

vantage over a card bibliography. No one need hesitate long to sacrifice two lines of print even to an almost worthless publication. But when it is a case of publishing a complete bibliographical card it becomes a most serious matter. For many years the Concilium tried various subterfuges; it issued many cards that seemed scarcely worthy of notice; it then experimented with printing the references on gummed paper to be pasted on cards by the subscriber, if desired. It also tried holding back such references till the end of the year and then publishing a dozen or more entries on a single card.

None of these means was successful. Finally, in 1902, a great catalogue of manuscript entries was founded. Such entries being omitted from the printed bibliography, the total number of cards sent to subscribers will be reduced annually by a thousand or more. The new cards are similar to the ordinary bibliographical cards in every respect, save that instead of being printed they are in manuscript. They can, however, be supplied when desired. Thus a subscriber in California will not be burdened by innumerable tales of beetles found in the county of Kent, England. For the inhabitant of Kent the note may have value, for the Californian it is rather superfluous. In future the Kent entomologists can receive the reference if they care for it; but the Californian ornithologist need not. This new departure means a loss to the Concilium of several hundred dollars annually. The maintenance of the manuscript catalogue is costly and the income from the printed card catalogue is reduced by leaving out such notes. It is merely a case of what I may conscientiously declare to have been the uniform policy of the Concilium, that of never deviating a particle from its disinterested aims. Every innovation of recent years has been attended with financial loss; but never have we faltered in assuming it. We have perhaps often imperiled the very existence of the work by such scruples, but at the same time we have, I believe, won the unqualified approval of every one who has taken the pains to examine closely our work and can with justice appeal for support to those who have

the interests of science at heart. I am confident that the disaster which the abandonment of the work would entail is not a danger which is seriously threatened. The immediate needs of the institute seem to us great; but they are only so in comparison with the modest means which have thus far succeeded in keeping the enterprise alive. A debt of \$4,000 ought not to burden indefinitely the work. \$3,500 for new machinery ought not to be a hopelessly large sum to secure. A yearly grant from an American source equal to that offered by little Switzerland (\$1,500) seems least of all exaggerated. And yet this is all that is needed to inaugurate a period of prosperity and work without preoccupations of a financial character. Doubtless new possibilities and new needs would open as the years passed; but the present program could be fully carried out with the support that I have sketched.

HERBERT HAVILAND FIELD.

*REPORT OF THE ICHTHYOLOGICAL RE-
SEARCH COMMITTEE.**

WE understand that the committee appointed by the Board of Trade in August last year 'to inquire and report as to the best means by which the State or local authorities can assist scientific research as applied to problems affecting the fisheries of Great Britain and Ireland, and, in particular, whether the object in view would be best attained by the creation of one central body or department acting for England, Scotland, and Ireland, or by means of separate departments or agencies in each of the three countries,' have come to the conclusion that, while no sufficient reason has been adduced for suggesting any changes as to the central authority for conducting scientific fishery investigations in Scotland and Ireland, it is desirable that the functions of the Fisheries and Harbor Department of the Board of Trade, which is the central authority for England, should be considerably enlarged. They recommend, therefore, that the Board of Trade should have power not only to delegate to any satisfactory fishery authority the conduct of such fishery

* From the *London Times*.

investigations as the latter body are willing and able to carry out, but also themselves to conduct investigations; and, further, that the local fishery authorities and the authorities or bodies who conduct or contribute to the expenses of such investigations should be represented on a Central Fishery Council at the Board of Trade, which council should have general control over all such investigations.

To give practical effect to this scheme the committee recommends the constitution at the Board of Trade of a Fishery Council for England, consisting of one expert and one administrative member representing each of the three coasts (E., S., and W.), together with such official representative or representatives as the department may nominate; the duty of this council being to meet periodically, to formulate schemes of investigation, to make recommendations as regards Governments grants, to report on the knowledge acquired by the researches made, and, generally, to exercise control over the investigations. In order to secure uniformity of action between scientific bodies at work in the seas surrounding the United Kingdom, and to prevent overlapping of areas of research, the committee suggest that there should be a conference consisting of representatives of the three central authorities to this extent only. The committee propose that statutory powers should be given to the local sea fisheries committees to expend money on fishery research; and, recognizing that on the east coast of England (except to a small extent in Northumberland) there are no local fisheries committees contributing to the knowledge of fishery problems, they recommend that the Fishery Council for England should itself conduct investigations on that coast. The committee think, however, that, if possible, the expenses of such investigations should be partly borne by those who are pecuniarily interested in them.

Another point emphasized in the report is the desirability of making provision at the principal fishing ports of the United Kingdom for the collection of statistics on the largest scale practicable for the purpose of ascertaining the particulars of the fish landed

and the place where they are caught. To achieve this end the committee suggests that arrangements should be made for the payment of masters of fishing vessels for filling up returns, and for the engagement of a staff of trained assistants to deal with these returns and with the samples landed and selected for examination. In addition to the research vessels possessed by the central authority in Ireland and by the Marine Biological Association at Plymouth, three special steamers should, the committee think, be provided to study definite sea areas, one to work on the east coast, a second along the west coast of England, and a third to replace the *Garland* on the coasts of Scotland. If the plan formulated by the committee finds approval, each of these steamers will work in connection with a biological laboratory; and each laboratory (in addition to those already established in Scotland and Ireland) will have three biological assistants, while another assistant will be stationed at the office of the central authority in each country. The committee explain that the laboratories at Liverpool and Port Erin (Isle of Man) would meet the wants of the west coast, while that at Plymouth would suffice for the south coast. It would be necessary, however, to establish a new laboratory at some central point on the east coast of England.

Finally, the committee expresses the view that benefit would be derived from the establishment of a National Fishery Museum, which had best be placed at a great fishing center, such, for example, as Grimsby. In this museum might be exhibited such of the specimens of the Buckland collection as are worth preserving; and, it is added, "perhaps it would be found possible to apply Mr. Buckland's monetary bequest for the purpose of such a museum, which might very appropriately be united with the proposed laboratory for the east coast." The original chairman of the committee was Sir Herbert Maxwell, M.P., but he resigned the post last May, since when the inquiry has proceeded under the presidency of Sir Colin Campbell Scott-Moncrieff, whose name appears first amongst the signatories to the report.