MARS, RUDDY PLANET NOW AT ITS NEAREST TO EARTH

Astronomers Hoping To Find Out Whether It Is Peopled, And If So, What the People Who Live On It Are Doing; Possibly There Are People There Far More Advanced In the Sciences Than Those Who Inhabit the Earth

By RENE BACHE.

If you have the use of even a small telescope, take a look at Mars. It is worth doing, for the planet has never been so near to us since the oldest human being now living was born.

Not again will it approach so near to the earth until long after the year 2000, when the babies of today—the few of them that happen to survive—will be very aged men and women.

All the big telescopes in the world are now pointed at Mars, which is less than 35,000,000 miles distant. Never before has there been such an opportunity for detailed examination of its surface; for astronomers today have at their disposal such instruments of observation as were not until very recent years available.

On this interesting occasion Mars is turning toward us his southern hemisphere, on which the astronomers will watch the progress of a Martian late autumn and early winter. They will see the southern ice-cap (corresponding to the ice-cap of our iwn South Pole) slowly form.

That in itself is a matter of inviting special attention, inasmuch as the ice-cap is unquestionably developed by falling snow; and snow implies water-vapor, which can be carried and precipitated in a frozen state only by an atmosphere.

Heat, Air and Water

This seems to settle the question whether there is air and water on the surface of Mars. Manifestly the planet has a considerable atmosphere containing a great deal of moisture. Water air and warmth are the three prime essentials for the support of animal and plant life.

How about the warmth? Some authorities have contended that Mars must be too cold to support life. It is 145,000,000,000 miles from the sun (Average distance), whereas the earth only 93,000,000 miles from the central luminary. But Mars, thanks to his thin atmosphere and lack of clouds, gets full benefit of at least 90 per cent of the heat delivered by the sun, whereas the relatively dense and vaporous blanket of gases that envelopes the earth allows only 60 per cent to come through.

Furthermore, observations of freezing and melting on the surface of Mars appear to indicate that temperatures are about the same as on the earth.

Clouds are seen from time to time floating in the atmosphere of Mars, but not often. For that reason telescopic observation of its surface suffers no interference; and hence it is that already we know more about the planet than we do about any other heavenly body, the moon excepted.

It is for that reason that we come to be so intensely interested in Mars, whereas little attention is paid to Venus, thouyh the latter is the earths very twin, of nearly the same size, known to be well watered, and apparently enjoying all conditions requisite for habitability. But Venus is always covered with a thick envelope of dense clouds, so that her surface cannot be seen.

Prof. C. A. Young, of Princeton, has written: "There are only two among all the heavenly bodies seen with our telescopes on which anything like terrestrial life could exist—Venus and Mars."

The temperature in Mercury (the little planet nearest the sun) exceeds the boiling point of water. The four "outer" planets—Jupiter, Saturn, Uranus and Neptune—are still so hot as to be incandescent. All the stars, of course, are blazing suns. Presumably most of them have attendant planets, but the latter are invisible to the telescope, though it is only reasonable to suppose that millions or even billions of them are habitable and inhabited by intelligent beings.

A limit being set to our facilities of observation, we concentrate our attention upon Mars, and hope that within the next few months we shall learn much about that planet which as yet remains unknown.

We are told that Mars is a much older planet than the earth; that it is only one-ninth the size of our terrestrial globe; that, in view of its lesser forces of gravity (38 per cent of ours), the average man on Mars (if there is such a being) should be eighteen feet tall and of proportionate bulk. He should be correspondingly strong and agile, with a muscular efficiency seven times as great as that of the average male American citizen. Hence he could leap with a spryness easily juggle with dumbells which, if we had them here, would weigh half a ton a piece.

In regard to the Martians, however, the most interesting idea is that, being inhabitants of a much older planet they may be millions of years ahead of us in the development of mechanical appliances, in civilization and in knowledge of the sciences. We talk about signalling to them by radio. Who knows that they may not have been trying to signal to us by that or other means for many centuries past?

What shall be said of those "canals" There aren't any. Or rather, it should be said that the streaks on the Martian surface alleged to be canals are really something else. They are still a mystery, but a theory now more generally accepted is that they may be strips of vegetation. Some of them are as much as 180 miles wide. The canal idea seems nonsense.

Schiaparelli, an Italian astronomer, who originated the canal theory, wrote: "All the vast extent of the Martian continents is covered with a network of dark stripes, some of them thousands of miles long, that do not at all resemble the winding course of streams. Sometimes where one of these canals opens upon a sea, it widens out into a great bay, as in the case of the so called Syrtis Major, formed by the vast mouth of the Nilosyrtis. That gulf is not less than 1,100 miles broad, its surface nearly equal in area to that of the Bay of Bengal."

This is worth quoting because of the picture it gives of the surface of Mars as it appeared to Sihiaparelli. But his inferences are highly speculative. The dark patches which he took for seas may not be water at all.

Observations at this time, when Mars is relatively close at hand, ought to shed much light upon this and other questions.

Plant Life On Mars

If the stripes in question are actually strips of cultivated vegetation, it would account for the sensational darkening and subsequent fading of the 'canals"—a phenomenon for which Schiaparelli confessed himself unable to account. In that case the time of the fading must be harvest time in Mars.

The vegetation, to correspond with the supposed stature of the people of Mars, may be of gigantic luxuriance If so, its production may be adequate to maintain proportionate numbers of people and plant-eating domestic animals that furnish food.

Are we witnessing, on Mars, in a blinking and near-sighted way, the doings of rational beings immeasurably superior to man and capable of dealing by engineering and other means, with thousands of square miles of territory as easily as we can cultivate a garden patch?

We know that Mars is a desert planet. It looks red, even to the naked eye, because most of its surface is reddish in color, though in parts yellowish. That means red and yellow sands and rocks. On this background appear dark and well-defined brownish and greenish patches, some of them very large, others small and scattered. Do these patches represent seas and lakes? Nobody can say.

Specially conspicious is a vast inland "sea," somewhat triangular in shape, which is called the Lake of the Sun. Another alleged water area of great size is the Lake of the Moon. But are these really water at all?

Too much guesswork. But it is the best that has been possible up to now. By observations now being undertaken some of it may be converted into definite knowledge.

On Mars the seasons are much longer than ours. If the year be regarded as equally divided between summer and winter, each is of 11 months' length. Thus the snow cap at each pole has time to be so far melted as to be reduced to a small remnant.

As each snow-cap melts, a dark area encircling it is seen to grow steadily, and it is reasonable to infer that this is water. A season of flood, due to the melting, has evidently arrived. Thereupon, or not long afterwards, the above mentioned stripes begin to appear, in lines so straight as to appear geometrical. They are from twenty miles to 180 miles in width.

How is one to account for them? Why are they temporary, reappearing and again fading at seasonal intervals? Is there any rational explanation except that the work of intelligent beings is somehow concerned?

Tnese are fasts, mind you. There is not a word in this story that as far as it goes, has not authorative endorsement. You are at liberty to draw your own conclusions.

Shall we not suppose, as a tenable theory, that the water from the melting polar ice-cap—from each pole at its recurring summer season—flows down over the surface of the planet, and, by the help of scientific irrigation on an enormous scale, is used for the growing of Martian crops?

Mars, as alreary said, is a desert planet. But what do we do with our own deserts up to now, we haven't done very much, but we are beginning to learn—as witness what we are doing in the reclamation projects of the West.

Possibilities of Irrigation

If there be lack of water for the land, anywhere, there is plenty of it not far away, usually. The most hopeless desert in the world, as one might suppose, is the vast depression in the Western part of the Sahara. Even the Arabs, with their caravans of camels, anxously avoid it. Yet the French engineers are going to turn the Atlantic ocean into it and convert it into a sea over which ships will voyage straight from Europe to Timbuktu and the region of the Niger.

The Martians, apparently, have found themselves confronted with vastly more formidable obstacles. But they have overcome them. They have had to do so in order to survive. What will not intelligent creatures accomplish if survival be in question?

The Martians may, as already suggested, be far more intelligent creatures than ourselves. How fortunate it would be if we could establish communication with them, and so obtain from them knowledge which otherwise we might need many thousands of years to acquire!

A few years ago there appeared on the surface of Mars what seemed to the astronomers to be a very bright light. The idea naturally suggested itself that it might be a beacon of some sort, meant for a signal to the earth.

What it really was, nobody knows. It is this day a mystery.

Now and then small bright spots are observed on the surface of the planet. They are thought to be the tops of snow-capped mountains shining in the sun.

It is conceivable that by the use of electricity we might, at enormous expense, make a signal light of some sort that would be visible to high-power Martian telescopes. Necessarily it would have to be of immense size.

A Problem in Geometry.

A mere illumination would not suffice to convince Martian astronomers that the earth was inhabited by intelligent beings. But suppose that such abeacon were of certain recognizable design—with a form, say, representing the forty-second proposition of Euclid. Any high school boy knows that proposition, the famous "asses' bridge," proving that the square on the hypoteause of a right angle triangle is equal to the sum of the squares on the other two sides. If a Martian scientist saw that design on the earth's surface, outlined in light, he would recognize its meaning instantly.

Where visable signals from earth to Mars are concerned, however, there is a difficulty of which we are to be reminded. Our own terrestrial globe, as viewed from Mars, is continually covered to a great extent by floating clouds. Even when clouds are left out of question, our relatively dense atmosphere, with much dust in its lower levels, must to a considerable extent obscure the earth as a visual object.

Not very long ago Marconi was convinced that signals of some sort were coming through from Mars by radio. His instrument perceived them—messages carried by waves of enormous length—but he could not translate them. Possibly he was right, but it seems much more likely that his imagination deceived him.

The mystery of Mars has naturally inspired the imagination of romancers. If the planet possesses inhabitants more or less human like, how vastly interesting it would be to gain communication with them. They may have reached a stage of civilization and enlightment so advanced that our own is by comparison a benighted barbarism.

The typical Martian may have a huge brain, with a head of size to correspond, and spindly legs. For locomotion on that planet, where the force of gravity is so small, he would require little muscular effort. Indeed, he may have given up walking. Why walk when there are easy mechanical means of getting about? We ourselves are advancing in that direction, as evidenced by the invention and development of the automobile.

Being Different From Us.

We are accustomed to consider that conditions as we find them in this world are established to fit our requirements. We are air-breathing animals; therefore an atmosphere is provided for our use. So likewise with everything else that goes to make up our enviroment.

This, however, is a totally mistaken view; the fact is exactly the opposite. We human beings are products of our enviroment, created and developed to fit it. Conditions on Mors are very different; hence it is to be presumed that the people there (if there are any beings properly so to be called) are very different from ourselves.

We certainly need to know them. They might teach us lots of things—for instance, how to deal with the desert problem. On all our continents the deserts are spreading at an alarming rate. One-sixth of the total area of the United States today is desert. Large parts of the vast sandy waste of the Sahara, in Africa, were agriculturally fruitful within historic time The earth seems literally to be drying up its surface waters being absorbed by the underlying rocks.

But Mars has been a desert planet for ages. If it is peopled by intelligent beings, they must not long ago learned how to deal with the problem. For water is the prime fundamental requisite of animal and plant life.

As for air to breathe, the Martians must be able to get along with much less of it than we require. Perhaps their lungs are of huge capacity, so that we may figure to our imagination the typical Martian is a human-like creature with a big head, a mighty chest, and spindly legs. Taking into view his great presumable stature, he would seem to us a gigantic goblin endowed with super human intelligence.

Prince of Wales at Polo

Wide World Photo

This view of the Prince whose visit has set many feminine hearts aflutter, shows him in action at his favorite sport.

TUCKER WILL OPEN A CLOTHING STORE

J. H. Tucker, who has been in the merchandising business in Henderson for the past fourteen years, has announced that he will open a clothing stode in this city on September 6. The business will be known as the Tucker Clothing Company, and will carry a full line of clothing, hats, haberdashery and men's wear in general. It will cater only to men and their needs.

Mr. Tucker left Thursday for New York markets to buy additional stock for the store. He has already done some buying, and the new goods are arriving now. Only selected lines of advertised good will be stocked, it is said.

Mr. Tucker has had many years of experience in the clothing business. He has been in Henderson for the past 14 years, the last ten of which have been with the Anchor Stores Company, and part of time as manager of the local store. He has had expressions of regret at his going, coming from officials of the store, as well as well wishes from many of his friends on the outside, who have learned that he will go into business for himself.

The new store will be located in the quarters in the Hawkins building on South Garnett street, formerly occupied by the Vance Plumbing and Electric Company, next to the Paragon Drug company. The building is to be overhauled, new metal ceiling put in, new light fixtures and modern fixtures for the display of hats and clothing. —Henderson Dispatch.

NEW CAFE

We wish to announce to the people of Louisburg and Franklin county that we have arranged and fully equipped and newly furnished a modern cafe in a room next to our barber shop. We have secured the services of Ada Stegall, who is one of the best cooks in town to have charge of the cooking. We expect to serve the best bill of fare that can be made up in Louisburg. You can order what you want and have it served right. We expect to make a specialty of a business mans lunch.

The cafe will be run exclusively for white people and every courtesy and accommodation will be extended those who pay us a visit.

9-5-5t STEGALL BROTHERS.

WANTED

First class cotton farmer either for wages or on shares, good dwelling, fine land, good neighborhood, for a part of Prestwould farm, Mecklenburg County, Virginia. See me or write

W. T. HUGHES,
9-5-1t Jeffress, Va.

FOR SALE—One or both of my farms near Bunn, in Dunns township. Good house, good location, easy terms. See J. S. Williams. 9-5-2t

TRUSTEE'S RE-SALE OF LANDS

By virtue of an order of re-sale made by the Superior Court of Franklin County upon a re-sale made on August 18, 1924, and an upset bid thereon; and by virtue of the power and authority conferred by that deed of trust executed by C. A. Long to Wm. H. Ruffin, Trustee, dated December 21, 1915, and recorded in Book 210, page 26, default having been made in the payment of the debt thereby secured and demand for foreclosure having been made upon said Trustee by the holder of the indebtedness so secured, the undersigned will on

MONDAY SEPTEMBER 22,1924

at the noon recess of court offer for sale at public auction to the highest bidder for cash, that tract of land in said deed of trust conveyed and described as follows:

Situate in Cedar Rock Township, Franklin ounty, North Carolina, being that tract of land conveyed by M. M. Gupton to Mrs. Emma Stallings, by deed dated December 16, 1990, and recorded in Book 85, page 510, and by Mrs. Mabel Sulter and Mrs. Elizabeth Stallings and G. B.H. Stallings, conveyed to C. A. Long, bounded as follows: Beginning at a hickory, G. M. Stallings corner, running thence S 88 1-2 E 123 poles to a small white oak, Coppedge's corner, in W. D. Coppedge's line; thence S 1 E 94 poles to two white oak pointers, W. D. Coppedge's corner; thence S 89 1-2 W 100 poles to a poplar and gum; thence N 81 W 29 poles 18 links to a red oak, R. R. Burnette's and G. M. Stalling's corner; thence N 3 1-2 E 85 1-2 poles to the beginning, containing 74 3-4 acres, more or less.

his August 30, 1924.

Wm. H. RUFFIN,
9-5-3t Trustee.

SALE OF REAL ESTATE

Under and pursuant to an order of Court in that certain special proceedings before the Clerk of the Superior Court of Franklin county entitled "Abraham L. Cooke, et al., vs Abraham L. Cooke, Administrator of J. L. Grant Cooke, et al.," the undersigned Commissioner in pursuance of said Order will on Monday, the sixth day of October, 1924, at 12:00 noon, at the Court house Door of Franklin County in the Town of Louisburg, N. C., offer for sale and sell to the highest bidder for cash the following described lots or parcels of land, lying and being in the Town of Louisburg, and more particularly bounded and described as follows:

FIRST TRACT: Beginning in the center of Louisburg-Raleigh road at an iron stake on the west side, Annie Green's corner; thence North 79 degrees West 10 poles to a cedar stake in Annie Green's line; thence North 11 degrees East 6 poles 4 unities to a cedar stake; thence South 79 degrees West 16 poles to the center of the road, a cedar stake in West side; thence along the road South 50 degrees West 8 poles 18 links, to the beginning, containing one-half acre, Recorded in Book 179, Page 482, Register of Deeds office of Franklin County, and being the property conveyed by C. E. Timberlake, administrator of J. P. Timberlake, to Grant Cooke.

SECOND TRACT: Beginning at a rock or stake Northwest corner of lot of Lazarus Neal; thence North about 54 feet to a rock or stake on said Raleigh road, William L. Williams' corner; thence East a straight line to Julius Hayes' line; thence South along Julius Hayes' line about 54 feet to Lazarus Neals' line; thence along Lazrus Neal's line West to the beginning, containing a dwelling house, and being the land conveyed by D. F. McKinn, S. P. Burt as Admr. of A. A. Turner, Administrators of W. A. Turner, deceased, to J. L. Grant Cooke.

This is a sale for partition, under order of the Court and subject to confirmation of the court.

This 30th day of August, 1924.

J. M. BROUGHTON,
9-5-4t Commissioner.