book, as we have already reviewed the first editions in *NATURE*, and also, on two occasions, Prof. Fleming's more comprehensive treatise on wireless telegraphy. We ventured then to predict that both these books would become standard manuals on the subject, and our forecast is shown to have been correct by the recurring necessity for the issue of new editions. There is not much difference to be noted between the present volume and its forerunners, but certain additions have been made to bring it up to date.

No doubt when the present war is over much valuable experience which has been gained of the use of wireless telegraphy both in sea and land operations will, by degrees, become public, but one does not look for such information at present. It is to be hoped that this experience may be turned, in due course, to more peaceful ends, in which case one may look forward to a fresh edition of Prof. Fleming's book. In the meantime, it remains the best introduction to the subject for all students, and a sufficient manual for those who intend to take up the practical application, but who do not wish to go too deeply into the theoretical and mathematical side. The book is well and amply illustrated, though some of the process-blocks are not so clear as could be wished.

M. S.

An Inquiry into the Statistics of Deaths from Violence and Unnatural Causes in the United Kingdom. By Dr. W. A. Brend. Pp. v+80. (London: C. Griffin and Co., Ltd., 1915.) Price 3s. 6d. net.

THE object of this book (a thesis approved for the M.D. degree, University of London) is to examine the official statistics relating to deaths from violence and unnatural causes in the United Kingdom, to investigate their usefulness and the accuracy of the returns, and to suggest modifications in the present system.

Several different authorities (Home Office, Board of Trade, Local Government Board, Registrar-General, etc.) compile the returns, but the different reports do not seem to be co-ordinated. Thus during the same period the deaths from alcoholism in Liverpool are given by the Registrar-General as 36, by the Home Office as 113; the Local Government Board records deaths from "starvation and privation" as 94, the Home Office ("want and exposure") as 231, and the Registrar-General ("cold and starvation") as 146, and these instances might be multiplied!

More accurate returns are needed in many instances. The importance, for example of trustworthy information concerning infant mortality from overlying and deaths of children from burning is obvious.

Dr. Brend's analysis shows that there are classes of deaths of which our knowledge, both statistical and otherwise, is seriously inadequate. At present, for example, the records of coroners' courts are practically inaccessible: the suggestion is made that all the records should be sent to a central office where they could be further analysed.

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LETTERS TO THE EDITOR.

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts intended for this or any other part of *NATURE*. No notice is taken of anonymous communications.]

The Universities, the Technical Colleges, and the Army.

A COUPLE of months ago it occurred to myself and the staff of the Heriot-Watt College that the first-year engineering course for the diploma would—with a few modifications—form an excellent preliminary scientific training for boys entering the Army who might hope for promotion to an officer cadet unit, the course at the same time still to remain an integral part of our diploma course.

The suggestion did not meet with local approval, but while thinking out the details, I also brought the matter before the Board of Education and the Association of Technical Institutions, where, I gather, it is meeting with some attention. I also found that similar suggestions had already been made by Mr. Darling in *NATURE* (January 20 and February 10) in some communications which I had missed, and also that a similar scheme was being carried out in certain English public schools.

Among those to whom I wrote was the Vice-Chancellor of Leeds University, and I have just heard from him that in his hands the whole scheme has taken a wider aspect, the idea being to devise courses of training which, while valuable as a preliminary scientific training for boys entering the Army, will at the same time be allowed to qualify as part of the course required for a university degree. It is on account of this wider aspect given to the matter by Principal Sadler that I venture to write to you on the matter.

The idea, which I believe originated with Lord Haldane, of drawing upon the universities for officers in the Army, and the establishment of the O.T.C., is no doubt a sound one. At the same time, at that stage the conception seemed to be to allow a student to go on with his ordinary university course while giving him in his spare time a certain amount of military training on the lines required by an officer.

It seems to me that among us we have evolved a much sounder conception of the duties of the university towards the Army, and that is, to give the boys such a scientific training as will be of value to them when they go to their special military training. There can be no harm in giving them a little drill, but the main object of the universities and the technical colleges should be to devote the time at their disposal principally to laying the foundations of the scientific knowledge of which modern warfare is an application.

A. P. LAURIE,

Principal.

Heriot-Watt College, Edinburgh, July 18.

The late M. Joseph Déchelette.

OF the many scientific men who have fallen in the present war none calls forth a deeper note of regret than the eminent and promising French archaeologist and anthropologist, M. Joseph Déchelette, who was killed while leading his company to attack on October 4, 1914. A committee, embracing all the leading archaeologists and anthropologists of France, has been formed "de conserver son effigie et de glorifier sa mémoire." The committee has secured the co-operation of the sculptor, M. Henry Nocq, to prepare a portrait plaque with, on the reverse: "L'épée moderne

de l'héroïque capitaine s'y croisera, au travers d'une large couronne de lauriers, avec le glaive de la grande époque gauloise que l'archéologue a si bien fait revivre." Nor can one abstain from quoting from the circular, which has been sent out by our colleagues in France, the following sentence:—"C'est l'unité d'une carrière riche d'œuvres, plus pleine encore de promesses, que rappellera la légende: GALLIAE RELIQUIAS ILLUSTRAVIT • PRO • GALLIA • MILES • CECIDIT."

There is not a British archaeologist or anthropologist who is not indebted to M. Déchelette, and I am certain they will be only too glad to participate in a movement which has been rightly initiated by their French colleagues. Subscriptions should be sent to M. le Comte O. Costa de Beauregard, Sainte-Foy, par Longueville (Seine-Inférieure). Those sending a subscription of 10 francs are entitled to a replica of the plaque in bronze, those giving 50 francs to one in silver, and those giving 80 francs to one in enamel, should they so wish.

ARTHUR KEITH,

President of the Royal Anthropological Institute of Great Britain and Ireland.

50 Great Russell Street, W.C.

A Sunset Phenomenon on July 22.

AN interesting sunset phenomenon was visible here at 8.10 p.m. G.M.T. on Saturday last, July 22. Two very well-marked dark bands were seen rising from the south-eastern horizon across the pale pink counter-glow. On the north-western horizon the tops of two very distant cumulo-nimbus clouds were visible, the tops being about half a degree above the horizon; the clouds were dark against the sunset, but their upper edges were bright. The dark bands were the shadows of these clouds projected right across the sky. The shadows could be followed for some distance from the clouds, but were not visible in the plane at right angles to the direction of sunset. They were visible for quite ten minutes after I first noticed them, by which time the twilight arch was some way above the horizon and the dark bands rose from it. The two cumulo-nimbus clouds and a small patch of cirrus were the only clouds visible; their bearings were 302° and 305° respectively. An inquiry by telephone elicited the fact that no clouds were visible at Benson Observatory, and the cumulo-nimbus must have been at a great distance. It would be of some interest to know this distance, and I should be very grateful to any readers of NATURE in Herefordshire, Wales (especially Anglesey and the west coasts), and any part of Ireland roughly between Co. Dublin and Sligo and Donegal Bays, if they could let me know the character of the weather at the time mentioned, whether any cumulo-nimbus clouds were noticed, and especially if rain or thunderstorms were experienced, or even merely whether the sky was clear or cloudy. I fear the weather of a week ago is not often remembered, but it is possible that some of your readers may recollect it or have recorded it.

Had the clouds been more numerous the shadows would have encroached more on the sunset glow and on the counter-glow, and the appearance would have resolved itself into crepuscular rays, the explanation of which has been a matter of some discussion.

C. J. P. CAVE.

Meteorological Office, South Farnborough, July 24.

Silvanus P. Thompson as a Painter.

THE late Prof. S. P. Thompson was a man of such extraordinary versatility and power that his artistic side was scarcely done justice to in the Press. It

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may therefore be interesting to put on record what our friend, George Flemwell, the well-known painter, naturalist, and writer, living in Switzerland, says in a letter from Zermatt:—

"To my mind enough has not been said of his power for rendering ice in water-colour. I knew nobody to touch him in the painting of glacier ice at close quarters." (I believe Mr. Flemwell, himself a distinguished painter of Alpine scenery, has seen little of Edw. Compton's work.) "And his method was, considering the excellence of the result, the simplest and most direct I have ever seen. With the utmost care he worked with great quickness and facility. A few simple washes, and there was the ice: its form, its structure, and its quality. His values were right and his colour clean; he got the body and substance of the glacier. I am happy to think I have two or three pencil sketches I made of him when he was working on the Glacier d'Argentières and at the Mer de Glace; and I was with him when he painted the original of the Christmas-card of which you speak. . . ."

H. S. T.

Bristol, July 17.

The Utilisation of Waste Heat for Agriculture.

MR. C. TURNBULL'S scheme (NATURE, July 20, p. 422) for artificially heating the soil, if feasible, would tend to encourage the insect pest. As all farmers and fruit-growers are aware, this has of recent years increased to an alarming extent. But for the seasonal lowering of the soil temperature it would become more serious still.

C. CARUS-WILSON.

Casterton, Kirkby Lonsdale, July 22.

THE INDIAN BOARD OF SCIENTIFIC ADVICE.

THE Report for the year 1914-15 of the Board of Scientific Advice for India consists almost entirely of isolated summaries of the work done during the year by the several scientific departments and scientific institutions of the Indian Government. As most, if not all, of these departments and institutions issue independent annual reports of their own, it is, to say the least, disappointing to find these technical summaries filling the report of a scientific body styled advisory; unless, indeed, the term "advice" be understood in the commercial or notificatory sense as merely indicating the existence in working order of these various departmental instruments of research.

The advisory proceedings of the Board occupy only thirty-seven lines of the 180 pages of the report, and all the information they afford is that the Board accepted the programmes of the several scientific departments, but would rather not have them in so much detail in future; and that it recommended (a) that officers attending the next Indian Science Congress should be regarded as on duty, (b) that a catalogue of scientific serials prepared by the Asiatic Society of Bengal should be published at the expense of Government, and (c) that experiments should be undertaken, as requested by the Punjab Veterinary Department, to determine the vitality of rinderpest virus under Indian conditions—all three mere departmental