sian characters, that are uncommon to most bibliographic enterprises.

Bibliographies as thorough and as well appointed as this one are definite milestones in the progress of research, in no matter what field. With the bewildering increment of literature in all branches of science, the great need for bibliographies is scarcely to be disputed. The most serious problem these days is to find funds for bibliographic publication after the necessary work of compilation has been done. In the present case the assiduity of the compilers and the interest and generosity of the sponsors, including one anonymous contributor, are especially gratifying. Botanists and plant scientists of at least three continents are the beneficiaries.

PAUL H. OEHSER

U. S. NATIONAL MUSEUM

GRIGORE ANTIPA

Grigore Antipa. Hommage à son oeuvre. 10 décembre, 1867—10 décembre, 1937. Bucharest, Imprimeria Natzională, 1938. (Published under the auspices of the Roumanian Society of Sciences.) Pp. 727; numerous plates and illustrations.

THIS noble volume, admirably printed and illustrated, is a tribute to one of the wisest and kindliest of modern biologists—Director Antipa, of the Bucharest Natural History Museum, Haeckel's assistant for many years at Jena, ex-minister of agriculture and world-renowned leader in fresh-water fishery development. Tendered to him on his seventieth birthday by pupils and friends, it contains a bibliography of his writings, accounts of his work as scientist, sociologist, economist and museum director; but its main bulk consists of valuable scientific papers in French, German, Italian and English (very few in Roumanian). These touch almost every phase of scientific interest, from the weathering rate of sedimentary rocks in Switzerland and the Pliocene fauna of Roumania, to sardine fisheries on the Chilian coast and an article by our own Henry Baldwin Ward on "Environmental Stimuli and Salmon Migration"; we even have an article by Netzhammer on Christian martyrs in the Danube basin and one on the development of forensic medicine in Zurich. It is interesting to discover that American "pumpkinseeds" and "bullheads" have made their way into the Danube system; there are specially valuable articles on wheat rust, on vitamin D from Black Sea sharks' livers, on the science of museum display, where Antipa was a pathfinder; but perhaps the most important have to do with pisciculture, in which we recognized Antipa's leadership some years ago by inviting him to investigate and make recommendations for the Mississippi Valley fisheries. Space limits prevent listing of the 52 articles; suffice it to say that this volume should adorn every large biological reference library, and the separate articles should go into the bibliographies. And all of us who have enjoyed the hospitality of Dr. Antipa and his charming wife will rejoice in the worthy quality of this hearty tribute—headed by King Carol himself—to a gentleman and a scholar of the highest rank and a patriot who showed his mettle under the trying conditions of the German occupation of Roumania; and we may take courage for the future of scholarship in the proof it affords of his stimulating influence on the younger generation.

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REPORTS

PURE AND APPLIED SCIENCE RESEARCH AT MELLON INSTITUTE

EIGHTY-SIX industrial fellowships, of which 30 are multiple and 56 individual, have been in operation in Mellon Institute during its fiscal year, March 1, 1938, to March 1, 1939. These investigations have employed 161 fellows and 96 fellowship assistants. During this fiscal year the institute has spent $1,104,405 in carrying on these research programs and its broad studies in pure science, which have been becoming more and more important, according to the twenty-sixth Annual Report of the director, Dr. E. R. Weidlein, to the trustees of the institution.

Of outstanding interest in this report is the account of the investigations on the chemotherapy of pneumonia under way in the institute's department of research in pure chemistry. Several active compounds have been discovered, but none appears to be as generally suitable as hydroxyethylapocupreine. The conclusions of the medical collaborators, Drs. W. W. G. Maclachlan, J. M. Johnston, M. M. Bracken and G. E. Crum, following three years of clinical experience with this drug, demonstrate that the mortality figure in pneumococcic pneumonia in adults during the past year has been greatly reduced in those cases which received hydroxyethylapocupreine. In comparing the mortality figures of the chemically treated cases, which were of course smaller in number, with the serum-treated cases in Pittsburgh, for the same types of pneumonia during the same period of time, almost identical results were observed by these specialists. Hydroxyethylapocupreine, which has shown no evidence of disturbing vision, can be used effectively in all types of pneumonia. Clinical studies of the drug in cities other than Pittsburgh have been arranged for. Experiments