

touched upon. In connection with the production of milk it would have been useful to include a short account of the practice of milk-recording, for the general reader has but little idea of the system and the benefits it confers.

The methods employed in separating cream and preparing it for churning are fully dealt with, and the chief machinery, such as the separator, the cream ripener, the regenerative heater, and the pasteuriser are described.

Cheese-making is dealt with by taking Cheddar cheese as a type, and the principles and practice are fully explained, as are also the essential points in the maturing and marketing of the produce.

Notes on judging cheese and also butter are given, and should prove helpful, whilst attention is directed to the advantages which have followed the control of butter in Denmark and cheese in New Zealand. The reproach still to be heard that a lot of home produce is not of the quality that might reasonably be expected is probably warranted, but a great deal is being done to teach proper methods, and an improvement in quality may be expected throughout the country in the near future.

*Elgie's Weather Book: For the General Reader.*

By Joseph H. Elgie. Pp. xii + 251. (London: The Wireless Press, Ltd., 1920.) Price 5s. net.

THIS work is essentially for the uninitiated in weather study. The author presupposes no technical knowledge, and has throughout avoided mathematics and formulæ. A rough survey is taken of elementary meteorology in a way which must commend itself to all who take an interest in ordinary weather changes. In the opening sentences the author appeals to boy or man; he might also as well appeal to the other sex, who are now taking a keen interest in all branches of science.

The book is divided into fifteen chapters, which separate the subject into well-recognised divisions. A weather vocabulary is given at the end which the reader will find helpful, and in this, as well as in the general text, the latest official and recognised publications have been consulted, which is an immense advantage, as meteorology at present is making rapid strides in its advance.

Weather and health are doubtless intimately associated, and in this respect reference is made to the close relationship between rainfall and diphtheria, as shown by Sir Arthur Newsholme, the disease varying inversely with the amount of rain. There are few points in the book with which a meteorologist could find fault, and the author certainly imparts a large amount of useful knowledge.

*Selected Studies in Elementary Physics: A Handbook for the Wireless Student and Amateur.*

By E. Blake. Pp. viii + 176. (London: The Wireless Press, Ltd., 1920.) Price 5s.

WE have here something of a short cut to knowledge which occupies a peculiar position in scientific literature. Addressed to those already

familiar with the phenomena of wireless telegraphy, it assumes some knowledge of electrical matters on the part of the reader, a little mathematics, but an almost complete ignorance of the physical and chemical properties of matter. We do not say that this attitude is necessarily unsound, as there must be many "amateurs" who have tried to run in pursuit of electrical subjects before they could walk, and it is praiseworthy to endeavour to teach them to walk by a quick method, as they are not likely to possess the time or the temperament to plod through more laborious courses. Granted, then, that there is a justification for presenting the elements of physics and chemistry in such a severely compressed form, the author displays skill in dealing with his difficult task, although there are some inconsistencies in the degree of knowledge that he assumes his reader to possess. We like, among other things, the way in which the author encourages the student to think in vectors early in his career, and to keep continually in mind the dimensions of the quantities that he is considering. If the reader is enabled, by taking advantage of the guidance offered, to form scientific habits of thought which he would not have acquired otherwise, the book will be a success.

*The Coolidge Tube: Its Scientific Applications.*

*Medical and Industrial.* By H. Pilon. Authorised translation. Pp. v + 95. (London: Bailière, Tindall, and Cox, 1920.) Price 7s. 6d. net.

M. PILON has not been so careful in selecting a translator for his little book on the Coolidge tube as he was in the original material. The French version was excellent, both from the practical point of view and the judicious selection of data bearing upon recent developments in radiography. Curiously enough, passages which in the original present no difficulty to the reader now lack that clearness which any translator should carefully preserve. We select a paragraph which explains the first figure in the text: "This rising part, denoted by  $e$ , is on account of the electrons, by traversing from one electrode to the other under the influence of a large potential difference, acquiring such a speed that on encountering gas molecules, they split up. . . ." Again, on p. 17, in describing the radiator type of tube, we read: "The limiting power it is capable of bearing oscillates between 500 and 600 watts."

We notice that the letterpress of many of the diagrams remains in the French language. The developments of the Coolidge tube and the uses to which it may be put will doubtless necessitate a further edition by M. Pilon, and we trust that he will then give the English edition more careful consideration.

*Techno-Chemical Receipt Book.* Compiled and edited by W. T. Brant and Dr. W. H. Wahl. Pp. xxxiii + 516. (London: Hodder and Stoughton, Ltd., 1919.) Price 15s. net.

THIS book contains a very large number of recipes covering an amazing field. As might be expected,