

A Sun Gas that Will Run Expresses to the Stars!

Professor Nield, Leading British Astronomer, Predicts That the New Gas, Coronium, by

Annihilating Weight, Will Solve the Problem

of Navigating Space

London, May 16. EXPRESS to the stars, half-day excursions to the sun and evening trips to the moon are within the wonderful possibilities of the near future, according to a British scientist.

H. Krauss Nield, one of the leading British astronomers, is authority for this statement.

Professor Nield believes that interplanetary travelling will be brought about with the help of the newly discovered gas coronium, which forms part of the corona of the sun.

This gas is so light that a quantity of it the size of a baseball has sufficient lifting power to raise an elephant. Applied to the dirigible balloon or the aeroplane it would increase the lifting power of the machine hundreds of times.

The corona is that part of the sun which is most visible during a total eclipse, and coronium forms the greater part of it. Coronium has never been found on earth. Its properties, its gravity and its lifting power have been calculated from spectroscopic analysis and from its behavior in association with other substances of which more is known.

It is calculated that if a comet could be condensed into the density of a piece of iron it could be packed in a dress suit case, although it is millions of miles long. Now, a comet has been observed passing through the sun's corona at a speed of 850 miles per second—that is, without the slightest retardation of speed. This shows that the corona is much lighter than a comet's tail, and enormously lighter than hydrogen, which we now use to lift balloons.

It is believed that coronium exists in the upper regions of the atmosphere. Many new atmospheric gases, such as krypton, neon and argon, discovered by Sir William Ramsay, have been identified in recent years, and it is highly probable that others still remain to be found. If coronium exists in the atmosphere it must be in combination with other substances which hold it down.

"When we are successful in isolating coronium we shall solve the problem of aviation both within the atmosphere and beyond," said Mr. Nield. He is a fellow of the Royal Astronomical Society, and was chief of the solar eclipse expedition to Burgos, Spain, in 1905, and also leader of the British Astronomical Society's expedition to Cape Matifou, Algeria, in 1900.

"There is nothing lighter than coronium," he continued. "Although it seems a rather extraordinary prediction, I maintain that some day this coronium will be harnessed, and we will have an opportunity of visiting our neighbors upon the other planets. This may not be during our generation. But it is sure to come. And when it does we will be able to discover for ourselves what sort of people reside on Mars.

"Coronium is closely allied in nature to nebium, which exists in large quantity in a great number of the nebulae of the heavens, and, like nebium, it exists in a free state there.

"The coronium line has only been observed something slightly under two hours in the whole history of the human race. In other words, it has been seen at the total eclipse observations for only a few seconds every two years. With specially prepared chemical plates I succeeded in photographing the corona at the moment of totality. I prepared my plates, placed my camera and had everything in readiness ten minutes before the eclipse, and was able to get a photograph before the totality was over. The totality lasts only six seconds, so you can readily see that there is not much time to be lost, and everything must be in readiness.

"An eclipse, with the corona furnishing a sort of halo around it, is a most beautiful sight to behold and one not to be forgotten."

Mr. Nield and his colleagues have been planning the type of machine which would be best adapted for navigating space with the help of coronium. This machine would have a car of fish-like form, constructed of steel, in order to resist every kind of pressure from within and without. Inside this little fortress the voyagers to the stars would operate the machinery and guide the course of the vessel. They would be provided with everything to make them safe and comfortable during such a hazardous and uncertain voyage.

Along the roof of the car would be little reservoirs of the precious gas coronium, arranged in balls of corrugated steel of peculiar construction to guard against the enormous pressure from within, and also against any possibility of leakage.

The machine would be propelled by an arrangement of planes and propellers similar to those used in aeroplanes. The coronium would entirely eliminate the problem of weight, which is the greatest difficulty the aeroplane constructor has to deal with.

Coronium having such tremendous lifting power, it would be necessary to anchor the airship down

"Enclosed in a Steel Fortress Forming Part of an Aeroplane Freed from Weight and Gravity by the Gas, Coronium, the Voyagers Will Fly to the Planets and Stars with the Speed of Light!"



A Drawing by Lanos Representing the Destruction of Humanity Through the Cooling of the Earth. We May Escape This Calamity by Moving to Another Planet on a Coronium Airship.

to the earth with strong cables.

When the start is to be made for the heavenly spaces, the ship's prow is carefully aimed in the direction of the heavenly body to be visited. Then the ship is released, and away she flies through the heavy lower atmosphere with almost the speed of light. As she reaches the rarified upper regions the speed diminishes.

At last she clears the atmosphere and the wonders of the whole celestial universe are revealed to the adventurers in the steel car. All the stars and planets appear as balls of light upon a black ground, for there is no diffusion of light. All about them is absolute zero.

The watchers peering through the windows see the surfaces of the heavenly bodies just as if they were a foot away, for distance cannot obscure the vision where there is neither dust nor vapor.

Let us suppose that the travelers are bound for Venus. That will provide a comfortable dwelling place for man when the earth becomes uninhabitable from the cold, as we know it must become in course of time. Venus has a

high temperature, for the density of the atmosphere causes the retention of the heat. It is probably inhabited by gigantic reptiles, for its conditions are similar to those of the Jurassic period, when the earth was peopled by dinosaurs. Those conditions would be better than a world without heat, for that would make life impossible, and in time to come the climate of Venus will be modified.

A heavy struggle through the heavy atmosphere awaits the coronium airship, and when the voyagers alight they may meet monsters never before seen by human eye.

The difficulties of this undertaking appear to be in steering a vessel accurately through the ether.

The atmosphere extends to a distance of sixty miles beyond our planet. After that comes the ether, the hypothetical substance occupying the space between the planets and stars and pervading all matter.

It is usually held by science that an object entering the ether would retain the impetus it had on leaving the atmosphere. An aerial vessel, under such conditions, would therefore continue on its course

until it reached the atmosphere of some other heavenly body or some solid object. That was the theory upon which Jules Verne based his famous scientific romance, "A Trip to the Moon." It was assumed that as a vessel was propelled through space without effort it would be stopped by a solid object without shock. Hence Jules Verne's travellers were able to alight safely on the moon. The nature of the ether is, however, still subject to discussion, since it is a hypothetical substance whose existence is based on reasoning and not on physical perception. There are scientists who argue that an airship could be made to navigate the ether if it could be projected there.

There are various ways in which the object could be attained. The airship might throw out an atmosphere of its own when it wished to change its course. The vessel would, in any case, have to carry a great supply of compressed oxygen for the use of its occupants.

There are scientists, however, who argue that the ether possesses a certain resisting power, since this must be included in the power to conduct light waves and electricity. They believe that an aeroplane constructed with sufficient lightness and delicacy could drive itself with propellers through the ether.

Many scientists besides Mr. Nield have discussed the possibility of reaching the other heavenly bodies. The great French chemist, Berthelot, believed that it would be done some day. Masterlinck, who combines considerable scientific knowledge with his great philosophic and literary gifts, believes that the final service of aviation will be to carry man away from the earth when it is no longer fit for human habitation. H. G. Wells, the most scientific of all novelists, has also explained why we shall be able to navigate the ether.

When man is able to roam through the universe at will he will be completely emancipated from the bonds of hunger, disease and ignorance, which are largely the creation of conditions that keep him rooted to one narrow spot.

The Corona of the Sun, Which is formed of the Gas, Coronium, and is Visible During a Total Eclipse. Photograph Taken at Mount Wilson, Cal., During the Eclipse of May 28, 1906.

Short Courtships; Quick Divorces

"THE shorter the engagement before marriage the more certain the divorce to follow. But if the engagement is too long the result will be an unhappy marriage, though it does not generally lead to divorce."

This was the interesting statement made recently by an expert on divorce matters.

"By far the largest number of divorces follow the short engagement," he said.

"Indeed, sitting in the divorce court, year in and year out, you become very certain that the short engagement ought to be condemned. It seems to be the surest route to divorce. Do away with the short engagement and the hasty marriage and you would do away with a very substantial number of the divorces which occur every year."

This is a very decided opinion con-

cerning the evil of the short engagement. On the other hand, there is also the peril of the long engagement.

"The short engagement," said a woman doctor, "may be a step in the dark and may lead to divorces, but the long engagement is just as likely to lead to lifelong unhappiness."

"An engagement which lasts for several years is bound to destroy most of the romance and fine feelings between the two."

"When marriage does take place it has really very little interest for them."

"There are many reasons for the short engagement, and they are all practical ones. In the first place, a six months' engagement to-day is considered quite a long one; indeed, it is by no means unusual to announce the engagement and an approximate date for the wedding at one and the same time."

"The man who proposes to a girl before he has a home to offer her is not applauded by the modern parent who is, to a great extent, responsible for the fashion for short engagements."

The Lifting Power of Coronium is so Great That a Balloon Filled with It the Size of a Baseball Would Raise an Elephant.

