubber, copper ores, and asphalt, the most important products of the neighboring territory.

The soil is very rich, and it is expected that within a few years there will be an enormous increase in the flourishing trade in fruit and vegetables. Furthermore, it is a fine centre for sea fishing. Indeed, it is the happy hunting-ground of the enthusiasts who delight to catch the big game of the sea, for in no other waters can that giant fish, the tarpon, which attains a length of 6 feet or 7 feet, be found in such large numbers.

Most of the commerce of Vera Cruz is also in the hands of foreigners, although it is a place to be avoided by those who have a regard for their health. Its moist, hot climate is notoriously unhealthy, and the annual death-rate ranges from one in eleven to one in twenty of the population, mostly from lung diseases and from yellow and other fevers. The full title of the city is Villa Nueva de la Vera Cruz, or "New City of the True Cross."

The Resignation of the Blind

How is it, asks a writer in "Cornhill's Magazine," that the blind as a whole look and appear to be happy? It is for the reason that their affliction is so entirely hopeless, so utterly absolute in its deprivation, that it compels them to see the uselessness of rebelling against the inevitable. It is the knowledge that moroseness and impatience will only aggravate their misery; it is the fight with themselves, once mastered, that causes them to see the matter in the right light. When that is accomplished a new life is opened up to them, a fresh start is made—as it has to be—the outlook becomes brighter and everything has to be relearned, so that they may gain their ends without the use of vision. This it is that gives them occupation and brings contentment, but do not imagine that, however they may look or appear, they forget for one minute their affliction or their longing and desire to see. That is ever present, and their life is merely patient endurance, with the desire to prove as little burden as possible to their more fortunate fellows.

Prolific Cattle Tick

A male and a female tick hatched in April may by Oct. 15 give rise to 6,750,000 descendants, about half of which, being females, will lay about 1,500 more eggs apiece immediately or the following spring.

Take the cattleman's point of view: A thoroughly, although not exceptionally infested cow may carry several hundred thousand ticks at one time and, during one season, may be infested by four such broods. Now, 1,500 ticks, after having engorged themselves for three or four days, will weigh about a pound, this representing almost entirely the weight of the blood taken from the host. Thus the helpless beast may actually lose from 200 to 500 pounds of blood in a single season.

Little wonder that thousands of Southern calves never reach maturity; that the pitiful spectacle of valuable dairy or beef animals actually starving to death in the midst of rich, nutritious pasture is not a nightmare, but a terribly frequent reality.—World's Work.

Friction of small steel balls polishes silverware in a new machine.



SIR ROBERT L. BORDEN:-Why these Knighthoods, Sir George? What have we done to deserve them?
SIR GEORGE EULAS FOSTER:-Done? Think of my speech of March, 1909, Advocating a Canadian Navy! Think of our alliance with the Nationalists! Think of our doubling of Expenditures! Look around and see what we have accomplished during the past session of Parliament!

NOTES FROM THE RURAL DISTRICTS

BLOOMFIELD RIDGE

Bloomfield Ridge, July 30—The weather for the last week has been very warm.

Mrs. John A. Spencer and her son Judson, were the guest of Mrs. Earl A. McDonald recently.

A. L. Boies has just returned home from Blackville with his handsome black stallion, Dusty Boarder. Mr. Boies will make another trip to Blackville this week.

Mr. J. E. MacNabb of Boiestown is hauling lumber to Roy I. Smith's mill also to Dow McLellan's from Gordvale.

Mr. Wesley E. Hinch has returned home from Duray and Indiantown a vacation of three weeks.

Quite a number of sports are up river on a fishing trip.

Mr. George Moor is making great improvements to his residence. Mr. Frank MacLewee of Boiestown is head carpenter.

Rev. Mr. Archibald, Presbyterian minister of Doaktown preached here last Sunday to a large congregation. Miss Lillian B. MacLellan of Bloomfield Ridge is standing her examination papers at Doaktown this term.

Mrs. Christie E. Hunter of Campbell is visiting friends at Bloomfield Ridge.

Mr. and Mrs. James McLellan were the guests of their daughter, Mrs. William E. Hurley of Green Hill, Sunday last.

Misses Susie and Ruby G. Boies were calling on friends at the River on Friday, July 10.

Mrs. Thomas Boies, Sr., is visiting her daughter, Mrs. R. A. Norrad at the River.

Messrs. John H. Spencer and Lorance Cowie has returned home from Douglas Boom.

William J. MacLellan has been spending a week at Doaktown and Storytown.

Mrs. Donald Donalds of Doaktown and her daughter Helen were the guests of her grandmother, Mrs. Jas. Spencer.

A. L. Boies left recently for Stanley, Durham, Williamsburg, Cross Creek and Maple Grove.

Mrs. M. E. MacDonald and Mr. E. J. Gunter attended church on Friday evening at Lovesville.

Mr. and Mrs. Kenney MacDonald was the guest of Mr. and Mrs. C. E. Boies on Sunday.

Mrs. James Robinson of Pleasant Ridge is visiting friends at Bloomfield Ridge and Gordvale.

The big social, sale and dance was a grand old time. The music for dancing was furnished by Mr. Harry and Miss O. I. Norrad.

Mr. Joseph Norrad has purchased a handsome organ from an agent in Fredericton.

HAMMONDVILLE.

Hammondville, July 23—Duncan Dyrus Kelly, our enterprising merchant and mill owner, is today loading his output of laths on the cars now at Hammondville station. This enterprising merchant has purchased a block of land from Lemuel Kitchen for the purpose of erecting a commodious store near the station. The building is to have a concrete base-

Beats "Whispering Gallery"

It cost a railroad company \$30,000 to remodel a new station in a California city when it was found that every whisper in a large waiting room could be heard in every other part of the room.

Automatic Employment Bureau

A Californian is the inventor of a machine into which a person in search of employment can drop a coin and get a card, visible from outside the machine, telling where work may be found and what kind.

Marvel in Tower Construction

Collapsible towers, adopted by the German army for searchlights and wireless telegraphy, are so light and compact that two men can carry a tower that extends to 160 feet.

Motorbike Postmen

Motorcycle side cars are being tried for delivering mail, in rural districts in England and it is predicted that the horse soon will disappear from the postal service of the United Kingdom.

Takes Shine off Paint

The addition of a little water will give a lusterless finish to oil paint without injuring it as the water will evaporate.

DR. DeVAN'S FEMALE PILLS Reliable medicine for all Female Complaint. \$3 a box, or three for \$10, at drug stores. Mailed to any address on receipt of price. THE SCOBELL DRUG CO., St. Catharines, Ontario.

PHOSPHGNOL FOR MEN Restores Vitality; for Nerve and Brain; increases "grey matter"; a Tonic—will build you up. \$3 a box, or two for \$5, at drug stores, or by mail on receipt of price. THE SCOBELL DRUG CO., St. Catharines, Ontario. Sold in Fredericton by A. J. Ryaa.

UNQUALIFIED ENGINEER

James Burney was fined one dollar and costs in the police court on Friday for acting as engineer at the Eictoria mill without being licensed. Factory Inspector Kenney appeared for the prosecution and A.R. Slipp, M.P.P., for the accused. It was agreed that Burney should not act as engineer until qualified according to law.

Wood's Phosphodine, The Great English Remedy. Tones and invigorates the whole nervous system, makes new Blood in old veins. Cures Nervous Debility, Mental and Brain Worry, Despondency, Loss of Energy, Palpitation of the Heart, Failing Memory. Price \$1 per box, six for \$5. One will please, six will cure. Sold by all druggists or mailed in plain pkg. on receipt of price. New pamphlet mailed free. THE WOOD MEDICINE CO., TORONTO, ONT. (Formerly Whitman.)

Mr. John Babington MacAulay Foreshores Baxter seems to have lost his temper completely at the meeting of the Royal Commission on Saturday. The reproduction of that \$500 check in the Telegraph was a solar plexus blow for him.



The Governor Says---

"Cut out tea and coffee, my boy. They contain an irritant—caffeine—and you can't have a fluttery heart or sour stomach or a grouchy headache and do big business.

It's a mighty good plan, if tea or coffee puts you "off color," to quit it, and for a delicious table beverage, use

POSTUM

the pure cereal food-drink. There is no caffeine nor other harmful substance in Postum.

In either form—Regular Postum which must be boiled [15c and 25c packages] or Instant Postum made instantly in the cup with hot water [30c and 50c tins]—

Postum is good in any business.

"There's a Reason"

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