

Among those whose names stand out on a first selection we may mention John Ray, the well-known naturalist, Nevil Maskelyne, Astronomer Royal, Thomas Millington, the alleged discoverer of sexuality in plants, and Robert Record, who introduced algebra to Britain. On slightly lower scientific grounds we may refer to Sir Hugh Platt, who conducted horticultural and agricultural experiments at Bethnal Green and in St. Martin's Lane, to John Lumley, who founded a lecture at the Royal College of Physicians, to Thomas Plume, founder of the Plumian professorship, to George Parker, second Earl of Macclesfield, president of the Royal Society, and to Roger Palmer, mathematician and political pamphleteer, afterwards created Earl Castlemaine and more generally remembered through his wife.

If science, however, does not figure prominently in this volume, the active part that Cambridge men played in all the religious and political movements of their time emerges clearly. Thus we find Thomas Legh, much employed in the suppression of the monasteries, and Matthew Mackarel, executed for supporting an insurrection against their suppression. Thomas Percy was one of the most active organisers of the Gunpowder Plot, while Thomas Knyvet searched the cellars of the houses of Parliament and discovered the plot. Several of the regicides were Cambridge men, as was also George Monck, Duke of Albemarle, largely instrumental in the Restoration. The ill-fated James, Duke of Monmouth, was Chancellor of the University, while Titus Oates tried two colleges but failed to secure a degree. Migration from one college to another was much more common in earlier times than nowadays.

Cambridge was also the home of many heretics. Hugh Latimer and Nicholas Ridley were the best known of those who were burnt at the stake. Many others settled in America and the West Indies to escape persecution. The strong position held by Cambridge men among English poets is reflected in the present volume in the names of John Milton, Christopher Marlowe, and Richard Lovelace, while other literary names worthy of mention are Thomas Nash, Thomas Otway, Matthew Prior, Andrew Marvell, and Samuel Pepys. The latter supplies one of the many human touches in a volume of short biographies. Others are found in the accounts of Thomas King, scholar of Eton and King's, who afterwards "kept the coffee-house in Covent Garden, called by his name"; of John Ruddle, the priest who exorcised a Cornish ghost; of Dr. William Oliver of "Bath Oliver" biscuit fame; and of Thomas Reresby, who was fined 1000*l.* in the Star Chamber for boxing the ears of Sir William Wentworth on the County Bench at Rotherham.

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### Our Bookshelf.

*Uses of Waste Materials: the Collection of Waste Materials and their Uses for Human and Animal Food, in Fertilisers, and in Certain Industries, 1914-1922.* By Prof. Arturo Bruttini. (International Institute of Agriculture, Rome.) Pp. xx+367. (London: P. S. King and Son, Ltd., 1923.) 12s. net.

ONE of the outstanding features of the War was the abnormal shortage of food for man and beast, fertilisers for agricultural use, and of many other substances regarded as essential for various economic purposes. The urgency of the need led to a diligent search for substitutes, many of which were found among unregarded bye-products and so-called waste materials and among wild and cultivated plants of every description. Many of these substitutes merely supplied the need of the moment, and fell into disuse as soon as the crisis was past. Others were of more permanent value and in certain cases have retained a definite economic position.

As time goes on it becomes increasingly difficult to realise the great amount of work and thought that was applied to the discovery and exploitation of these waste materials, and Prof. Bruttini has rendered good service to the community by placing on record not only details of the commodities themselves, but also a history of the legislative and administrative measures adopted by the various belligerent countries to deal with these matters. No other writer has covered the ground so completely, and the "Uses of Waste Materials" provides an excellent outline of the information available to date, with adequate references to more detailed papers where such exist.

In outline the book deals first with the legislative and administrative aspects, and secondly with the methods of handling waste materials and their various properties and uses. The subject is treated under the four main headings of human food, food for live stock, fertilisers, and alcohols, oils and other industrial products, though in some cases the same raw material can be utilised for several purposes. Wherever possible, analyses are given, and for feeding stuffs the appropriate rations for different animals are frequently indicated. As regards fertilisers, much experimental work has been carried out to test various residues, both as to their actual fertilising value and their relative value when the cost of production is taken into account. Many have proved to be uneconomic on the latter score, but the tests have indicated various sources of potential manures, some of which may profitably be exploited. A comprehensive table of contents and a number of illustrations add their quota to the general usefulness of the volume under review, which should prove a valuable work of reference to all agriculturists and to many of those associated with industry. W. E. B.

*The Evolution of Mathematical Physics: Being the Rouse Ball Lecture for 1924.* By Dr. Horace Lamb. Pp. 48. (Cambridge: At the University Press, 1924.) 2s. net.

"THE profound study of Nature is the most fruitful source of mathematical discoveries." In this quotation from Fourier, Prof. Lamb gives the keynote of his lecture on mathematical physics. He traces the history