

extremely important researches of Farmer and his associates into the essential nature of cancer!

Satisfactory as this undoubtedly is, we have only to look across the channel to see how puny—numerically and financially speaking—are our efforts to promote original research. Our cousins across the Atlantic, a practical people if ever there was one, are even more energetic. Does a 'freeze' destroy or seriously injure the oranges of Florida, what matter? In a very short time a man of science and a man of resource is on the spot. He looks for and finds a hardy stock whereon to graft the tender scion, he puts the resources of hybridization to the test in the endeavor to procure hardy seedlings. All this is done at once by state or government agency. Here, if anything were tried in a parallel case, it would be with great deliberation and with little or no encouragement or support.

Those familiar with what is done to promote research in the universities and colleges of the United States, as at New York, Chicago, Philadelphia and in California, not to mention the older foundations of Harvard and Yale, must feel almost aghast at the progress that is being made, and at our own backwardness. In the *Gardeners' Chronicle* for January 30 is an article contributed by a well-known professor familiar with what is being done here as well as there. In that article he gives details as to the astonishing activity manifested in the American universities, mainly by the aid of funds provided by private individuals. We too have reason to know and appreciate what is done by the government agricultural department, and by the very numerous experimental stations scattered all over the wide territories of the United States.

As we write, there comes to us a report of the establishment, under the auspices of the Carnegie Institution, of a 'desert botanical laboratory, the purpose of such establishment being to study thoroughly the relation of plants to an arid climate and to substrata of unusual composition.' A laboratory has accordingly been erected near Tucson, in Arizona, under the management of Dr. W. A. Cannon, of the New York Botanical Garden,

who has been appointed resident investigator in charge of the laboratory. What may be described as a sort of preliminary report has been drawn up by Mr. Coville and Dr. MacDougal, and a very interesting and copiously illustrated report it is.

As some of our readers may care to see this publication, we may add that it is issued by the Carnegie Institution of Washington, U. S. A. (publication No. 6).

Vast as is their territory, and numerous as are their experimental stations and like institutions, our cousins are not yet satisfied. They have invaded British territory, in a most genial and friendly manner it is true, but still they have annexed, with our consent, a portion of the island of Jamaica, and there they have established, at 'Cinchona,' a botanical laboratory and research station open to the students of all countries. The direction is in the hands of Dr. Britton, of the New York Botanical Garden, in cooperation with Mr. Fawcett, the director of public gardens and plantations in the island. The policy of the 'open door' pursued by the Americans in these matters prevents us from doing anything but acquiesce in their proceedings. But why what should have been a plain duty for us should have been allowed to be undertaken by others is a mystery.

We do not question the utility of ironclads and cruisers as protectors of our commerce, but it is obvious to those who are watching the proceedings of our neighbors and of our rivals that if we do not largely extend our scientific training and induce our wealthy citizens to follow the example of their American brethren in endowing science, the necessity for protection will vanish, and that not slowly.

INTERNATIONAL CATALOGUE OF SCIENTIFIC LITERATURE.

THE International Council met on Monday, May 23, and Tuesday, May 24, 1904, at the Rooms of the Royal Society of London, and transacted business as follows:

On the motion of Dr. Uhlworm, Professor H. E. Armstrong was elected chairman of the meeting and Dr. H. Forster Morley secretary.

On the motion of Dr. Blanford, it was resolved: That the report submitted by the executive committee be received and adopted for presentation to the Regional Bureaus.

The council authorized the distribution of the balance sheet to the several regional bureaus for publication in some recognized periodical in each of the constituent regions, in accordance with the regulation laid down at the Third International Conference.

On the motion of the chairman, it was resolved: That, in view of the success already achieved by the International Catalogue of Scientific Literature, and of its great importance to scientific workers, it is imperative to continue the publication of the catalogue beyond the first five annual issues. That this Resolution be communicated to the Regional Bureaus, requesting them to bring it under the notice of the contracting bodies and to obtain the necessary guarantees for the continuance of the work.

It was resolved: That the executive committee be authorized, in consultation with the Regional Bureaus, to spend a sum not exceeding £100 in making the catalogue known.

On the motion of the chairman it was resolved: That a representative of Russia be added to the executive committee, and that steps be taken to invite countries not yet represented on the Catalogue (Spain, Balkan States and South American Republics, etc.) to establish Regional Bureaus.

It was resolved: That the council accede to an application of the University of Ottawa, Canada, for the replacement of volumes of the catalogue lost in a conflagration which destroyed the whole of the university buildings including the library.

A motion by Professor Korteweg to place copies of the catalogue at a reduced price at the disposal of the regional bureaus for the use of the experts was discussed and withdrawn, the feeling being that, although desirable, the financial position of the catalogue did not yet admit of such a step being taken.

The proposal to extend the scope of the catalogue by the publication of additional series of volumes dealing with such subjects as (a) Medicine and Surgery, (b) Agriculture, Horticulture and Forestry, (c) Technology

(various branches), was discussed, and the opinion expressed that it was desirable that the executive committee should take the matter into further consideration, in order that it may be brought under the notice of the International Convention in July, 1905.

It was resolved: That all alterations proposed in the schedules shall be collected and edited by the central bureau; that the amended schedules, together with the proposals of the bureaus, shall be submitted to the regional bureaus for their opinion; and that the final editing of the schemes to be submitted for the approval of the International Convention be entrusted to a committee of five persons, to be nominated by the executive committee.

SCIENTIFIC NOTES AND NEWS.

THE University of Michigan has conferred its doctorate of laws on Dr. F. H. Gerrish, professor of anatomy in Bowdoin Medical College.

THE degree of doctor of science has been conferred by Lafayette College on Francis P. Venable, president of the University of North Carolina and formerly professor of chemistry.

THE Western University of Pennsylvania, at its commencement held on June 16, conferred the degree of Sc.D. on Mr. Frank Hurlbut Chittenden, assistant entomologist of the United States Department of Agriculture, Washington, D. C.

THE University of Dublin has conferred the doctorate of science as follows: J. Dewar, Jacksonian professor of experimental philosophy, Cambridge, and Fullerian professor of chemistry at the Royal Institution; Professor J. H. van't Hoff, Berlin; Professor F. Klein, Göttingen; Major R. Ross, C.B., F.R.G.S., professor of tropical medicine, Liverpool; J. J. H. Teall, F.R.S., director of the Geological Survey of the United Kingdom; W. H. Thompson, King's professor of the institutes of medicine.

DR. J. T. ROTHROCK has, owing to ill health, resigned the position of forestry commissioner of the state of Pennsylvania. Mr. R. S. Conklin, present deputy commissioner, has been appointed his successor.