

distributing is several parts among a large number of the most eminent men in the walks of science and practical agriculture, in Great Britain, gives to it an originality and authority, possessed in the same degree by no other publication of the kind. The Editor, Mr. Morton, occupies an eminent position as a practical scientific farmer in England, and is well known in every portion of the civilized world as the Editor of the *Agricultural Gazette*; a weekly paper, combined with the *Gardeners' Chronicle*, under the superintendence of Dr. Lindley, who undertakes the Botanical department of the *Cyclopedia*. In Chemistry, it is sufficient to mention the names of Dr. Playfair and Professor Way, the consulting chemist of the Royal Agricultural Society of England. Entomology is supplied by John Curtis, F.L.S.; and Geology by John Morton, F.G.S., (father of the Editor), and Joshua Trimmer, F.G.S. In the *Art of Agriculture*, we notice the names of some of the most eminent practical farmers and breeders, both in Britain and on the Continent of Europe; while the business of farming is treated of in its various details, by well known writers of extensive experience, in their respective departments. The Engravings and Wood Cuts, of which there will be upwards of a Thousand interspersed through the work, are beautifully executed in the highest style of the art. The illustrations of the animals, plants, and insects of the farm, with the clear and minute descriptions accompanying them, cannot fail to impress and inform the most careless reader; while the engravings of implements and machines are so admirably executed, as to give any one a clear understanding of the principles of their construction. The first two parts contain, in addition to the numerous wood-cuts, beautiful steel engravings of three of the most approved English Chaff Cutters, Biddel's Scarifier, a Scotch Tilt Cart, an English Waggon, Stratton's Northampton Cart, also his celebrated Manure Cart, and Croskill's Clod Crusher, an implement of great power and utility.

We shall glean some useful information from the numbers of this publication as they appear, for the benefit of our readers; only observing further, at present, that Mr. MACLEAR, Bookseller of this City, who is the Canadian Agent for Messrs. Blackie's house, can supply the work as it appears, through his travelling agents, at the publishers' price, 3s. 1½d. each part. Twenty-four parts, it is expected, will complete the work. We should be glad to see a work of this high character accessible to the farmers of every township in Canada. Could

not Agricultural Societies and Trustees of Schools adopt some combined plan for securing an object of this kind? The intelligence and wealth of the country would be thereby greatly promoted.

ACCLIMATION.

The *Cyclopedia* opens with a very interesting article, from the pen of Prof. Lindley, on the natural adaptation of plants to climatic influences and conditions. Our extracts will impart considerable information, and, at the same time, give the reader some idea of the execution of the work.

"Nothing seems to be more certainly made out, than that all plants demand a particular climate, that is to say, a peculiar combination of temperature, moisture, light, and atmospheric pressure, in order to arrive at perfection; and that all considerable disturbances of the proportion in which such combinations are naturally provided, are prejudicial and fatal to the health of plants. A particular temperature of the soil is required for germination; one seed will vegetate at 33°, and another requires 80°: a particular heat is requisite to healthy growth; the almond will expand its flowers at 40°, the horse-chestnut demands perhaps 60°: the temperature which is favourable to the growth of one plant is prejudicial to another, and fatal to a third; at 40° the cabbage thrives, the kidney bean and cucumber languish, the sugar-cane dies. These well-known facts lead to the conclusion, that plants have a specific constitution given them by nature; in order to adapt them to the places in which they are stationed; and it is believed, with reason, that such peculiarities explain the cause why plants have, in general, in so limited a degree, the power of extending into foreign regions. By these means it is imagined that the geographical limits of vegetation are determined, and an effectual natural barrier opposed to all migration of species. It must be obvious, that if this is so, (and no rational doubt can be entertained of the fact,) the power of man, in introducing the plants of one country into another, must be determined by the similarity of climate in the two countries, and that no reasonable hope can be entertained of introducing the field crops of the hotter parts of the world, into regions that are colder. Annual crops offer an apparent but not real exception to this; as when we find the gourds and melons of India cultivated in England, and the wheat of Europe producing a crop in countries where coffee and sugar-cane are staple products. But in such cases, the cold country crops are only grown in the cold season, or winter of the tropics, and the hot country crops in the height of summer, in northern regions. Our summer heat [in England] is high enough for the gourd, the melon, and the cucumber, which are Indian annuals; but they suffer as soon as the temperature falls to 40°."

"Such being the nature of the barriers opposed to the dispersion of species; and plants not possessing, like animals, the power of adapting themselves to circumstances, by artificial means, nothing would appear more hopeless than the attempt at overcoming