

It is interesting to have an area so far west in the island so thoroughly worked out, and certainly one of the most instructive points in connection with the matter is to note which British plants fail to reach and become very rare within the area. Taking the species according to their types of distribution as classified by Mr. Watson in the fourth volume of his "Cybele Britannica," and adopting the more stringent scale of species-limitation which he there follows, we find that out of 1,425 British species 764 grow in the neighbourhood of Plymouth. The 120 species of Watson's highland or extreme northern type and the 49 local or doubtful species are not represented here at all. Of the eighty-one species of his Scottish type we get only 5, and out of the 37 species of his intermediate type only 3 enter into the Plymouth area. So that the boreal element of the British flora, 238 species, is represented at Plymouth only by 8 species, such plants as *Rubus saxatilis*, *Gnaphalium dioicum*, *Polypodium Phegopteris*, *Polypodium Dryopteris*, and *Lycopodium Selago* lurking in very small quantity in the recesses of Dartmoor. Of Watson's 70 Atlantic or specially western species Plymouth has 36; of Watson's 127 Germanic or specially eastern species Plymouth has only 16; of the 532 species spread almost universally through Britain Plymouth has 484. Perhaps the most noteworthy point of all is that of Watson's 409 plants of the English type of distribution, plants spread widely through England, but running out in a northern direction north of the Humber and in the Scotch Lowlands, Plymouth gets only 220, or little more than half. Amongst the absentees in widely-spread English plants, for instance, are the common Forget-me-not (*Myosotis palustris*), the Mistletoe, *Genista tinctoria*, *Veronica Anagallis*, *Glyceria aquatica*, and *Scirpus lacustris*; and amongst the great rarities the common harebell (*Campanula rotundifolia*), the cowslip, the common butter-bur, *Hieracium boreale* and *vulgatum*, and some of the common south-country weeds, like *Solanum nigrum* and *Mercurialis annua*, which round about London are exceedingly plentiful. In the critical genera of British plants Plymouth is rich in rubi and roses, very poor in willows and hieracia. Amongst the rarities of the neighbourhood are *Polycarpon tetraphyllum*, *Erynum campestre*, *Pyrus Briggsii*, a curious pear with fruit like that of a small crab-apple, *Physospermum cornubiense*, and two species of *Hypericum*, *baticum*, and *linariifolium*, and it produces some curious hybrid epilobia and rumices.

The area is divided into five districts, founded on river-drainage, two of which are in Cornwall and three in Devonshire; and under these the special localities of the species are carefully traced out, the abundance in which each occurs being particularised, and the claims of each to be regarded as wild being in all doubtful cases carefully investigated.

As stated in the title, the book includes a map and short sketches of the climatology and geology of the district, and of the progress of botanical investigation within its bounds from the days of Lobel and Parkinson down to the present day. We can recommend it with confidence to all our readers who are interested in geographical botany as one of the most complete, conscientious, and interesting works of its kind that have ever appeared.

## OUR BOOK SHELF

*Peruvian Antiquities: The Necropolis of Ancon in Peru. A Series of Illustrations of the Civilisation and Industry of the Empire of the Incas. Being the Results of Excavations made on the Spot.* By W. Reiss and A. Stübel. (London: Asher and Co., 1881.)

A FIRST instalment now lies before us of this magnificent undertaking, which, if fully realised, bids fair to rival in scientific interest and typographical splendour Lord Kingsborough's great work on Mexican Antiquities. Reserving a full notice for a later stage of the project, it will suffice here briefly to indicate its main features, and direct attention to its paramount importance for antiquarian and ethnological studies. The authors, who have lately returned from South America laden with archaeological treasures of all kinds, have been encouraged by the munificence of the directors of the Berlin Royal Museum to place the results of many years' diligent research at the disposal of the public. Under the general heading of "Peruvian Antiquities" the publishers, Messrs. Asher and Co., of Berlin and London, propose to issue simultaneously in English and German a series of folio volumes illustrating the whole field of the ancient Quichua-Aymara culture, such as it existed at the time of the Spanish invasion. The publication will spread over a number of years, each volume appearing in separate parts varying in number according to the nature of the subject. Each part will contain a number of chromolithographic engravings with corresponding pages of explanatory text. These illustrations, which of course are the great feature of the work, will be produced in the most finished style of modern typographic art, and will consist of perfect facsimiles either in natural or reduced size of every conceivable object associated with the ancient civilisation of the Incas. The series begins with a volume devoted entirely to the "Necropolis of Ancon," now an obscure watering place and fishing village on the Peruvian coast, a little north of Lima, but in pre-Spanish times evidently the centre of a thickly-peopled district that had long been occupied by a settled population. The "finds" made in the mummy graves of this burial-place are of extraordinary archaeological interest, illustrating in the most vivid manner every aspect of the social and domestic life of the ancient Peruvians. The volume is to be completed during the course of the ensuing two years in ten uniform parts, as above described, and to judge from Part I., which has just appeared, it is likely to prove of the utmost value to the antiquary and ethnologist. But our remarks on all details must be postponed till this volume is completed. The English text has been entrusted to Mr. A. H. Keane, whose special knowledge of the subject must ensure accuracy in the descriptive and explanatory part of the work.

*Exposé Historique concernant le Cours des Machines, dans l'Enseignement de l'École Polytechnique.* 23 pp. (Paris: Gauthier-Villars, 1880.)

THE council for the improvement of the course of study at the Polytechnic School has for some time had under consideration a revision of the *Programme d'Instruction* of the two years' course, and at different times, for instance in 1865, steps have been taken with a view to their improvement, but, according to this pamphlet, different circumstances, especially in 1870, have deferred the realisation of such schemes. Upon such a wide subject our author does not venture, but he confines himself merely to that part which relates to the *Cours de Machines*. We are indebted for this very interesting and full historical sketch of the matter from the very foundation of the school to the veteran geometer, M. Chasles.