much appreciated by those who desire a popular book at a moderate price.

Practical Exercises on the Weather and Climate of the British Isles and North-west Europe. By W. F. Stacey. Pp. vii+64. (Cambridge: At the University Press, 1919.) Price 2*s.* 6*d.* net.

MR. STACEY has produced an excellently planned little book, a model of the way in which a specific inquiry into a subject of relatively narrow compass should be conducted. But, although the methods he adopts are suitable for school work, the subject-matter under consideration is not geography, and is not necessary for all or perhaps for any of the forms of a secondary school. Mr. Stacey has selected a typical set of weather data for the British Isles from the Daily Weather Reports, and has based thereon exercises in which the pupils construct and interpret weather maps. Naturally enough, the work is based upon the records of pressure observations, and his titles include the terms "cyclone," "depression," "wedge," "col," and "anticyclone." The exercises deal with weather records, but not with climate. It is fairly certain that the study of pressure, as distinct from the study of isobars, is out of place in a school geography course unless carefully correlated with a well-developed course in physics, and it is to be feared that Mr. Stacey's efforts will lead to a juggling with words and symbols rather than to a comprehension of atmospheric conditions.

Alternating Current Work. An Outline for Students of Wireless Telegraphy. By A. Shore. Pp. ix+163. (London: Wireless Press, Ltd., 1919.) Price 3*s.* 6*d.* net.

As shown by the sub-title, this work is addressed to students of wireless telegraphy. It outlines, without very elaborate mathematics, the general principles of alternating currents and their generation, transformation, etc., in a way readily intelligible to those having already some general knowledge of electricity and magnetism. As the book advances, the treatment specialises more and more in the direction of wireless working. Discussions of the influence of inductance and capacity lead up to a consideration of resonance, and high-frequency resistance is given a prominence justified by its importance in this class of work. A few typical measuring instruments, as used in wireless installations, are briefly described at the end. A reviewer, on turning over the leaves for the first time, might receive a false impression from the presence of an illustration in the chapter on alternating-current generators of an obsolete, although historically interesting, type of machine. This is, however, not unduly enlarged upon in the letterpress. The book is clearly written throughout, and should save those for whom it is intended much trouble and waste of time in picking out the parts of the subject that they require from the many more complete and general works on alternating-current working.

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.*]

Science and the New Army.

THE leading article on "Science and the New Army" in NATURE of March 18 raises a number of points of fundamental importance with regard to the future relations between science and the Services. The whole subject may conveniently be considered under two heads: (*a*) The utilisation of the results of scientific research for military purposes; and (*b*) the direct employment in times of emergency of scientific workers themselves.

With regard to the first, the difficulty has been the lack of real contact. The university worker is necessarily largely withdrawn from the problems of everyday life; and this, not through either mental incapacity or unwillingness on his part, as many people seem to think, but mainly because his time is usually fully occupied with teaching or university routine. Thus he is not, in many cases, even aware of the problems which need solution, and some organisation is required to bring them to him. More, however, than this is wanted if he is to give active help, and attention will have to be carefully given to the following points:—

(1) There is a great disinclination among reputable scientific societies to publish work (even though it may be of considerable practical value) which does not constitute a definite advance in science itself. Now, the solutions of many Service problems are, from the scientific point of view, trivial, though laborious. Nevertheless, it is of great importance that they should be *explicitly* worked out and reach the people interested. On the other hand, technical journals often look askance at what they would probably call "academic" contributions. There is here a gap to be bridged.

(2) Even a scientific worker will expect either remuneration or credit for his work; if the Services expect his collaboration, they must be prepared to pay for it. It has frequently happened that scientific men have given their time and efforts without stint and received little beyond mere thanks (if as much), whilst the credit has been monopolised by some administrative official.

(3) It must also be made clear that scientific workers are not wealthy amateurs, and that the sum (sometimes considerable) necessary to finance preliminary experiments must be provided. Further, the Services must be willing to take the worker into their confidence and to let him observe for himself the actual conditions to which his work will apply. Most Service men cannot even state a problem to a researcher, and are incapable of distinguishing between data which are essential and those which are not. It is entirely useless to expect a scientific man to work in the dark, on second-hand statements from them. For example, one cannot work on submarine detection without submarines at one's disposal. Facilities (which may involve the temporary use of a ship, of aircraft, or of troops) are necessary if results are to be obtained.

In this connection I feel doubtful as to the wisdom of the policy quoted in your leading article from the memorandum of the Secretary of State for War of separating what is called "pure research" (query: Does this mean "research in pure science"?) from