

for five years; it is recommended that it should receive not less than £5,000 for the first year and £20,000 for each of the four following years.

3. That the board shall be representative of the various sections of science and industry.

4. That the board shall, as one of its chief functions, consider all proposals for specific scientific researches, and shall allot to the proper person or persons the duty of conducting such specific researches as it may approve.

5. That in order to avoid centralization, and in the interest of economy, the board, in the carrying out of investigations, shall wherever possible co-operate with the university, college authorities in the various centers, with a view to making the fullest possible use of their staffs and laboratories; there shall also be set up local advisory boards to inquire into, advise and report upon local problems.

6. That one of the duties of the board shall be to advise primary producers, and those engaged in industrial pursuits, as to the results of scientific investigations affecting or calculated to benefit their industries, including processes for the utilization of waste products.

7. That the board shall have power to establish scholarships and also to award bonuses and prizes, with the object of encouraging scientific and industrial research.

8. That the board shall keep touch with government departments and also with scientific and educational institutions, with a view to cooperation in scientific investigation as well as in furtherance of scientific education and of everything which will tend to foster a greater appreciation of the advantages of science, not only by producers, but by the people at large.

RESEARCH IN THE CERAMIC INDUSTRY

THE National Research Council and the American Ceramic Society have established a joint committee for promoting the investigation of scientific problems underlying the ceramic industry, especially by founding a series of research fellowships whose holders shall devote their attention exclusively to these problems. A press statement from the council says:

The ceramic industries, including brick and tile making, and general crockery and glass manufacture as well as ornamental potteries, although among the earliest ones developed by man, have been the last of our great manufacturing industries

to reach the status of an applied science. They have been based for centuries on rule-of-thumb methods, trade secrets and individual artistry. As far as their artistic features go science can do little or nothing for them; but in all other ways it can be of great advantage to them.

In sharp contrast to the painfully slow development of these ancient industries is the extraordinarily swift development of such exclusively modern industries as those of synthetic dyes and others entirely based on the discoveries of modern science. The startling success and speed of growth of these are almost entirely the fruit of highly organized scientific research, with methods of scientific control at young stages of the operations. A famous English scientist is authority for the statement that the capital, large as it has been, which the German dye firms have invested in scientific research has been the best-paying investment which the world has ever seen. It is certain that an organized effort to develop the fundamental science of ceramics can have a great influence in advancing the industry.

AWARDS BY THE HENRY DRAPER COMMITTEE OF THE NATIONAL ACADEMY OF SCIENCES

IN accordance with the recommendations of the Henry Draper Committee, the following grants and award of medals have been made by the National Academy:

1. \$400 to Dr. S. A. Mitchell, director of the Leander McCormick Observatory, University of Virginia, to complete the purchase of a measuring microscope for use in the photographic determination of stellar parallaxes, on the basis of observations made with the 27-inch refracting telescope. The academy awarded the sum of \$250 from the Draper Fund to Dr. Mitchell in 1916 to apply on the purchase of this instrument. The microscope cost \$650. The proposed grant of \$400 will complete the purchase, in effect making the instrument the property of the academy, and Professor Mitchell will devote an equivalent sum, \$400, to the other needs of his parallax research.

2. \$300 to Dr. Joel Stebbins, professor of astronomy in the University of Illinois, to assist in the further development and application of the photo-electric cell photometer.

3. \$400 to Dr. Frank Schlesinger, director of the Allegheny Observatory, to enable him to test an automatic zenith camera for the determination of terrestrial latitudes with the expectation that the results will be more accurate than any hitherto