Chamberlin or myself. Ordinarily such conduct justifies the use of strong terms in characterizing it, but in the present case I believe astronomers and others who are familiar with the situation will fully agree with me that these aberrations are more deserving of pity than of censure. F. R. MOULTON

June 10, 1909

COMMUNICATING WITH MARS

TO THE EDITOR OF SCIENCE: In view of the recent proposals for opening communication with the planet Mars, as reproduced by the European press from American newspapers (with accompanying portraits), no truly patriotic American can fail to feel a thrill of pride and exultation at the thought that it his country that is solving this great cosmic problem. It is time to sound the alarm, however, for there are indications that an attempt will be made to rob us of the honor after all. A distinguished French astronomer has recently published a letter on the subject, in which, while giving a small measure of approval to the American projects, he broadly intimates that the last word has not been said. The Germans are keeping very quiet, but it is rumored that Count Zeppelin is thinking, and in commercial and manufacturing circles there is great though silent activity in the direction of trying to ascertain in advance just what articles now "made in Germany" are likely to be most in demand among the inhabitants of Mars when once communication is opened. Assuming that the planet is correctly named (and it has borne the name for hundreds of years without protest), the great Krupp establishment is looking for a practical monopoly of trade, and to meet the expected emergency it has taken options on all the land adjacent to the present planet. Their engineers are known to entertain the opinion that it will be a comparatively simple matter to send to Mars a 14-inch 70 foot gun, first, of course, hermetically sealing it in the aluminum cylinder. If it should not reach the exact spot where it is wanted it can readily be transported anywhere by canal boat.

Having all this information, which has only recently come to me, I have decided to protect American interests by making premature publication of my own scheme for signaling to our celestial neighbor, which, for efficiency, simplicity of arrangement and ease of operation altogether surpasses, I think, all will admit, anything hitherto before the public. It is well known, even among astronomers, that as the orbit of the earth lies between the sun and that of the planet Mars, the dark side of the earth must, at regular intervals and for considerable periods of time, be turned toward Mars.

A hole through the earth would, at this time, allow the passage of a beam of sunlight, the intelligent interruption of which could be made to appear as a series of signals, using the Morse (E. S.) code or any other that might be chosen.

That is all; the problem is solved in this simple way.

One can readily understand how the system might be also put in operation on the moon, if the lunatics would only bore a hole through which the sun might shine when the dark side of the moon was toward us and then arrange a device for cutting off this beam of light at will. For our immediate purpose of wigwagging to Mars such a hole must necessarily be several miles in diameter. Although some minor difficulties in the way of the execution of this plan remain to be overcome, many of the details are already settled, including the selection of the spot where such an opening might best be made in the interests of mankind generally. T. C. M.

DRESDEN, GERMANY,

May, 1909

P. S. I regret that I have no portrait to send with this.

"TYPHOID MARY"

MUCH has appeared in the press of late concerning the unfortunate woman who for two years past has been held a prisoner upon North Brothers Island by order of the board of health. On June 29 she appeared before Supreme Court Justice Giegerich on a writ of habeas corpus, sued out by her attorney to obtain her release. Judging from the evidence,

we all know that Mary is a "typhoid carrier," and a dangerous one by reason of her occupation as a cook; but she is only one among many such "carriers" and it is scarcely justice to place upon her alone the burden that should be shared by her entire class.

Of all those who recover from typhoid fever something like four per cent. carry about with them the germs of the disease for long periods of time. They are "carriers" in fact, and can, like Mary, become centers for secondary infection. There are at the present moment probably 560 such persons in the state of New York, representing four per cent. of the 14,000 cases of typhoid fever occurring during the past year. How many must be added to that number to allow for the "hold-overs" coming down from previous years it would be hard to guess. Others will be added during the year to come.

We can not keep in detention all these people, then why single out and imprison one.

Typhoid carriers are dangerous when they are possessed of uncleanly personal habits, and they become more so when their occupations have to do with the preparation of food.

It would be eminently wise to instruct a "carrier" as to the danger lurking in human dejecta and to insist upon the necessity for great personal cleanliness. It might be also well for the authorities to direct that such a person should not be engaged in the preparation of food; but beyond "education" and an order for "change of occupation" it is scarcely practical or fair to go.

W. P. Mason
Rensselaer Polytechnic Institute,
July 1, 1909

QUOTATIONS

Mr. Latham's Aeroplane

After a comparatively short training, Mr. Hubert Latham has brought the Antoinette monoplane from obscurity into serious rivalry with the Wright machine as regards duration of flight, while it is easily superior in speed. He has also shown that it can be flown in windy weather, and the ease with which he controls it quite upsets the theory held by the bi-planists that the monoplane is exceedingly difficult to manage. Nevertheless, when the experience of Mr. Latham is placed alongside that of the many other monoplanists, who so far have not been particularly successful, the point is demonstrated that the human element counts for much. It would appear that Mr. Latham is something of a genius in navigating aerial machines.

The Antoinette monoplane, which is designed by M. Levavasseur, consists of a central skiff-like body, from each side of which a main plane springs at a slight upward tilt. The single propeller is mounted in front of the central body, and close behind is the motor. In a well to the rear of this the pilot is comfortably situated, his position allowing him a clear look-out, and affording a certain degree of protection not noticeable in other machines. Indeed, Mr. Latham claims that he is very safe from injury in this machine, being well protected by the planes and the body of the vessel.

At the rear of the main body are vertical equalizing fins, two vertical rudders, and a horizontal elevator for giving upward or downward direction. The lines of the body are very clean, the total bearing surface is remarkably small, and there is an absence of the many stays and members which, in the biplane especially, lead to increased head resistance and consequent loss of speed. At the rear end of each main plane is a flexible extension, which can be given a varying angle of incidence for purposes of stability.

The under-frame is a clever piece of work. The chassis rests on two wheels placed close together, and a forward extension of this frame takes the form of a runner, which is designed to receive the first shock of landing and thus save the wheels from buckling strains. The combination of sledge runner and wheels in the Antoinette enables the aeroplane to be started without the use of extraneous mechanism, whilst it allows landing to be effected at speeds which would smash any ordinary wheel.

The control of the Antoinette machine is by means of side wheels, those at one side