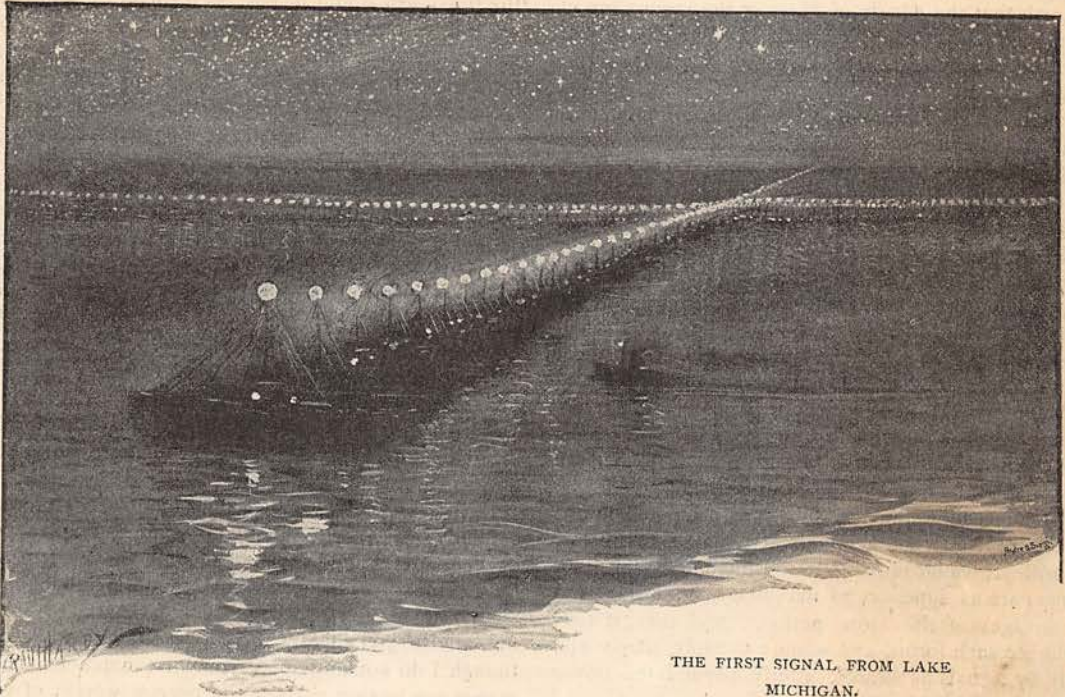


CORRESPONDING WITH THE PLANETS.



THE FIRST SIGNAL FROM LAKE
MICHIGAN.



NE morning when the post came in, one of my letters struck me as strange. It bore the postmark of "Tobolsk," in Siberia, and had a Russian stamp. I opened it. The contents were curious indeed, for they mainly came from a region far more remote than Tobolsk. The letter was written on a green tissue, such as I had known Aleriel to use, and at the head were these words in English :—

"I, Selauriar, a child of another world, send this to you, commissioned by my friend Aleriel, and a wanderer from another world resting for awhile in earth's Arctic realms—I greet thee.

"SELAURIAR."

Underneath, on green tissue, was inscribed in Aleriel's peculiar, but to me well-known, hand, these words :—

"MOUNT ASONIAR,
"THE BANKS OF THE GANGES,
"IN THE WORLD OF MARS."

I am told by one who came from earth but recently, and who has brought to me and my comrades, who for awhile are resting here in this Ganges realm of

Mars, the news that mankind are beginning now to wish to communicate with their fellow creatures in other worlds. It is a natural feeling. When you know they exist, and that life is not confined to one tiny world in space, which to the vast whole is but as a grain of sand to the ocean's shore, you must wish to know something of your brethren in other worlds—at least, in the worlds near you. The sentiment that animated the founder of the great Observatory of California, and which has now moved somebody in Europe to make a bequest for this object, is one which is most natural in rational beings.

However, there are difficulties in the way. The distance from earth to the nearest habitable globes is very great. Man can hardly rise to the summit of earth's loftiest mountains; and while men are discussing whether human life could be maintained upon the top even of Mount Everest, in the Himalayas, it might seem presumption to aim at communicating with worlds many millions of miles distant.

Sound is impossible as a mode of communication, for though Pythagoras dreamt in the days of old about the "music of the spheres," in interplanetary space there is an eternal silence—for there is no air to convey sound.

But sight—the appreciation of light through interplanetary ether—is a sense which traverses all space, even to the remotest nebulae. To sight alone can you look for aid.

But supposing sight is available—still supposing the rational intelligences of the solar system are no further advanced than mankind is—even that will be hardly sufficient. It is only by the best instruments of Earth that the canals of Mars or the mountains of Venus can be seen. The unaided human eye can only see bright stars, the highest skill of man can imperfectly discern the markings on their surfaces. The assumption in the whole proposal of intercommunication with the intelligences of other worlds implies that they are superior to mankind.

And does not the wonderful canalisation of Mars—the huge inlets, as it were, straight and parallel on that world—going in one direct line for hundreds of miles for the advantage of the inhabitants and for the irrigation of their territory, encourage you to the theory that in Mars at least—an older world than yours—civilisation, and knowledge, and control of natural forces may be greater than it is on earth?

Assuming this—that there are beings in the solar system equal or superior in knowledge and power to man, who wish to receive from this earth a message from mankind—how shall it be sent them?

The suggestion that buildings of geometric forms should be constructed on some plain is manifestly absurd. It would imply that the inhabitants of other planets are as superior to mankind as man now is to the savages of the Stone period. And then, if they could see such forms, and wanted to reply, they would reply by signals as minute, utterly beyond the power of earth's mightiest telescopes to descry.

Probably the one way is that which I used upon earth, *i.e.*, the lighting up of a large surface of the sea or land with coloured lights in geometric forms. The power of reflectors on your best lighthouses shows how great the power of man is already to light up a large tract of sea. But the blue colour of the water is unfavourable. The lighting up of a large plain clad in winter snow by night with reflectors from electric arc lights would be effective. Suppose, for instance, on the Rigi such lamps were fixed, and turned on snows beneath; or better still, perhaps, from the Malvern Hills when snow falls on the Midlands, a large space might be lighted up at night in a geometrical figure.

You will require not a small space, but several square miles to be thus lighted up. You know that Phobos and Deimos, the tiny moons of Mars, have hardly so large a diameter as Greater London. Thus the lights of London and Paris have long been seen by the astronomers of Mars.

But the question is: If a signal is given, how shall it be made quite distinct from natural objects, so that those who looked on it millions of miles away would see at once that it was artificial, and not natural? The proposal that the first figure should be the forty-seventh proposition of the First Book of Euclid is a good one. That is manifestly artificial, and would not be likely to result from natural causes. But a simple Latin or Greek cross would do still better. It is not a natural form, and one easier to discern than the complex forty-seventh proposition of Euclid.

The cross is also an easy design to form by electric lights. All you have to do is to form a series of powerful arc flash lights with reflectors turned on a snowy surface or on a lake in a line north and south (the true north would be best, as it would show design), and then a cross series at right angles. This would produce an effect on the dark side of the earth such as one can hardly suppose would be produced exactly by natural forces anywhere in the solar system. It would, to the whole of the intelligences capable of observing it, demonstrate itself as artificial—not a product of natural laws, which work usually in different ways, according to laws of evolution, and not with mathematical exactness. Flash lights would be useful. Alternate light and darkness every ten minutes could not be a result of natural laws. They would manifestly be artificial.

When the illuminated cross was formed it should be repeated for several nights, perhaps for weeks. At the same time, careful observations should be made of the red plains of Mars about the canal region and on the mountain-lands of Venus, which are opened to human sight while the plains are clad with clouds.

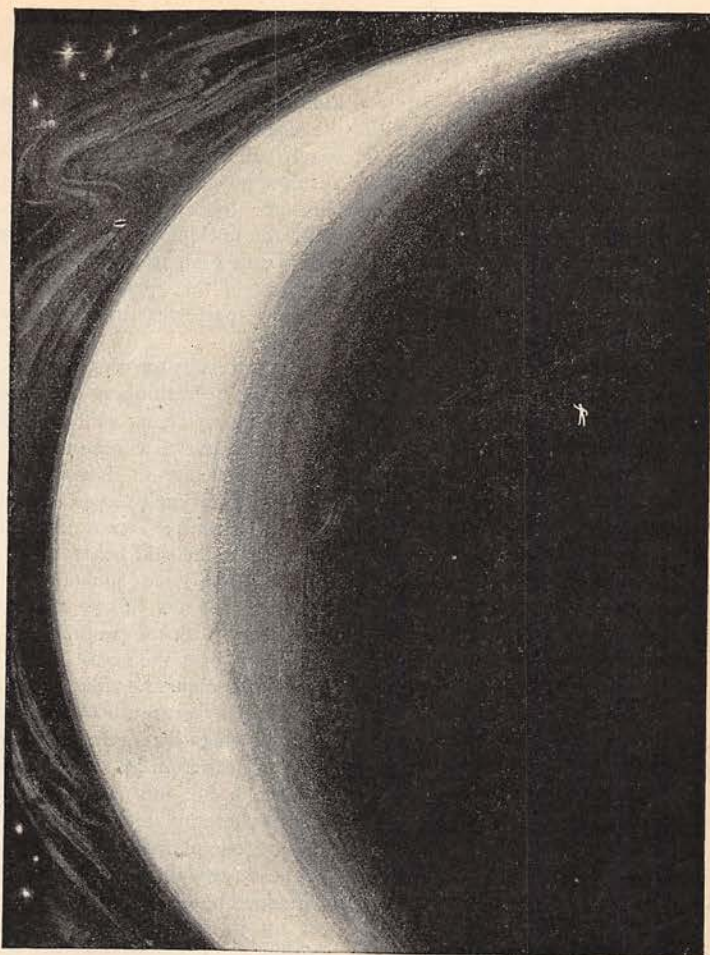
If there, or elsewhere in the solar system, a cross similar to yours, with its head toward the north pole of the planet, should appear, you would have fair *prima facie* evidence that in that world at least intelligences similar to man, or superior to him, exist. I would not advise you merely to look at Mars and Venus, though I do not anticipate you have much reason to expect any answer save in the nearest worlds of your own order: *i.e.*, belonging to the inner group of worlds of which the earth is the largest.

If a reply did appear, the question is: What should the next signal be? The first was merely to attract attention, the next should dispel all doubts.

But the point is: What common idea has mankind with the inhabitants of other worlds? In all communications we must proceed from the known to the unknown. What symbol would do?

The first idea which they must have if they be rational, and which man also has, is the form of your own world. Form a circle of white light of about fifteen or twenty miles diameter. In its place—in tracings of green light—outlines of the continents and large islands of one of your hemispheres. The representation of the earth itself in miniature would appear thus on one disc of your planet. Then see (supposing intelligences like men exist) what would be the reply. Would it be the representation of earth as it looks to them, or a map of their own world? Should either appear, then the existence of these intelligences, either equal to or superior to man, would be established with almost mathematical certainty.

One of the first symbols you should give them, if this were achieved, would be the representation of a man—the tracing of a human figure, either man or woman—in an outline of electric arc lights. This would show them of what form humanity was, and probably they would reply in the same place, with their own forms: thus you would learn something you never could gain



OUTLINE OF THE HUMAN FIGURE, AS SEEN FROM MARS.

by augmenting your telescopes a thousand-fold, *i.e.*, the physical appearance of the intelligences of the other worlds of the solar system.

It seems to me that we have more hope of seeing mankind undertake this great enterprise in America than in Europe. You Europeans are too occupied with your vast armaments for mutual destruction to care to devote much cost or trouble to communicating with neighbouring planets. It may be an interesting, but it would be thought an unprofitable enterprise. But in America, with the memories of the Columbus centenary before men's minds, it is just possible that some enterprising Americans might catch the fire of the genius of Columbus, and launch forth the rays of light into space that should reveal (if they exist) the peoples of other worlds. Men called the Continent which Columbus opened up a "New World." It is not so. It is only part of a hemisphere of the earth.

But this would truly reveal to you a new world, and tell you more about the universe than any improvement of the telescope could reveal. It is intellectually in one way a grander work than that of Columbus, though not likely to have such material results. Could it be tried at Chicago Exhibition? If the snow be not then available, the waters of Lake Michigan might be lighted up. What nobler spectacle than that of the forming such a display of electric lights on lightships, moored in a cross form on Lake Michigan, striving, on the occasion of the exhibition, to communicate with the planets, in the presence of myriads of earth's denizens assembled there to celebrate the centenary of the opening up of a new hemisphere to human civilisation? Man progresses in four centuries from communicating with the Western Continent to communicating with another world.

ALERIEL.

