

department from public funds amounted to £338,552, against £427,432 in the previous year.

For the current year this expenditure is estimated at £342,641—nearly £85,000 less than in 1920-21, though about £40,000 of the reduction is accounted for by the government decision that research work undertaken directly for the fighting services at the National Physical Laboratory shall be a charge on the votes of those departments and not on the research department's vote.

While the council deplore the necessity for this reduction of expenditure, with the consequent slowing down of the research program, they realize that the check is less injurious now than if it had come at a later stage, because a steady policy in the matter of research is more conducive to success than the provision of larger sums of money without the assurance of their continuance. They refer with special satisfaction to the report of the Geddes committee, which stated: "We are of opinion that the activities of this department have been minutely examined with a view to obtaining a reduction of expenditure, and we are unable to recommend any further reduction beyond what has been effected."

The second section of the report also deals with the question of expenditure, and its introduction contains short notes by the Advisory Council on each of the activities of the department, intended to show the necessity for their continuance. It goes on to discuss the present position and future prospects of the research associations connected with the department. Of these, twenty-four have now received licenses from the Board of Trade, and twenty-two are in active operation. In addition, three other industries have the possibility of forming such organizations under immediate consideration, and preliminary negotiations are taking place with several others. Several examples are given of the economies and improvements in practice that have resulted from the work of these associations.

The report proceeds to describe the work that has been done for national purposes, including the work of the coordinating research boards, the research undertaken in the various research institutions belonging to the department, and certain investigations undertaken for

the department elsewhere. There is also a brief account of the development of research for other parts of the empire, reference being made to the Empire Cotton Growing Corporation, the Colonial Research Committee, and the West Indian Agricultural College, for the last of which temporary buildings and laboratories are being prepared in Trinidad.

Steady progress is reported in the direction of closer cooperation between the scientific work of the various government departments, represented on the coordination boards, and an increasing tendency is noted on the part of the service departments to enlist the cooperation of outside bodies and to arrange for the open publication of the results of their work, when these are of general scientific and industrial importance.

A general survey follows of the work of various institutions under the direct control of the department, including the National Physical Laboratory, the Geological Survey, the Fuel Research Board, the Deep and Hot Mines Research Committee, the Building Research Committee, the Food Investigation Board, and the Forest Products Research Board.

The last part of the report deals with certain independent institutions and specific researches which have been aided by the department, and with the grants made to individual research workers and students. As regards the latter, 544 applications for grants were considered, against 333 in the preceding year, and 280 awards were made, against 245. The bulk of the applications for the academic year 1922-23 have been received, and already it is clear that they will at least equal in number those received last year. The expenditure proposed under this head for 1922-23 is £50,000, against an estimate of £47,000 for the year ending on the thirtieth of September.

PEKING UNION MEDICAL COLLEGE

THE year 1921, the seventh of the work of the China Medical Board of the Rockefeller Foundation, was marked by the completion of the main buildings of the Peking Union Medical College, the only institution for which the China Medical Board has thus far assumed complete financial responsibility.

It is hoped, according to the report of Dr.

Roger S. Greene, the director, that it may serve as a model for other medical schools, not in the sense that it necessarily represents the ideal in all matters of organization and construction, nor that it is as yet complete in every respect as a few of the largest institutions in other countries may be said to be complete, but that it presents, in China, a demonstration more nearly adequate than any that has preceded it, of the essential elements of a modern medical school.

The college seeks to point the way by which the future system of Chinese medical education may be adapted as well as possible to the actual conditions in the country. If the hopes of its founders are realized, it will graduate a select group of leaders in medical education, in research, and in public health administration, and a larger number of useful practitioners of medicine and surgery.

The attempt to harmonize the exterior of the college buildings with the great architectural monuments of Peking may be regarded as typifying the hope that the Peking Union Medical College itself may in time become a true Chinese institution, and that through it Chinese scientists may succeed in adapting western medical science to the needs of their own country more effectively than foreigners can ever hope to do.

It is obvious that foreigners can play only a very limited part so far as giving actual medical service is concerned; while foreign-trained Chinese doctors and nurses, though they can be very useful in the initial stages, will always be few in number and at some disadvantage because the schools they have attended have not sought to equip them for meeting the special conditions, whether of climate or of social and economic organization, which prevail in China. Therefore the establishment of an institution to provide the requisite training on local soil was logically the first step in the program of the China Medical Board. The efforts of its officers during these first years have accordingly been largely devoted to the reorganization and equipment, on a satisfactory basis, of one such medical school, the Peking Union Medical College.

Since 1915 the college has been supported by

annual contributions from the China Medical Board. The budget for the academic year 1921-1922 provides for a gross expenditure, on the school and hospital, of \$1,418,989 Chinese silver currency. The local income from fees and hospital earnings is estimated at \$219,383 Chinese currency. To cover the difference an appropriation of \$600,000 United States currency has been provided.

Of a teaching staff of ninety at the end of 1921, forty-seven were Americans or Europeans and forty-three Chinese, the latter being for the most part men who had been students in the United States or Great Britain. In order to lessen the isolation of the staff from scientific progress in the west, provision has been made for visiting professorships under which, every year, one or two leading medical scientists of the United States or Europe are invited to spend from four months to a year in Peking.

In 1921 visiting professors included Dr. A. B. Macallum, of McGill University, in physiology, and Dr. Francis W. Peabody, of Harvard University, in medicine. In 1922 the visiting professors from the United States are: Dr. E. C. Dudley, professor of gynecology in Northwestern University, Chicago; Dr. Harry R. Slack, Jr., of Johns Hopkins Medical School, in charge of the department of otolaryngology; Dr. Donald D. Van Slyke, a member of the Rockefeller Institute for Medical Research, who is giving graduate instruction in the department of physiological chemistry, and Dr. Elliott G. Brackett, professor of orthopedic surgery, Harvard Medical School, and during the war director of military orthopedic surgery for the United States Army, who has conducted graduate courses and clinics.

LEGAL RESTRICTIONS ON TYPES OF BABCOCK GLASSWARE

A STATEMENT has been issued by the experiment station at Geneva setting forth the provisions of the amendment to the agricultural law enacted at the last session of the legislature relative to the kind of Babcock glassware that can be legally used for making butter fat tests of milk and cream where the test forms the basis of payment. Accurate glassware is essential for just payments, and milk dealers and