

LETTER TO THE EDITOR.

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A Mite whose Eggs survive the Boiling Point.

IN several preparations of boiled flax seeds for fungus-culture it was observed that numbers of mites (*Tyroglyphus histiostoma*) made their appearance. A petri dish containing mites was boiled, and in about three weeks there were again large numbers of them present, though the cover had never been removed since boiling.

On June 6 a decoction of flax seeds containing mites in a test tube was boiled for five minutes, and the neck plugged with cotton wool. On June 15 a similar preparation was made, but the test tube was covered with an indiarubber cap in addition to the plug of cotton wool. On August 24 both test tubes contained living mites. So the inference seems justified that the eggs, though saturated with water, must have survived the boiling point.

The mite is about 2/5mm. in length. The bean-shaped eggs ($108.5\mu \times 66.5\mu$) are enclosed in two transparent valves like watch glasses.

I am much indebted to Mr. G. H. Carpenter for identifying the species.

J. ADAMS.

Royal College of Science, Dublin, September 2.

THE BERLIN CONFERENCE ON WIRELESS TELEGRAPHY.

WE have on two or three occasions referred in these columns to the International Conference on Wireless Telegraphy which was held last month at Berlin. The conclusions at which the conference arrived have now been published in the *Cologne Gazette*, and were summarised in the *Times* last week. In considering these conclusions it is as well to bear in mind that the conference was only preliminary; though representatives of nearly all the important States were present, it was not intended that the recommendations should be final, but rather that they should serve as a basis for discussion at a future conference with more definite powers. Still, the decisions are of interest as they indicate more or less clearly the general state of opinion on the present position of wireless telegraphy.

We have frequently pointed out in NATURE that for the present at any rate it should be the aim of those directly interested in the development of wireless telegraphy to perfect it as far as possible as a means of communication between ships at sea and between ship and shore. This is really an infinitely more important object than the more ambitious and more striking attainment of Transatlantic communication, and such seems to have been the opinion of the conference. Within the last few days it has been announced that Mr. Marconi is now practically in a position to reopen Transatlantic communication on a commercial basis, but even if the attempt proves successful on this occasion less will have been gained than seems to be the case at first sight. We have already means of communicating telegraphically across the Atlantic, and though wireless telegraphy may add another, and possibly a cheaper, method, the gain will be trifling compared with the advantage of perfecting it in a direction in which we have no other resources, whereas should the working of the high power long-distance stations in any way interfere with or hinder the development of the less pre-

tentious short-distance signalling, the loss to the community generally will be very great. Unfortunately, the actual condition of affairs at the present time is difficult to determine; important facts are kept quiet for what are doubtless sound commercial reasons, and assertions and counter assertions are rife. On the one hand we are assured that the big stations do not interfere with the small ones, and on the other we have undeniable evidence that these monstrous etheric disturbances may affect all apparatus in their neighbourhood. It may be possible to avoid this interference by suitable adjustment, but it ought not to be permissible to make this necessary any more than it should be permissible for a factory to belch forth smoke from its chimneys on the ground that those who wish for cleanliness and health can move their firesides to the country.

Wireless telegraphy, indeed, presents a somewhat peculiar and difficult problem; in the first place its medium of communication is one to which all people have an equal right, and which, therefore, one person or set of persons must not be allowed to use to the detriment of others; secondly, its utility depends directly on its availability under all conditions, and at all places, so that to be most useful there must be either a world monopoly or else a perfectly free interchange between competing systems. The second consideration is a strong argument in favour of State monopoly of any means of communication, whilst the first is an additional reason for international control of wireless communication. At the same time it is naturally unjust that those who have spent time and money and energy in pioneering development should be deprived of the legitimate reward of their labours. It is obvious that a solution to the difficulties is only to be found by a fair compromise between conflicting interests, that of the public at large on the one hand and those of the various wireless telegraphy companies on the other. The resolutions of the Berlin conference indicate the only way we can see in which such a compromise can be arranged. Two of these, which are concerned with rates and the method of charging, are not of particular importance; the others propose that coast stations shall be obliged to receive and forward all telegrams from vessels at sea by whatever system transmitted, that telegrams referring to wrecks or calling for assistance shall have precedence, that stations shall be arranged to give the minimum of interference, and that any necessary technical details of the working of apparatus shall be published. The first of these is naturally the most important, and at the same time is the one which it will be most difficult to ratify. It is, of course, well known that the Marconi Company has refused to acquiesce in such an arrangement, by which, as far the largest and most powerful wireless telegraphy company, they have least to gain and most to lose; their position as undeniably the pioneers of practical wireless telegraphy entitles them to special consideration. For this reason the delegates of Italy and Great Britain did not sign this recommendation. The Italian Government is bound by a fourteen years' agreement with the Marconi Co., so that all the delegates could do was to undertake to suggest to the company the amendment of the agreement in the desired direction. The British Government is in an almost equally difficult position, for the Marconi Co. is a British company, and holds already a practical monopoly in this country. Still, it is to be hoped that these difficulties will not stand in the way of an ultimate settlement. There is not unnaturally a suspicion that so far as other countries are concerned there is a desire to benefit, if possible, by