

The Bee's Home Magazine Page

Wonders of the Heavens :: By Garrett P. Serviss

Sirius, the Magnificent and the Terrible—What Would Happen to the Earth If It Should Come Within the Rays of the Dog-Star?



Sirius, a celestial furnace of glowing hydrogen and forty times hotter than the sun; a star which travels one thousand miles a minute and, if it were nearer the earth, would make our world red hot.

The more that is learned about the giant stars of space the more wonderful they appear. The biggest (to our eyes) of these great super-stars is the Dog star, Sirius. It would probably thirty or forty times the one that makes our day-light.

Light takes about eight and a half minutes to come to us from the sun. But it takes about eight and a half years to come from Sirius!

As a minute is to a year, so is the distance of the sun to that of Sirius.

In other words the great Dog star is about 25,000 times as far away as is the sun.

But the brightness of any shining object diminishes in proportion to the square of the increase of its distance. Accordingly, if Sirius were actually just as bright as the sun (when viewed from the same distance), it ought to appear 250,000,000,000, or 250,000,000,000 times fainter than the sun to our eyes. But measurement of its light shows that it appears only about 7,000,000,000 times fainter than the sun, from which immediately follows the conclusion that its actual brightness must exceed the sun's about forty times.

Now, starting with this fact, let us imagine that we could swiftly approach Sirius, or that the earth could quit the sun and fly away with us to become a satellite of the Dog Star. The experiences that we should have during such a journey would surpass the boldest flights of the imagination.

When we had gone exactly half way from the sun to Sirius, on looking back we would perceive that the sun has diminished to a second magnitude star. We would no longer have any daylight, but only starlight. Sirius itself would still be only a star, but a star of extraordinary brilliance, forty times as bright as it now appears to us.

As we continued on our way, the sun would become fainter and Sirius would constantly grow brighter, until at last we would begin to receive a new daylight upon our far-journeymen earth, and this new daylight would be Sirian sunshine, which would possess a quality of intrinsic brilliance exceeding that of which

we had been accustomed when near our native sun.

When the earth had approached as close to Sirius as it really is to the sun, its new solar master would appear with ineffable splendor, blinding, dazzling, overwhelming, scorching and burning like a blast from an opened furnace door.

Then the brightness of Sirius would not be merely forty times as great as that star now looks to us, but forty times as bright as the sun now looks to us!

And the heat would be in similar proportion. The temperature on the earth

would mount to thousands of degrees. The oceans would explode into super-heated steam and disappear. The granite mountains would run down and gush in floods of molten fire. The solid globe would begin to dissolve in hot vapors.

Our great journey would end like the flight of the dazed moth, which steers, in its fascination, straight into the flame of an electric arc and perishes before its astonished senses can feel the burning touch of the terrible death that it has ignorantly invited.

Huxley and His Strange Dream

By REV. THOMAS B. GREGORY.

The great English scientist saw more things and greater things with his "mind's eye" than he did with the eye of flesh. Looking into the quivering structure of the jelly-fish he saw therein the foundation of modern biology. He gazed on the horse upon which he took his daily exercise and in the distant background of the early Eocene he saw its strange ancestor, with its five hoofs on each leg.



He bent over the tiny bit of protoplasm and in it there was revealed to him the grand procession of life, from Ameba to the pre-cambrian sea to Plato, Shakespeare and Washington.

But all this is nothing in comparison with another vision that came to Huxley—the influence of which abided with him to the end. He had a dream; and in the dream he saw himself dedicated to truth.

A stern, yet kindly, voice said to him, "Thomas Huxley, you are to maintain your intellectual honesty and self-respect; and no matter what comes, you are never to lead yourself to the cause that does not seem to you to be backed by the evidence of facts."

"I do not know," he would say to those who asked him about the things of which he had no knowledge. Was it a question of political economy or science, or theology—it made no difference, his reply was ever the same, "I do not know."

And so Huxley lived and died—true to his beautiful dream, always searching for the truth, always loving the truth when he found it.

Science

By EDGAR LUCIEN LARKIN.

Q.—"Can you tell why the circle is divided into 360 degrees?" Is this arbitrary or made by rule?"

A.—When history began the Babylonians were using this division. Very early observers, without telescopes, sextants, armillary spheres or any instrument of geometric precision, thought that the earth turns on its axis 360 times while moving around the sun once.

They could not possibly have discovered the modern fact that the earth turns around 366.25648 times when making one exact revolution around the sun.

Question—What is your opinion of the transmission of matter as promulgated by Sir William Ramsay?

In the ultimate, what distinction can be drawn between organic and inorganic matter, since mind is matter or force? Therefore, is it not matter or force under a different aspect or relation to surrounding appearances, or, in other words, are not all things a unit?

Answer—(1) The ultimate distinction between inorganic and organic matter is always found in the mineral, and where so uranium exists no radium has ever been discovered. This mutation is wrought by nature with an exceedingly slow rate, and vast periods of time are required for uranium to disintegrate and appear as radium and then as helium.

Answer—(2) The ultimate distinction between inorganic and organic matter is always found in the mineral, and where so uranium exists no radium has ever been discovered. This mutation is wrought by nature with an exceedingly slow rate, and vast periods of time are required for uranium to disintegrate and appear as radium and then as helium.

A Fascinating Group of French Fashions



- (1) On the left of the picture (figure standing at back) is shown a striking hat trimmed with an enormous pair of wings, for tailor-made wear.
- (2) The seated figure on the left is wearing one of the Italian military cloaks which have gained such rapid favor, this example being in vivid rose with gown of dark hyacinth.
- (3) The attractive taffeta gown (standing) with the pointed waistcoat of Roman-striped satin is in pale reseda glaze, the jaunty little hat being black, with reseda plume.
- (4) The chic effect of a white waistcoat. In the center of the

- group is seen the latest thing in waistcoats cut with a mediet collar; there is an inner vest of Roman stripe.
- (5) On the next figure is shown a Dolly Varden hat with brim of frilled tulle, also the newest style of collar in the ubiquitous Roman stripe.
- (6) A charming toilette d'ete (seated in front). Black velvet is used with very chic effect for the collar, cuffs, and sleeve ribbon of the crepe gown with pleated mousseline tunic.
- (7) Another illustration of the furor for stripes is the striking model standing on the right. The cloak has a collar of plain cloth matching the darker stripes.

Life Lessons--Two Studies in Chromatics

By ELBERT HUBBARD

While many are passing pink peregrinations, carefree, silly and humorous, in the direction of the colored contingent, let us not forget that porter on a train that was recently held up in Mississippi.

Two masked men with drawn revolvers entered the Pullman car. They called aloud for the passengers to hold up their hands. And the passengers obeyed.

The porter, however, refused. Armed simply with a whip broom, he went straight at those gunmen. And all the time they were shooting.

He grabbed one of the hands by the collar, pushed him to the door and literally threw him through the glass door of the vestibule into the night. And the other gunman jumped and ran for his life.

Not a passenger lost a purse, a grip, a watch, or anything but his peace of mind.

After the gunmen were routed, and safety and serenity had settled down on the landscape, the conductor and trainmen came back. The porter went smiling at his work making up the berth.

Some one noticed, all at once, that he was an olive green in tone instead of his usual rich chocolate hue. However, he insisted that he was not hurt, and laughingly tackled his work with a little needless added zest.

Suddenly he sank to the floor. In one minute he was dead. Three bullets had gone completely through his chest.

the Caucasian has no monopoly, that the Sherman act can recognize, on either courage, loyalty, love or gratitude.

A second piece of news comes to us as follows:

It seems that Colonel Joe Choyinski, prize fighter and ambidextrous, charming, bookish gentleman, about twenty years ago was working the Wire Grass circuit with a variety show. The town that was the scene of this story was one of those well-to-do county seats where the sons of the best citizens at times transform themselves into hoodlums and hoodlums.

A Chinaman had come to town and opened up his little laundry; and one night the hoodlums had gathered and were sending dead cats and other delectables through the front window.

Joe Choyinski, about this time, came by on his way from the theater to the hotel. Noticing the excitement he stopped, stood up the situation, gently chided the hoodlums for their actions in restraint of trade, and begged that they go along peaceably and leave the Chinaman to his textile ablutions.

And then it seemed that the hoodlums transferred their attentions from the Chinaman to what they were pleased to call "the dude actor."

At this Colonel Choyinski only smiled. He waved in, gave out upper cuts right and left, with short-arm jabs and a few long-armed swings, all without prejudice. The hoodlums hit the dirt, and suddenly, and soon there was no one on the spot but Joe and the Chinaman.

And so Joe went along to his hotel. He left town the next day on the 9:40 and duly forgot the incident.

And the years passed. The Chinaman made money in his industrious and economical fashion. A few weeks ago he was taken ill, sorely stricken by the black wing of death. The doctor told him he would not survive.

He sent for a lawyer and made his will, and he left all of his money, about \$10,000, to Joe Choyinski.

Then the Chinaman died. The lawyer used the wires and found that Joe Choyinski was in Pittsburgh, acting as director of the Pittsburgh Athletic club.

The Chinaman, it seems, had written Joe's name out on a piece of butcher's paper with a stick and kept it all these years.

The money was sent to Joe Choyinski. He really did not know what to do with it, and explained that since he had never earned it, it wasn't really his and all he could do was accept it as a trustee.

And now Colonel Choyinski has decided what he will do with the ten thousand dollars. He has started a school in San Francisco to give lessons to Chinese in physical culture.

Household Suggestions

Here is a hint which will be found useful at spring-cleaning time. Take sufficient flowers of sulphur to give a golden tinge to about one and one-half pints of water. In this liquid boil about four or five bruised onions, or some garlic. Strain off the liquid, and let it stand till it is cold. Then take a soft brush, dip it in the liquid, and wash any of the gold frames, that require restoring. When it is dry, the gliding will be as bright as when new.

Blocks of camphor dispersed in all corners of damp rooms in a new house will effectually banish dampness in a short time, even when fires have proved ineffectual. They should be simply laid on paper, or on the bare shelves of a damp room or linen closet. The blocks gradually decrease in size, and when they finally disappear should be replaced until their purpose is served.

To remove paint from a dress take a camel-hair brush, dip the point of it in turpentine, and just damp the parts that are stained. Let garment dry and then rub briskly. When the paint will fall off in a dust. If it does not all come off repeat the operation.

FRECKLES

Don't Hide Them With a Veil; Remove Them With the Othine Prescription. This prescription for the removal of freckles was written by a prominent physician and is usually so successful in removing freckles and giving a clear, beautiful complexion that it is sold by Sherman & McConnell Drug Co., or any druggist, under guarantee to refund the money if it fails.

To Keep Skin in Fines Condition All Summer

It would be much better for the skin if little cream, powder or rouge were used during the heated term. Mixed with perspiration, dust and grime, these things are anything but beautifying. Ordinary mercerized soap will do more for the complexion, and without giving an oily, streaked, spotted or puffy appearance. It is the ideal application for the season, as it not only keeps the pores clean, but daily removes particles of sebum skin which have been saved by dirt or weather. By constantly keeping the complexion clear, you are naturally tending toward perpetuating a youthful countenance. This is the secret of the so-called wax, obtainable at any druggist, will completely remove the sebum, complexion. It is applied at night like cold cream and washed off in the morning. To keep the skin from a dried or wrinkling, or to overcome such conditions, there is nothing better than a face wash made by dissolving 1 ounce powdered ascorbic in 1 pint water. Advertisement.