

The Tuberculosis Congress.
Few things which mark the modern progress of civilization have advanced so rapidly as knowledge of the nature and curability of tuberculosis. The decision of physicians that the disease is not hereditary has lifted a burden of dread from thousands of hearts, and the success of methods of treatment in the early stages of the disease has brought hope to thousands of others. But far more important than this has been, and will be, the work of bringing about an understanding of the dangers of the disease and impressing the necessity of precautions. From September 21 to October 12 the United States will be the host of the International congress on tuberculosis, which is to meet in Washington. Mr. Roosevelt has lately accepted the presidency of the congress. The occasion will undoubtedly be the most important event that has yet occurred in the fight against the dread disease. The convention will bring together the most noted experts of the world, and methods of treatment and prevention which have shown the best results will be illustrated. It will be as interesting to the layman as to the physician, for in the stamping out of consumption much of the work will have to be done by laymen—officers of state and city governments, the police, boards of health and private citizens. It is to be hoped, says the Youth's Companion, that the congress will also do something to allay the groundless fear which many persons have of anyone known to be suffering from tuberculosis—an attitude which frequently renders it impossible to secure the most desirable sites for treatment camps or hospitals, and often results in grave injustice, if not actual cruelty, to the individual. If due precaution is observed, isolation is in no way necessary. This, indeed, is the chief lesson which those most familiar with the matter are trying to impress.

Freight shipped to merchants east of the Mississippi must be plainly marked with the name and address of the consignee hereafter, according to a recent decision of the railroad companies. It has been the practice of manufacturers to mark the goods with a hieroglyphic, partly to save time in shipments, and partly to prevent spies from competitors learning who their customers are. This practice has made it difficult for the railroad companies to deliver the goods. One company is said to have lost fifteen hundred thousand dollars in the last ten years, because it has had to reimburse shippers for goods lost on the road. Goods in car-load lots may go marked in cipher as heretofore, as it is not difficult to deliver a car at the point to which it is billed.

Another national park is likely to be added to the domains of the United States at the next session of congress. The senate committee on public lands has reported in favor of taking the wild and beautiful glacier region of the continental divide in Montana—a tract comprising nearly a million acres. The region contains numerous peaks from 6,000 to 10,000 feet in height, and about 60 glaciers. The large number of big game animals, such as Rocky mountain white goats, bighorn, grizzly, deer, elk and moose, suggests the value of reserving the tract as a breeding ground for the surrounding region. The name proposed is the Glacier National park.

Corn is getting to be one of the great products of the world, although the United States has the first call. The uses to which corn may be put are rapidly increasing in number. Making glucose from the grain is the foundation of an important industry, and a New York concern, finding the American supply petering out, is importing stock from Argentina. But there is promise of a bumper yield in our corn states next fall, and the foreign article is merely a stop-gap. The mills will run at a still livelier rate when the home supply comes to market.

Mr. Flagler's retirement from Standard Oil, on account of his advanced years, would seem to be pardonable, though he is not thereby wholly freed from caring cares. A man who is almost an octogenarian, and who has got several hundreds of millions of dollars on his hands, has need to be anxious lest he may die disgraced.

Count Tolstoi is fortunate if he aspires to have his books become best sellers. The Russian censor has just ordered three of them suppressed. How some American writers who want circulation must wish their writings could be suppressed.

A woman lecturer in Boston sneers at men for wearing starched collars. She is unreasonable. Lots of collars are only starched when they come from the laundry, not after they are on a-bill.

BEWARE! END OF THE WORLD ONLY 12,000,000 YEARS AWAY!

By G. FREDERICK WRIGHT, A. M., LL. D.

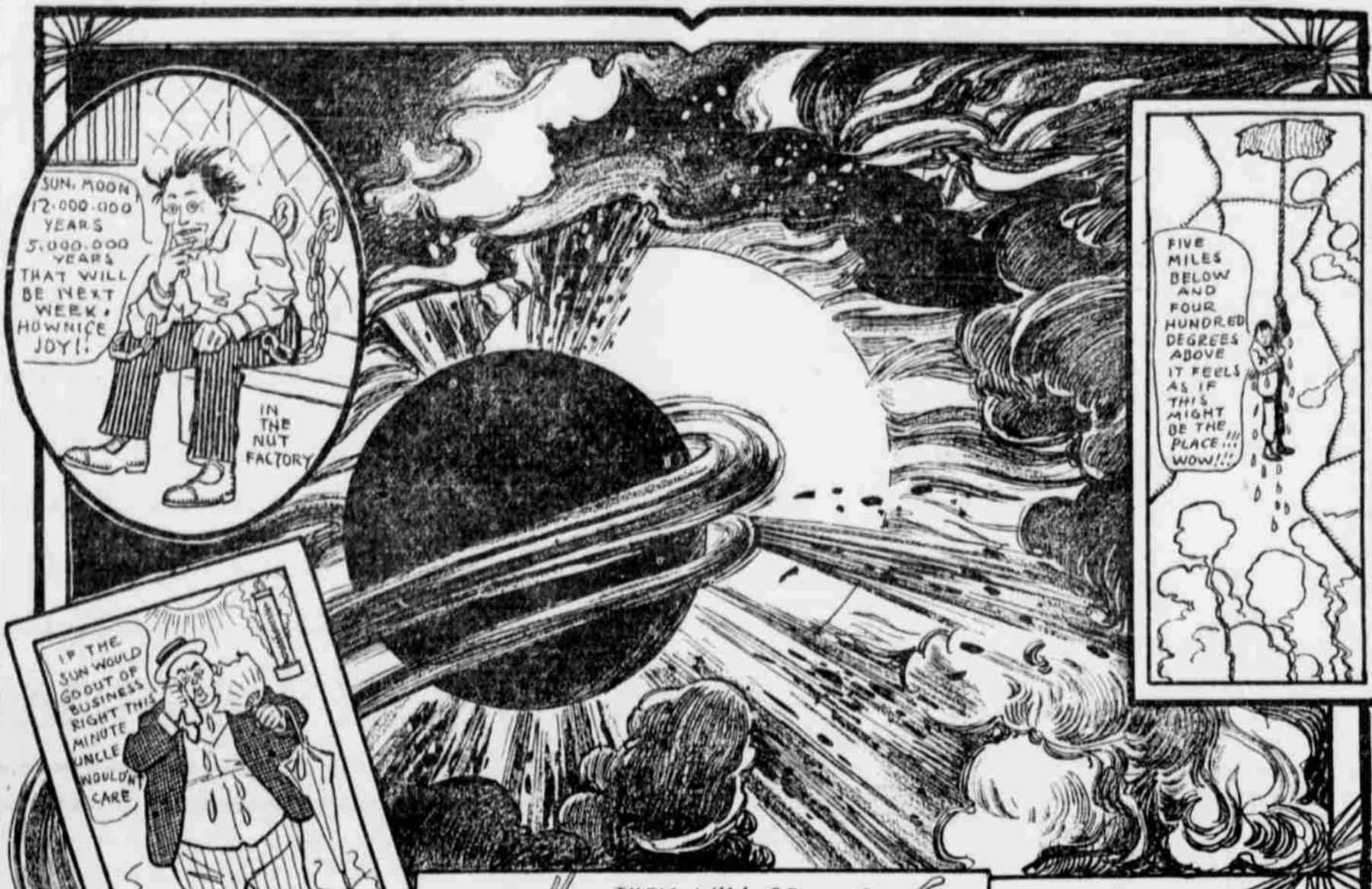
Then the Sun Will Shrink, Lose Its Heat and Inhabitants of the Earth Will Freeze and Starve to Death.

High Browed Scientists Have It All Worked Out—"Things Are in a Bad Way." Warns Adherent of Nebular Hypothesis—World's Center Giving Forth Warmth May Save Us for a Time, But Ultimate Destruction Is Inevitable, Wise Ones Say.

REASONING from the principles of the pretty generally accepted nebular hypothesis the end of the world is to be reached very gradually through the increasing reign of cold and the lengthening of the earth's day. For it is evident that the sun cannot keep on radiating heat at

sun will have become so far cooled off that we shall be indifferent to everything else that happens.

Another limit to the future of the habitable portion of the earth is brought to light by the rapid progress of erosion that is going on all over the land surface of the world. Wallace estimates that one foot of



the present rate, or, indeed, at any rate, forever. As Lord Kelvin has well said, we know that the sun is cooling off just as certainly as we should know that a hot stone which we encountered in a field was cooling off, though we had not seen it long enough to measure the rate of its cooling. Heat is not a permanent quality of any known object. The sun must be losing its heat, and hence in time will become a cold and lifeless object.

If things continue to go on as they now do, astronomers tell us, the sun will lose its life-giving heat long before 12,000,000 years have elapsed. Like all other cooling bodies, the sun must be diminishing in size. Its diameter must be contracting. Newcomb estimates that in less than 5,000,000 years the sun's diameter will contract to one-half its present length, so that the sun will occupy only one-eighth of the space it now occupies. It is hardly possible for it after that to continue to furnish as much heat as it does now, but it must then cool off with great rapidity.

This reasoning is based on the supposition that the sun is not yet a solid body, but is so hot that its mass is still in a gaseous state. But the force of gravity upon the sun is so great that the gas is compressed into a much smaller proportionate compass than it is on the earth. The force of gravity on the surface of the sun is 27 times that on the earth, so that a man weighing 150 pounds on the earth would weigh nearly two tons on the sun. So great is this pressure of gravity on the gases of the sun that they are reduced to one-quarter the density of the solid nucleus of the earth. But so long as the nucleus of the sun continues to be gaseous it will continue to grow hotter as it diminishes in size. So soon, however, as it loses sufficient heat to allow the material to take on the solid form, a crust will be formed and the radiating heat will rapidly diminish. Probably, also, the heat radiated will diminish long before that time, even though the sun is growing hotter, because of the diminishing size of the globe.

The only way that the astronomers can see to avoid this slow paralysis of the sun, and so of the whole solar system, is that lately proposed by Prof. Langley in a sensational article depicting what would happen if a dark world moving at an incredible speed in space should come so near our sun that the two would collide. In this case the original heat of the sun might be restored, but the catastrophe would practically produce such an expansion of its volume and such an increase of its radiating power that everything on the earth would be burned up, producing about such phenomena as are described by the Apostle Peter. Indeed, the resemblance between the words of the apostle and the theory of the Washington astronomer was as striking as it was unexpected, so much so that some readers may not know from which source the following quotation is taken:

"The heavens shall pass away with a great noise, and the elements shall be dissolved with fervent heat, and the earth and the works therein shall be burned up."

But the suggestion of the astronomer was pure speculation. There are no apparent signs of any such approaching catastrophe as Dr. Langley suggests as possible. At any rate, we may settle down to the conclusion that so far as astronomical forces are concerned the present order of things will not be disturbed for three or four million years.

But an equally gloomy prospect is before the world in the distant future from another cause which is in slow operation. The length of the earth's day is slowly increasing through the retarding influence of the tides produced by the moon. To be sure, this effect is so slight that it has not been directly perceptible since accurate methods of measuring the time of the earth's revolution on its axis have been observed. But that it must be taking place is as sure as that friction will stop a railroad train when the steam is turned off.

The tides raised by the moon's attraction are distributed by the continents so as to present many anomalies, but when considered in themselves they act the same as a wave three feet high constantly running in an opposite direction to the revolution of the earth, and so by friction retarding its motion. Astronomers are agreed that similar tides produced on the moon have reduced her revolution on her axis to a period of 28 days. Eventually the revolution of the earth will be reduced so that our day will be several times longer than now. When that time comes the nights will be so cold that nothing can stand it, and if they could the days will be so hot that what was left by the cold would be destroyed by the heat. But that time, also, is so far in the future that the present generation may put it out of their minds. This catastrophe will not arrive for many million years yet. Indeed, before that time arrives the

the earth's surface is, on the average, washed away by the streams every 3,000 years and deposited at the bottom of the ocean. This amounts to more than 300 feet in a million years. As the main elevation of North America is 748 feet, and that of Europe 671 feet, it follows that by the operation of present forces Europe will be washed into the sea in 2,000,000 years, and America in 3,000,000 years. What providence has in store for us after that, no man knows. If the sunken portion shall rise at the end of that period, as it did at the end of the coal period, there will be dry land to live on, but it is doubtful if it have such stores of iron and coal as have blessed the present race of human beings.

There are two other sources of heat to which we may look with much confidence and hope. It was more than a dream of Ericsson to invent an engine which could be run by collecting the direct rays of the sun through immense sun-dials, thus generating the heat necessary to set in motion the wheels of industry. But the successful carrying out of his plans would necessitate the transfer of our great manufacturing centers to the rainless regions of the world where perpetual sunshine prevails. It, therefore, will not be impossible that the desert of Sahara and the sandy wastes of Central Asia shall in the future usurp the place now assumed by the localities in proximity to the great coal fields of the world, while the latter become overgrown with briars and brambles like the mounds of many an ancient center of civilization.

Still another possible source from which we may draw infinite quantities of heat and power is to be found in the heated center of the earth. As we descend below the surface of the earth, the temperature rises on an average of one degree in 60 feet. At a depth of two miles, therefore, the temperature of boiling water would be reached, and at a depth of five miles a temperature of more than 400 degrees. It would, therefore, not seem by any means impossible to bore into the earth deep enough to make a portion of its heat available for all ordinary purposes.

The world, however, is concerned with impending catastrophes nearer at hand. The prosperity of the present time is largely due to the rapidity with which we are using up the reserved stores of nature upon or near the surface of the earth. Thus geology, while it opens up to mankind the stores of good that are buried for safekeeping in the depths of the earth, points to their limited quantity, and calls upon men to use them economically and leave as much as possible for future generations. Wastefulness of these limited stores is a sin. At the same time it gives the philosophical student of history a sobering view of the destiny of man. Nothing is more certain than that man has not been always on the earth, and that he is not always to stay here. The world is like a transcontinental railroad train and the human race like a passenger who gets on at one end and has to get off at the other. Out of mystery man came and into mystery he goes. The visible world is a passing show. All that is unchangeable lies in the world of the unseen.

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A SURGICAL OPERATION



If there is any one thing that a woman dreads more than another it is a surgical operation.

We can state without fear of a contradiction that there are hundreds, yes, thousands, of operations performed upon women in our hospitals which are entirely unnecessary and many have been avoided by

LYDIA E. PINKHAM'S VEGETABLE COMPOUND

For proof of this statement read the following letters.

Mrs. Barbara Base, of Kingman, Kansas, writes to Mrs. Pinkham: "For eight years I suffered from the most severe form of female troubles and was told that an operation was my only hope of recovery. I wrote Mrs. Pinkham for advice, and took Lydia E. Pinkham's Vegetable Compound, and it has saved my life and made me a well woman."

Mrs. Arthur R. House, of Church Road, Moorestown, N. J., writes:

"I feel it is my duty to let people know what Lydia E. Pinkham's Vegetable Compound has done for me. I suffered from female troubles, and last March my physician decided that an operation was necessary. My husband objected, and urged me to try Lydia E. Pinkham's Vegetable Compound, and to-day I am well and strong."

FACTS FOR SICK WOMEN.

For thirty years Lydia E. Pinkham's Vegetable Compound, made from roots and herbs, has been the standard remedy for female ills, and has positively cured thousands of women who have been troubled with displacements, inflammation, ulceration, fibroid tumors, irregularities, periodic pains, and backache.

Mrs. Pinkham invites all sick women to write her for advice. She has guided thousands to health. Address, Lynn, Mass.

FREE SHAVE.



Kind Gentleman—My poor man, of all the bad scrapes you've had, which was the worst?

Rambling Rupert—De worse scrape I ever had, sir, was when I got shaved in a barber college.

CUTICURA CURED FOUR

Southern Woman Suffered with Itching, Burning Rash—Three Little Babies Had Skin Troubles.

"My baby had a running sore on his neck and nothing that I did for it took effect until I used Cuticura. My face was nearly full of tetter or some similar skin disease. It would itch and burn so that I could hardly stand it. Two cakes of Cuticura Soap and a box of Cuticura Ointment cured me. Two years after it broke out on my hands and wrist. Sometimes I would go nearly crazy for it itched so badly. I went back to my old stand-by, that had never failed me—one set of Cuticura Remedies did the work. One set also cured my uncle's baby whose head was a cake of sores, and another baby who was in the same fix. Mrs. Lillie Wilcher, 770 Eleventh St., Chattanooga, Tenn., Feb. 15, 1907."

Astuteness.

"Why does that Chinese diplomat ask so many questions?" "It is merely to flatter us with the idea that he regards us as possessing superior knowledge."

Your Druggist Will Tell You

That Murine Eye Remedy Cures Eyes, Makes Weak Eyes Strong, Doesn't Smart, Soothes Eye Pain and Sells for 50c.

There is at least one woman in the world for every man in the world to think the world of.

Lewis' Single Binder straight 5c cigar. Made of extra quality tobacco. Your dealer or Lewis' Factory, Peoria, Ill.

Girls are partial to automobiles because they have sparkers.

