

and see a little of our own continent?" And he did, taking with him a bright young niece, so that age and youth might travel together. And we are glad that he did and that so large a portion of his tour fell in our own country—a country so large that many of us can never hope to see the whole of it, and they will see some parts of it by reflection and those who have seen these parts will be glad to see them again with Mr. Field's eyes, which are certainly a great deal better than those of many much younger men.

Mr. Field begins with the "longest railway in the world," the C.P.R., on which a considerable part of his journey took place, and he speaks cordially, almost enthusiastically of the road, of its makers, their enterprise and other high qualities. Throughout the book, we should remark, there is a constant exhibition of generous feeling towards Canada, in no way savouring of patronage or adulation but eminently creditable to its author. It would be useless to follow in this long journey further than by noting that the travellers passed on the north shore of Lake Superior, and that Mr. Field tells us in a pleasant way of the beginnings of Rupert's Land, and tells of the glories of Banff and the Rocky Mountain Park. He also tells us almost thrillingly of riding on the cow-catcher, bringing back to remembrance Lady Macdonald's experience in that way. And so the travellers pass on to Vancouver and Victoria, and then turn north to Alaska. The account of this frozen region is not only interesting, but communicates many facts which will be new to most readers. Coming back the author tells us of the Yellowstone Park, the Geysers, and many other wonderful things; and in all this he gives us one of the pleasantest books of travel that we have come across for many a day.

We cannot, however, despatch this notice without referring to some very interesting statements of Mr. Field—a genuine American—respecting our own country and people. He has some pleasant words about Sir John Macdonald, "who may be called the Father of the Canadian Pacific." Then he has some touching memorials of a more recent loss, Sir John Thompson, and we would gladly quote the words of respect and admiration which he connects with his memories of that distinguished man, and we doubt not that those who read this notice will look out for these words. But we must here content ourselves with extracting some remarks on a topic which, indeed, is of no great interest here, but on which it may be interesting to hear an American gentleman give his thoughts—the subject of annexation.

Mr. Field says that in Canada he cannot feel that he is in a foreign country. "After all we are but one people, and these natural affinities will draw us together without a political union. Indeed any suggestion of the latter, it seems to me, is rather to be discouraged in the interests of a real and genuine harmony." He goes on to mention Lord Dufferin's asking him if there were any party in the States trying to bring about the annexation of Canada. He said, "No, adding that if in the course of time there should be a natural gravitation towards each other, which should end in a union that was not forced, but spontaneous, no doubt our country would be very proud of this accession to its greatness, but that it was not a question in American politics and that such a thing as an accession party did not exist; that on the contrary we were perfectly content to let things remain as they are, living in the best relations with those on our northern frontier." He then goes on to speak of the constitution of England and of Canada as being now more democratic, in reality, than that of the United States. However, there seems some chance of that defect being remedied, or some effort being made to remedy it, in the old country. We thank Mr. Field for a very delightful volume.

* * * Rational Building.*

THIS work is one of a series of practical architectural works published in uniform style at \$3.00 a volume. The present volume is a translation of the article "Construction" in Viollet le Duc's "Dictionnaire Raisonné de l'Architecture Française," done by Mr. George Martin Huss, one of the New York architects engaged in the recent competition of designs for the Episcopal cathedral to be built in New

York. While he was preparing plans for the cathedral the extensive use that was made of the article "Construction" in the "Dictionnaire" suggested to him the desirability of translating it for the use of others.

It is pity if this example is not followed by other translators. That amazing work, the "Dictionnaire" would make many useful volumes, and Viollet le Duc's wonderful drawings, for the sake of which so many people who cannot read French use the dictionary, are in clear lines easy to reproduce by process. In Mr. Huss's volume there are 156 drawings by number, but the actual quantity must be a good deal more than this as many numbers are repeated with letters added when the drawings refer to one point.

The book has been well called "Rational Building." This quite expresses Viollet le Duc's view of the methods used by the old builders. Though an enthusiast about Gothic architecture, Le Duc has nothing in common with the manner of treating it which makes most works on the subject so unpractical for a Canadian or American student, to whom the idea of repeating mediæval forms exactly is, if he has any sense, a foreign one. There is no restoration of ancient buildings to be done in this country, and the profession cannot take a real interest in an account of the style which devotes itself entirely to its forms and to the variations, often minute, which distinguish the different periods. What caused these variations in form, what constructive reason or motive of convenience is at the bottom of it, we are seldom told; and the lesson of Gothic architecture, the only lesson for modern students—how the most exacting constructional requirements have been met with ordinary materials and the highest beauty, the beauty of character, evolved at the same time—is quite left out of the teaching. If the professional man or the general reader wants to understand Gothic architecture he must read Viollet le Duc. Le Duc may be compared to Ruskin in the originality and magnitude of his work for art, but whereas the reader needs to be on his guard with Ruskin, and constantly to compare him with himself in order to avoid being led away by a half truth energetically uttered, one may yield one's self freely to Le Duc for he deals, at any rate in the "Dictionnaire," with facts rather, than, as Ruskin did, with ideas. There is no controverting the facts, and to follow them point by point is to learn, as it seems to us, the whole lesson of Gothic architecture. The great problem of the period was, of course, the vaulted roof and the process of its evolution from the continuous barrel vault of the Romans to the comparatively light stone framework of ribs, filled in between with flat surfaces, and bearing but on few points in the wall, is the history of Gothic architecture. All the peculiar forms of the style sprang from this, and its essential distinction as a manner of building is that the pressure from the walls is not downwards, but outwards. For this reason the roof is supported not by thick walls all along the sides of the church, but by buttresses at certain points to resist the outward thrust and the space between the buttresses needs only to be filled in as a screen from the weather and may be, as it was, filled in chiefly with glass. The whole system was then one of equilibrium. Not as in classical buildings the repose of weight upon support, but the repose of an equalization of opposite thrusts. How this was managed without using anything but stones, and these of small dimensions, and how in the lofty cathedrals to which the French builders finally devoted themselves, the enormously increased chances of settlement were provided for is the main subject matter of "Rational Building." It is not an assemblage of mathematical problems, but a plain statement in a manner of thinking that must have been that of the Gothic builders themselves appealing to ordinary perception and requiring no more elucidation than the numerous sketches of the author. In these days when our own high buildings are in process of evolution there are practical hints to be obtained from such a volume, but the greatest benefit to be obtained from a study in this spirit of the mediæval builder's work is the bent which comes of often following the process by which use has been converted to beauty and which makes the essential principle of architecture, that use should suggest beauty, not so much a principle to be kept painfully in view as a natural habit of mind. There are also chapters which deal with mediæval, civic, and military buildings. The chapter on domestic work is suggestive in many ways; among others of the possibility of building a fire-proof mansion without too great expense.

* "Rational Building." By George Martin Huss, Architect. New York: Macmillan & Co. Toronto: Rowsell & Hutchison.