## THURSDAY, JUNE 16, 1887.

## THE JUBILEE.

BEFORE our next number appears, most of the celebrations connected with the fiftieth anniversary of the Queen's accession will have taken place; and in London, at all events, the gorgeous ceremonials which are now being prepared for next Tuesday will have been the admiration of hundreds of thousands of Her Majesty's loyal subjects. It is therefore quite right and fitting that in a journal devoted to the progress of science, which the history of the last fifty years has shown to be the main basis of modern civilization, we should for a moment turn aside from our true function-that of fostering and recording the progress of natural knowledge-and dwell for one moment on the subject now uppermost in all minds, and dear to most British hearts. We know that in loyalty the students of Nature in these islands are second to none; and their gladness at the happy completion of the fifty years' reign, and their respect for the fifty years' pure and beautiful life, are also, we believe, second to none. But the satisfaction which they feel on these grounds is tempered when they consider, as men of science must, all the conditions of the problem.

The fancy of poets and the necessity of historians have from time to time marked certain ages of the world's history and distinguished them from their fellows. The golden age of the past is now represented by the scientific age of the present. Long after the names of all men who have lived on this planet during the Queen's reign, with the exception of such a name as that of Darwin, are forgotten; when the name of Queen Victoria even has paled; it will be recognized that in the latter half of the nineteenth century a new era of the world's history commenced. Whatever progress there has been in the history of any nation during the last fifty years-and this is truer of England than of any other country-the progress has been mainly due to labourers in the field of pure science, and to the applications of the results obtained by them to the purposes of our daily and national life.

Space utterly forbids that we should attempt to refer to the various memoirs, discoveries, and inventions which at once are suggested to the memory when one throws one's self back fifty years and compares the then condition of England with the present one; and we do not suppose that the most Philistine member of any community in our land, from the House of Lords downwards, will urge any objection against the statement.

It is quite true that some men of science take a pride in the fact that all this scientific work has been accomplished not only with the minimum of aid from the State, but without any sign of sympathy with it on the part of the powers that be.

We venture to doubt whether this pride is well founded. It is a matter of fact, whatever the origin of the fact may be, that during the Queen's reign, since the death of the lamented Prince Consort, there has been an impassable gulf between the highest culture of the nation and Royalty itself. The brain of the nation has been divorced from the head.

Literature and science, and we might almost add art, have no access to the throne. Our leaders in VOL. XXXVI.-No. 920.

science, our leaders in letters, are personally unknown to Her Most Gracious Majesty. We do not venture to think for one moment that either Her Majesty or the leaders in question suffer from this condition of things; but we believe it to be detrimental to the State, inasmuch as it must end by giving a perfectly false perspective; and to the thoughtless the idea may rise that a great nation has nothing whatever to do either with literature, science, or art-that, in short, culture in its widest sense is a useless excrescence, and properly unrecognized by Royalty on that account, while the true men of the nation are only those who wield the sword, or struggle for bishoprics, or for place in some political party for pay.

The worst of such a state of things is that a view which is adopted in high quarters readily meets with general acceptance, and that even some of those who have done good service to the cause of learning are tempted to decry the studies by which their spurs have been won.

If literature is a "good thing to be left," as Sir G. Trevelyan has told us, if Mr. Morley the politician looks back with a half-contemptuous regret to the days when he occupied a "more humble sphere" as a leader of literature, if students are recommended to cultivate research only "in the seed-sowing time of life;" are not these things a proof that something is "rotten in the State," even in this Jubilee year? It surely is well that literature, science, and art should be cultivated by men who are willing to lay aside vulgar ambition of wealth and rank, if only they may add to the stock of knowledge and beauty which the world possesses. It surely is not well that no intellectual pre-eminence should condone for the lack of wealth or political place, and that as far as neglect can do it each scientific and literary man should be urged to leave work, the collective performance of which is nevertheless essential to the vitality of the nation.

We venture to think that our view has some claims for consideration when we note what happens in other civilized countries. If we take Germany, or France, or Italy, or Austria, we find there that the men of science and literature are recognized as subjects who can do the State some service, and as such are freely welcomed into the councils of the Sovereign. With us it is a matter of course that every Lord Mayor shall, and every President of the Royal Society shall not, be a member of the Privy Council; and a British Barnum may pass over a threshold which is denied to a Darwin, a Stokes, or a Huxley. Our own impression is that this treatment of men of culture does not depend upon the personal feelings of the noble woman who is now our Queen. believe that it simply results from the ignorance of those by whom Her Majesty is, by an unfortunate necessity, for the most part surrounded. The courtier class in England is—and it is more its misfortune than its fault—interested in few of those things upon which the greatness of a nation really depends. Literary culture some of them may have obtained at the Universities, but of science or of art, to say nothing of applied science and applied art, they for the most part know nothing; and to bring the real leaders of England between themselves and the Queen's Majesty would be to commit a bêtise for which they would never be forgiven in their favourite coteries. No subject-still less a courtier-should be compelled to demonstrate his own insignificance. That this is the real

cause of the present condition of things, which is giving rise to so many comments that we can no longer neglect them is, we think, further evidenced by the arrangements that have been made for the Jubilee ceremonial in Westminster Abbey. The Lord Chamberlain and his staff, who are responsible for these arrangements, have, we are informed, invited only one Fellow of the Royal Society, as such, to be present in the Abbey; while with regard to literature we believe not even this single exception has been made. It may be an excellent thing for men of science like Prof. Huxley, Prof. Adams, and Dr. Joule, and such a man of literature as Mr. Robert Browning, that they should not be required to attend at such a ceremonial, but it is bad for the cere-The same system has been applied to the Government officials themselves. Thus, the Department responsible for Science and Art has, we believe, received four tickets, while thirty-five have, according to Mr. Plunket's statement in the House on Tuesday, been distributed among the lower clerks in the House of Commons. Her Gracious Majesty suffers when a ceremonial is rendered not only ridiculous but contemptible by such maladministration. England is not represented, but only England's paid officials and nobodies.

While we regret that there should be these notes of discord in the present condition of affairs, there can be no question that Her Majesty may be perfectly assured that the most cultured of her subjects are among the most loyal to her personally, and that they join with their fellow-subjects in many lands in hoping that Her Majesty may be long spared to reign over the magnificent Empire on which the sun never sets, and the members of which Science in the future will link closer together than she has been able to do in the past.

## IMPERIAL GEOLOGICAL UNION.

N O one interested in geological science could fail to be impressed with the evidence afforded by the Colonial and Indian Exhibition, in its display of natural products, in the conferences connected with it, and in the number of scientific men collected from all parts of the Empire, of the amount of geological work represented by Great Britain and its dependencies, and the commanding position of the Empire with reference to the geology of the world. The same fact was apparent in the importance attached to Colonial and Indian geology and geography at the meeting of the British Association at Birmingham. Influenced by these facts, I was induced to speak somewhat strongly in the address which I had the honour of delivering at Birmingham on the position of Britain and its colonies and the English-speaking world in general with reference to scientific progress. On my return to Canada, and more particularly after the (temporary, as I hope) failure of the project to hold a meeting of the British Association next year in Australia, it seemed desirable to give the matter some definite form; and after correspondence and consultation with friends, I was induced, in February last, to address a letter on the subject to Prof. Stokes, the President of the Royal Society. The reasons for this course were that both Prof. Huxley and his successor in the Presidential chair of the Royal Society had suggested an Imperial Scientific Union, and the subject was understood to be under the

consideration of the Council of the Society, which from its central and commanding position has a right to the initiative in any movement of this nature. In this letter geological science is alone directly referred to, as being that with which the writer is more immediately connected and that which in some respects has already the best organization; but without excluding other departments of science. Special reference is also made to Canada, as affording an apt illustration of the extent and value of the geological domain of the Empire. I need scarcely add that the present year, distinguished as it is by many movements in the direction of Imperial Union, in connexion with its being the fiftieth year of the reign of Her Gracious Majesty Queen Victoria, seems especially auspicious for such a project. The following are extracts from the letter referred to

"It is, I think, evident from the report of the last meeting of the International Congress of Geologists, that great, if not insuperable, difficulties lie in the way of any general agreement as to geological classification, nomenclature, and mapping. These difficulties, however, depend so largely on difference of language and of habits of thought, that they would not affect a union for scientific purposes on the part of the geologists of the British Empire, and ultimately of all English-speaking countries. It therefore appears that such a more limited union might with advantage be undertaken in the first instance, and with the view not of obstructing but of aiding the wider movement.

"The British Empire also possesses exceptional facili-ties for taking the lead of other nations in so far as geology and physical geography are concerned. British Islands, as is well known, are remarkable for the great variety of their formations and the excellence of their exposures, and much of the present classification and methods of representation in geology has originated in Great Britain, and has been adopted with slight variation in all English-speaking countries, and to a considerable extent in other countries as well. In Canada we have the larger half of North America, and much of this very satisfactorily explored. We have also the advantages of the best exposures of the older crystalline rocks, of a development of the Palæozoic series in the Eastern Provinces, more closely allied to that of Europe than to that of the interior American plateau, and of Pleistocene deposits so extensive and complete that they must ultimately decide many of those questions of glacial geology which have been so much agitated. In India, Australasia, and South Africa, with the western districts of Canada and various smaller dependencies, we hold a controlling influence in the geology of the great Pacific and Indian Ocean areas. Arctic and Antarctic geology and modern oceanic deposits have been worked principally by English observers, and English-speaking geologists have been and are exploring in many countries not under the British flag. More especially the large amount of geological work done in the United States is based on English methods, and is published and discussed in the English language, and the most intimate and friendly relations subsist between the geologists of the United States and those of Great Britain and the colonies.
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"In these circumstances it would seem that a union of British and English-speaking geologists might overcome the difficulties which appear so formidable as between the different European nations, and might lay a broad foundation of geological fact, classification, nomenclature, and representation, which would ultimately be adopted by other countries as far as local diversities and differences of language might permit. Such a geological union would naturally be accompanied or followed by similar co-operation in other departments of investigation in

natural science.