FRIDAY, JUNE 29, 1883.

THE IMPORT DUTY ON SCIENTIFIC JOURNALS.

THE failure of Congress last session to put books and periodicals on the free list was, whatever some of our literary friends may think, a serious disappointment to many scientific workers. As to the general free-trade question, or the impolicy of imposing a tax on mental culture, we have nothing to say here; and, indeed, nothing that scientific men could say would at present have any practical effect against the influence which the publishers, with their capital and organization, exert whenever they think their interests threatened. We believe, however, that something might be done by a combined effort of American scientific men to get the duty removed from certain specified foreign journals, which no publisher in the United States would ever dream of reprinting, and which in no way compete with any American publication. To take a few examples: the *Quarterly journal of mathematics*, the *Repertorium der physik*, the *Comptes rendus*, and *Pflüger's Archiv für die gesammte physiologie* could never conceivably be reprinted in this country except at a loss. On each number of these journals, as it arrives by mail, the subscriber is nevertheless forced to pay duty before it is delivered to him, and is frequently put also to the additional annoyance of having to go in person to the post-office or customs-house. These vexatious duties protect no American interest. What they do protect, if any thing, is the European investigator from equal competition on the part of American workers, to whom the gaining of a knowledge of what is taking place in other countries in the various branches of science is made as costly as possible.

It is useless to answer that all incorporated educational institutions get their periodicals duty free. Many of the most active workers have no college library within reach; still fewer colleges can afford to subscribe to more than a very limited number of scientific journals; and all busy teachers and investigators know that it is essential to have at least the chief publications in their own special line of work always at hand for immediate consultation, or for perusal in a chance half-hour's leisure, without the necessity of a pilgrimage to a library for the purpose. Happily, the day is rapidly going by when all expected from a college professor was, that he should be pretty well 'up' in a tolerably modern text-book, and be able to hear recitations from it. To maintain a worthy position among his fellows, and do his duty by his students, a professor nowadays must know something of all the recent work of importance in his own line of study; not necessarily know the details in each minute subdivision of it, but at least have skimmed over the recent publications, so as to be able to tell an inquiring student where the latest papers are to be found, and give him some hint as to the comparative value of the investigations of different workers. To do this properly, a professor must have the readiest access to the current literature of his own department. This 'readiest access' implies that he must receive personally all the more important journals at the earliest possible date.

We venture to suggest to the American association for the advancement of science, that it appoint at its next meeting a committee to draw up a definite list of foreign technical journals of mathematics, physics, chemistry, mineralogy, geology, geography, botany, zoölogy, physiology, and ethnology, such as do not compete with any enterprise of any publishing firm in the United states; and then urge upon Congress the passage of a special act, putting these journals on the free list. In England, France, and Germany, there are always to be found members willing to bring before the legislature the legitimate claims of science. We cannot doubt, that, if a suitable bill were drawn up by official representatives of science in the United States, some member of Congress could be found to introduce and support it. If judiciously framed, so as to touch no publisher's pocket, and vigorously

supported by the influence of the scientific men of the country, such a bill could, we feel certain, be passed through Congress, liberating us from this tax, which falls heavier on men the poorer they are and the more faithfully they try to do their duty.

Some of our most esteemed literary idols have lately astonished us by signing a statement which seems to imply, that, in their opinion, American literature needs coddling to keep it alive. They must decide in their own line of work. We are certainly not less proud of, or less desirous to cherish, American science than they are American letters, and, we are bold enough to think, with at least as much reason. We are sure that we give expression to the conviction of all American scientific men when we say that we believe in no isolated American science. The accurate study of nature is the common duty of all civilized peoples: what each does helps all the rest.

In this connection, we are rejoiced to find that most American artists have taken a position in regard to art agreeing with ours in regard to science. The attitude lately taken by certain prominent authors is but one sign, among several, of a certain tendency in Literature to fall from its former lofty ideals; and, losing the characteristics of a profession, to become simply a trade, followed for the sole sake of the money to be made at it. If this does happen, then Art and Science will have to take the place once held by Letters, and strive to keep alive the belief that there are more worthy aims in life than getting the largest possible number of dollars for one's work, whatever it be. We do not, however, now ask our literary friends to expose themselves to a promiscuous, and, as they appear to think, debasing competition: we only ask to be allowed, duty free, a limited number of purely technical journals; and we shall still read with delight the *Autocrat* and the *Professor*, although sorely pained that our own familiar friend, in whom we trusted, has done what lay in his power to make it difficult for us to learn our anatomy.

THE MICROSCOPIC EVIDENCE OF A LOST CONTINENT.

Much interest has been attached to St. Paul's rocks, situated in the mid-Atlantic nearly under the equator; since they were stated by Darwin[1] to be unlike any rock he had ever met, and that they were not volcanic. Darwin's words have caused these rocks to be looked upon as forming a portion of the lost Atlantis; those holding that view overlooking the fact that Darwin simply meant that they were not rocks of volcanic origin such as those he had any acquaintance with. That they were not eruptive or volcanic of earlier date than the other islands in the Atlantic, he was not in a position to assert, and evidently did not intend to do so. Being of different material from the other Atlantic islands, they might even be of comparatively modern origin, and still not show especial traces of their eruptive character. Situated as these islands are, no relation of the rocks of which they are composed to the adjacent rocks can be ascertained: hence the only resort is to study the structure and composition of the rock-mass itself, and to ascertain what evidence it may afford.

When these rocks were examined *in situ* by the members of the Challenger expedition, they were thought by Mr. Buchanan to be referable to the serpentine group, but by Prof. Wyville Thomson to have been formed by the 'ejecta of sea-fowl.'[2]

In this state of affairs, the material collected was wisely placed by Mr. John Murray, who had charge of the Challenger material, in the hands of a competent lithologist, Rev. A. Renard, S.J., curator of the royal museum of natural history at Brussels.

When studied microscopically these rocks were found to be composed of olivine, enstatite, actinolite, chromite, or picotite, and a pyroxene mineral. When M. Renard first examined these rocks, he thought that he discovered in them certain structures which he regarded as fluidal.[3] He therefore held that these rocks were of eruptive origin; but in some publications recently issued he has modified his views, and is inclined to regard the structures seen as schistose and not fluidal.[4]

M. Renard then endeavors to show that these may be metamorphic sedimentary rocks

[1] Volcanic islands, 1851, pp. 31-33, 125.
[2] Voyage of the Challenger, ii. 100-108.
[3] Neues Jahrb. min., 1879, 389-394.
[4] Description lithologique des récifs de St. Paul (Ann. soc. belge micr., 1882, 53 pp.); Report on the petrology of the rocks of St. Paul (Scient. results voyage Challenger, 1873-76, Narrative, 1882, ii. app. B, 29 pp., 1 plate).