

we can consult on topography, as we have recourse to a lexicon for a word about which there is a doubt. The provinces forming the Dominion are politically united by the Confederation Act; but the first step to a thorough identification of aim and feeling will be gained when we acquire some information about those who are henceforth to be of one family with us. Every accession to the roll of provinces has thus made the need more pressing of a carefully prepared work which may constitute the adults' Canadian geography of reference. There is only one publisher in the Dominion, from whose energy and public spirit Canadians had some right to expect such an undertaking; we are pleased to learn that he has almost completed the task. The specimen pages of Mr. Lovell's *Gazetteer of British North America*, now before us, are eminently satisfactory. When the volume is published it must prove of permanent utility, if an intelligent appreciation of the end in view, combined with laborious research and conscientious accuracy, can make it so. Some idea of the work of the editor, Mr. Crossby, may be gleaned from the preface:—"The nature and extent of the labour involved in the *Gazetteer* may be inferred from the fact that there are 6,000 cities, towns and villages, within the Dominion of Canada and Newfoundland; that each of the 6,000 had to be classed in alphabetical order; the geographical position described; the railway or steamboat connections, postal or telegraphic facilities, distances from important centres; also the manufacturing, mining, agricultural, shipbuilding and fishing industries; and the population, as far as it could possibly be ascertained. Also the locality and extent of over 1,500 lakes and rivers had to be described." In the pages issued are concise and yet most complete descriptions of British Columbia, Manitoba, Prince Edward Island, Cape Breton and Newfoundland. Each of the provinces, each of the counties, and each of the cities, towns, villages and geographical points, are separately treated—the lakes and rivers being arranged by themselves—all in alphabetical order. In addition to this there is a table of routes and distances,—24 lines of railway with 26 branches—distinguished by letters of the alphabet; 51 steamboat routes numbered, with 54 others simply referred to; and all the stage connections throughout the country. Moreover every locality in the work afterwards finds a place in an index showing the nearest point from which it can be reached, the county in which it is situated, and the letter or figure indicating the line of railway or steamboat to be taken. How all the valuable information regarding even the smallest village as well as the most distant province has been gathered

together, it seems difficult to conjecture. That such a complete and satisfactory *Gazetteer* should be published at all is a matter of congratulation; that it is also a model of typographical neatness and not more expensive than an ordinary city directory, we owe to the energy and enterprise of Mr. John Lovell, the pioneer publisher of Canada.

CRITIQUE AND ADDRESSES. By Thomas Henry Huxley, LL.D., F.R.S. New York: D. Appleton & Co., 1873.

The articles in this powerfully written volume are not new, but consist of essays and reviews which appeared originally in various English periodicals, together with two or three addresses delivered to public bodies. Any single article would require for its adequate criticism more space than can here be devoted to the entire work, and it will, therefore, be sufficient to indicate briefly the subjects treated of in the different essays. The writer's name is of itself a sufficient guarantee that every subject touched upon is handled with vigour and freshness.

The opening article is entitled "Administrative Nihilism," and is essentially political in its nature, if we use this term in its higher sense. It treats of the functions of the State, and is essentially a powerful appeal for the intervention of the State in education. The next two articles are also concerned with education, and treat respectively of the English School-boards and of Medical education. The fourth essay appeared first in the *Contemporary Review* under the title of "Yeast," and gained a very considerable notoriety. This it owed not only to the great erudition displayed in it, but also to the very vigorous attack upon Dr. Hutchison Stirling with which it closes. Those, however, who are familiar with the controversy anent Protoplasm, by which this attack was called forth, will probably conclude that the victory remains on the whole with Dr. Stirling. The next four lectures treat of the Formation of Coal, of Coral and Coral Reefs, of the Methods and Results of Ethnology, and of some fixed points in British Ethnology. All of these possess points of interest, but we cannot discuss them now.

The ninth article is the well-known anniversary address delivered to the Geological Society of London, and entitled "Palæontology and the Doctrine of Evolution." Though many biologists will find themselves unable to agree with the conclusions herein arrived at, it must be conceded that this essay forms a most valuable contribution to Palæontological science. The remaining three articles, like the preceding, treat of the Darwinian theory or of the doctrine of evolution. One of them, entitled