cists, but also by those engaged in other scientific pursuits who desire trustworthy information as to the "new physics." H. S. A.

Le Rocce. Concetti e Nozioni di Petrografia. By Prof. E. Artini. Pp. xx+636+Tav. xxxii. (Milano: Ulrico Hoepli, 1919.) Price 18.50 lire.

PROF. ARTINI states in his preface that there has been no general treatise on rocks in the Italian language since that by Achiardi, published thirty years ago. He rightly remarks that a translation is always an indifferent expedient; a book for Italians should be rich in Italian examples. He looks on rocks from the point of view of a naturalist, and his use of landscapes among his illustrations makes us hope that he will some day give us a petrography of Italy that will connect mineral evolution with the scenery from Monte Bianco to Catania. The material here brought together is thoroughly up to date; we may cite, for instance, the remarks on *idrogels* (p. 186), on bipyramidal quartz (p. 338), and on the alleged gneissic *Grundgebirge* (p. 544). Graphic methods of representing rock-composition are illustrated. As an Italian detail, may we point out (p. 319) that *gabbro,* and not *eufotide,* is of Tuscan origin, the name of a Tuscan village having been utilised by von Buch? The treatment of sedimentary rocks is unusually adequate, and the photographic plates of thin sections are extremely clear and helpful. This compact volume is so full of fundamental *concetti* that it certainly should have been provided with an index. G. A. J. C.

Agricultural Bacteriology. By Dr. H. W. Conn. Third edition, revised by H. J. Conn. Pp. x+357. (Philadelphia: P. Blakiston's Son and Co., 1918.) Price 2 dollars net.

WHILE the general plan of this book remains the same as before, considerable changes have been introduced in the sections on soil bacteriology, on the control of milk supplies, on plant diseases, and on laboratory technique. In some cases, however, further information might have been given with advantage; thus under slimy or ropy bread practically no description is given of the causative organism. Under "tuberculosis" the illustration Fig. 50 is stated to depict "a bit of animal tissue"; what is actually shown is a giant cell only; the tubercles are stated to be "swollen masses of tissue," and among animals that suffer from tuberculosis dogs and cats are mentioned; actually these animals rarely suffer from the disease. The consideration of the bacteriology of the soil, of milk, and of milk products is adequate, and such details as protozoa in the soil and soil sterilisation and the possibility of the accumulation of toxic substances in "worn-out soils" are all referred to. In an appendix a scheme of laboratory work is given, with detailed exercises, which should be of value to the teacher. The book is freely illustrated and clearly printed, and forms a good elementary introduction to the wide subject of agricultural bacteriology.

R. T. H.

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.]*

Wireless Telephony.

REFERRING to my letter on this subject in NATURE of June 12, Mr. Godfrey Isaacs tells me that his wireless remarks with regard to secrecy were intended to apply, not to the apparatus actually in use on May 28, but to a new Marconi system, the apparatus for which is only now in course of manufacture. The scientific world will, I am sure, await with interest details of this new secret wireless telephone system.

A. A. CAMPBELL SWINTON.

40 Chester Square, London, S.W.1, June 17.

Camouflage of Ships of War.

PROF. KERR, in the course of a letter which appeared in NATURE of May 15 under the above heading, paid me a high tribute by stating that, during the summer of 1917, "the value of the principle [*i.e.* obliterative colouring] was now recognised [by the Admiralty] and its application entrusted to skilled hands," but the main point in his letter was to show that the principle of obliterative colouring was no new thing, and was common knowledge to biologists: this no one will question. My aim in replying to his letter is with the view of showing that I was not working on biological lines, and is thus to remove a misapprehension.

I feel that Prof. Kerr has not thoroughly grasped the idea of the special form of camouflage on which I was engaged, and of which I still claim to be the originator. "Dazzle-painting," so called officially, had one purpose in view only, viz. to upset a submarine commander's estimate of a vessel's course, when carrying out an attack with torpedo. I was under no misapprehension as to its value for gunnery, and in my original submission to the Admiralty in May, 1917, I made no claim that it might be used for this purpose, as I felt certain that paint could not possibly have sufficient carrying power to stultify the enemy's range-finders at the great distances at which a modern action would probably be fought.

Subsequent experiments on dazzled ships with range-finders justified this belief.

The accurate estimation of a vessel's course is the prime factor required by a submarine commander to ensure successful attack. In every dazzle design this point was studied to the exclusion of all others, *i.e.* to frustrate accurate calculation of course. The mere breaking up of a vessel's form by strongly contrasting colours would not achieve this end without careful study of the perspective and balance of the design. I am not aware that this occurs in biology, *i.e.* the disguise of direction.

Surely the obliterative colouring of birds and animals is operative only so long as the bird or animal is in a state of rest; the moment movement commences the illusion is destroyed. The ship subject to torpedo attack is in constant movement. Again, in how many cases is Nature's scheme for protection successful when the subject is seen on a ridge silhouetted against the sky? Yet this is the only point of view from a submarine when observing a ship through the periscope.