make the collection of reptiles which he described on his return.

Once established in the Museum of Comparative Zoology, Garman seldom left Cambridge, but settled down to a life of persistent work on certain groups of fishes, a quiet career of graving age, one day much the same as another for over half a century. So seldom did he go upstairs to the museum library or exhibition halls that few students even knew him by sight, for he entered early and left late from his own little grilled door in the basement. Upwards of fifty papers on fishes, most of them of special value, and including new facts and new material are listed in Dean's "Bibliography of Fishes" from 1875 to 1913. Of these the most important is the one latest in date. "The Plagiostomia (Sharks, Skates and Rays)." Tn this are given detailed descriptions of the known species, with 77 excellent plates depicting nearly all of them. Of great value also is his report on the fishes of the deep seas collected by The Albatross under direction of Alexander Agassiz along the west coasts of tropical America. This is one of the most useful contributions to our knowledge of the fauna of the deep seas. Other papers of importance are the Selachians (sharks) of the voyage of The Blake, the accounts of Chlamydoselachus the frill-shark, regarded as the "oldest living type of vertebrates," which view is perhaps questionable; "The Discoboli," the "Cyprinodonts" and the "Chimaeroids," besides detailed anatomical studies and accounts of new species.

Garman was a man of medium size, latterly rather bent over and spare. He loved his garden and working there and with his bees kept himself in excellent physical condition until but a few years before his death. His library of fishes is one of the very largest ever gathered in private hands and by his generosity is now in the possession of the museum which he dearly loved and of whose staff he was one of the most distinguished members.

> DAVID STARR JORDAN, THOMAS BARBOUR

#### SCIENTIFIC EVENTS

# THE NATIONAL RESEARCH COUNCIL OF ITALY<sup>1</sup>

HIS EXCELLENCY, PREMIER MUSSOLINI, the head of the government, on the first of the year, directed to the Honorable Guglielmo Marconi, president of the National Research Council, the following message, in which are fixed some of the fundamental objectives which should control the activities of the Council:

<sup>1</sup> From La Tribuna, of Rome, January 7, 1928. Translated and submitted to SCIENCE by Dr. John W. Lieb.

## Mr. President:

The necessity of a coordination and regulation of scientific research, so intimately related at the moment to the technical and economic progress of the country, induces me to organize an instrumentality well equipped for this high national purpose. The interesting ("geniale") invention almost always originates in the brain of an isolated individual, but only the persistent work of patient investigators, with large and well adapted means, can efficiently develop and utilize it. A country like our own, poor in raw materials and dense in population, finds it absolutely necessary to have a thoroughgoing organization in order to be able to solve promptly difficult problems so as to avoid waste of energy, of money and of time.

To the National Research Council I have confided this duty, so full of responsibility. In its difficult task it can count upon my hearty support and to this end I intend to fix several fundamental objectives which should inspire its action and that of all of the bodies which will collaborate with it.

First. It is necessary to systematize in Italy research laboratories and well-equipped and live museums, in which the progress of science, of technology and of industry are rendered evident. A country does not spend in vain for such a progressive activity.

Second. The Research Council must have a care that Italian representatives in foreign parts, in the meetings so frequently held of technologists and scientists, should worthily represent our country and are dignified and well educated. I intend that these, my instructions, shall be respected in the most rigid manner. No official Italian delegation should go abroad to represent our country in the field of science or technology unless nominated by me on the recommendation of the Research Council. I beg that my colleagues in the government will assist in every way the directors of the council in discharging this not easy duty.

Third. The scientific and technical congresses which are held in Italy also, whether they are national or international, require to be regulated. These meetings will be authorized by me on the recommendation of the directors. No Italian delegate has the right to propose meetings in Italy of international scientific congresses without my specific authorization.

Fourth. I have intrusted the National Research Council with the not easy task of attending to the compilation of the Italian technical-scientific bibliography. The utility of this work is evident; it facilitates our scientific and technical progress which is essential to our economic welfare, and it is necessary for valorizing and recording in Italy the hard work done by our scientists also in comparison with other countries. It is necessary that everybody lends his cooperation with enthusiasm in this work of national interest, and everybody must answer with a ready response the questions asked by the National Council. It is my intention that all state, and public organizations in general, should support this truly Fascist undertaking.

Fifth. Very often government technical bureaus need

information and data about technical and scientific results accomplished in certain fields. The Research Council must see to it that the desired information is forwarded to the interested parties with promptness and accuracy. In this way, a service will be gradually unified, instead of having it, as it is now, divided amongst the various ministries with its great cost and waste of energy and which, on the whole, can be greatly reduced.

Mr. President, I am sure that the National Research Council will fully perform the task I am intrusting to it, and in that confidence I am sending my very best wishes to you and to the directors of the council.

January 1, 1928, VI.

#### MUSSOLINI

This message of the chief of the government constitutes an event of outstanding importance for the scientific and technical development of the country and, from several points of view, can rank with the speech of Pesaro, which marked the beginning of the economic rehabilitation of Italy.

The head of the government, after having reestablished the authority of the state, reorganized the finances and stabilized the currency, is now taking up again genially with this message the policy of expansion and affirmation of our people in all fields of intellectual activity and he desires that Italy reconquer again the function of predominance in scientific research which had its birth and flourished in our midst.

The organ of this revival will be the National Research Council, which the lofty mind of the Duee has desired to be presided over by the most genial investigator which Italy to-day possesses, Guglielmo Marconi, and by a directorate on which serve men distinguished for ability and culture: His Excellency Giannini, minister plenipotentiary; the Honorable G. A. Blanc, Professor Parravana, General Vacchelli, His Excellency Bonaldo Stringer, manager, and Professor Magrini, secretary general.

A National Research Council has been in existence since 1921, but on account of its peculiar organization it has not been able to obtain all the expected good results.

The national government, fully aware of the great benefits which such an institution could render to the nation, decided to promptly reorganize it and better define its juridical status and it has accordingly made it a permanent consultative and informative organ of the head of the government, and of the ministry of public instruction, for everything concerning the development and progress of scientific activity at home and abroad.

At the same time, in order to obtain the necessary information, he has given to the council the freedom of approach to the institutions, laboratories and establishments where scientific research is carried on. The constitution of the National Research Council is as follows: A board of directors and ten national committees, one for each of the principal branches of science.

At the head of each committee there is an executive board consisting of a president, a secretary and three members. Each national committee has a number of members varying according to the development attained by the scientific branch it represents.

In addition, the National Board of Directors may propose from time to time to the head of the government the appointment of special national commissions for the study of specific problems which have a practical importance in the life of the nation.

The organization of several of these commissions has already been determined upon, and two of them, that for food and that for national fertilizers, will very soon initiate their work.

The head of the government in his important message, when referring to the tasks assigned to the National Research Council, speaks of the institution of well-equipped research laboratories.

The Duce thus stresses, interestingly, one of the most important items of the activities of the organization and points out with accuracy one of our deficiencies which must be removed.

Italy, among the nations of great cultural development, is the only one which has not as yet any institution for pure scientific research, and all technical progress is intrusted to university laboratories, which, on account of their predominantly didactic functions, can not take care of the development of science with the necessary energy.

It is, therefore, indispensable to equip some great institution so that it may completely satisfy through books and magazines, apparatus and instruments, all of the exigencies of the investigators and thus place the country in a position to contribute, equally with other nations, to the technical progress of the world, and meanwhile this order of the Duce will be executed at once.

The importance of the other functions which the National Research Council is called upon to perform is self-evident but we wish especially to refer to the compilation of the technical and scientific bibliography and its diffusion abroad in every center of study in order that the patient and often valuable (geniale) work of Italian scientists may no longer be ignored by anybody.

## THE FARADAY MEMORIAL FUND

WILLIAM F. CASTLE, mayor of Southwark, writes as follows with regard to the Faraday memorial fund:

Michael Faraday was born in Southwark, the son of a