Vicious Circles in Sociology and their Treatment. By Dr. J. B. Hurry. Pp. 34. (London: J. and A. Churchill, 1915.) Price 2s. net.

This little book, planned on the lines of the author's "Vicious Circles in Disease," is intended to emphasise that, just as in disease, so in social life, various pernicious factors are at work which act and react upon one another, constituting a "circle." Thus crime leads to loss of employment, which leads to loss of means of subsistence, which again begets crime, and tuberculosis leads to poverty, and poverty is a potent factor in the causation of tuberculosis. author recognises ten such circles met with in sociology, and while they may act separately, several of them may be in simultaneous operation, e.g. poverty, uncleanliness, overcrowding, alcoholic indulgence, and disease. The remedy is to break the circle, and according to the author "the first task of the sociologist is to extricate from the symptom-complex those dominant factors that constitute the circle, to discover the weakest link in the unending chain, and to effect a breach at the point of least resistance." The book should be of service to the social worker in assisting him to analyse social problems into their constituent factors, and the references to standard authorities which have been freely introduced will likewise be helpful.

Willing's Press Guide and Advertisers' Directory and Handbook, 1916. Pp. xii+487. (London: James Willing, Ltd.) Price 1s.

This concise and comprehensive index to the Press of the United Kingdom, as a sub-title describes it, this year reaches its forty-third issue. It is as useful as ever. The classified list of periodicals arranged under subjects is particularly useful. The lists of the principal Colonial

the compilation.

## LETTERS TO THE EDITOR.

and foreign journals add greatly to the value of

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## Instruction in Science for Military Purposes.

In a special war lecture on "Field Telephones," delivered before the Royal Socity of Arts on July 28, 1915, I pointed out how the services of science teachers might be utilised with advantage in training all ranks of our new armies in this important subject. Although in isolated cases work of this kind has been carried out, and highly appreciated by the military authorities, no general scheme of instruction has yet been adopted. As the urgent necessity of such in-struction does not appear to be realised, a statement of the present conditions regarding facilities for training in science as applied to military purposes may be useful.

The only officers in the British Army who receive a scientific training are those belonging to the Royal Engineers and the Royal Artillery, who are attached to the regular Army. Some who obtain direct com-

missions in these branches receive instruction at the Ordnance College, Woolwich, at Chatham, or elsewhere; but this is by no means general. For the cavalry and infantry officers practically no facilities exist. It does not appear to be generally known that the teaching of science at Sandhurst was abandoned many years ago, and even yet has not been resumed. The result is that the greater portion of the British Army is engaged in conducting a war in which scientific knowledge is essential, without its officers having the opportunity of studying some of the most important matters relating to their duties. The circulation of pamphlets dealing with special points cannot be regarded as a substitute for proper tuition, yet it is practically the only means at present employed. It is with a view to remedying this deplor-

able state of things that this letter is written.

At the meeting of the Association of Public School Science Masters, held on January 5, Mr. C. L. Bryant, of Harrow, presented a scheme for the instruction in military science of boys who were receiving commissions directly from school. The subjects to be taught were suggested by the Director of Military

Training in the subjoined letter:

WAR OFFICE,

November 19, 1915.

To the Secretary of the Association of Public SCHOOL SCIENCE MASTERS.

SIR,-I am directed to inform you that your offer to train future officers in various subjects is very

I am also requested to inform you that the War Office is not in a position, and is not likely to be in a position, to render any assistance in the provision of funds, equipment, or instructors. Subject to these restrictions, it is suggested that the training should consist of the following subjects:-

EXPLOSIVES.—The nature of various explosives in use—methods of firing charges—care in handling—detonators—fuses—methods of lighting fuses—gren-

TELEPHONES.—Detection and mending of breaks in cables-laying of lines-remedying faults in receivers and senders-reading and sending on the buzzer.

Poison Gases.—Methods of combating same—first aid to men suffering from same.

RANGE FINDING.—Methods of taking range.
I am to enclose a manual, "Guide to Instruction in the use of Grenades," and to recommend that instruction in other subjects be from the Manual of Field Engineering, from the Training Manual, Signalling, as regards Telephones and from the Musketry Regulations as regards Range Finding.

I am to add that every possible assistance will be given to you, but that this department cannot undertake to communicate with all the Public Schools.

(Signed) F. C. HEATH-CALDWELL, Director of Military Training.

Working on this basis, a syllabus was drawn up by Mr. J. Young, of the Royal Military Academy, Woolwich, and Mr. Bryant, to which the present writer contributed a few suggestions. This work has already commenced at Harrow and a few other schools, and it is sincerely to be hoped that every school will follow on the same lines without delay. The instruction, however, should also extend to boys about to enter Sandhurst, as such will not have an opportunity of studying the first three of the above subjects in a proper manner after leaving school. By avoiding extraneous matters, a single term's work will suffice, even in the case of beginners, to impart a mass of information of the highest practical value. It seems almost incredible that at the present time

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