

## SPECIAL CORRESPONDENCE

## THE RUMFORD FUND

THE Rumford Fund of the American Academy of Arts and Sciences was established by Benjamin Thompson, Count Rumford, physicist and administrator, through a gift of five thousand dollars to the American Academy, in July, 1796, for a medal or premium to be awarded at regular intervals to authors of the most important discoveries or useful improvements in light and heat, in any part of the continent of North America or in any of the American islands.

The American Academy had, in the earlier years, certain difficulties in administering the fund, and applied, in 1831, to the Supreme Court of the Commonwealth of Massachusetts for instructions. The court issued a decree which enabled the academy to apply part of the income from the fund for grants to researchers in light and heat. Since 1833, the academy has maintained a standing committee of seven fellows, known as the Rumford Committee, which makes recommendations to the council for the award of the Rumford Premium, and also makes grants to suitably qualified researchers in light and heat.

The thirty-five recipients of the Rumford Premium to date, commencing with the first award in 1839, have been Hare, Ericsson, Treadwell, Clark, Corliss, Harrison, Rutherford, Draper, Gibbs, Rowland, Langley, Michelson, Pickering, Edison, Keeler, Brush, Barus, Thomson, Hale, E. F. Nichols, Acheson, Wood, Curtis, Crafts, Ives, Stebbins, Coolidge, Abbot, Bridgman, Lyman, Langmuir, Russell, Compton, E. L. Nichols and Plaskett.

The Rumford Committee has also made more than

two hundred and eighty grants of money, ranging from \$25 to \$500, to researchers, the average amount since 1839 having been about \$270. These grants are for apparatus, materials or experimental equipment, but not for the payment of assistants. They are also made towards the printing of researches on light and heat, subjects in which Count Rumford was particularly interested. More recently, however, the subject of X-rays has been accepted by the committee as coming within the scope of the fund.

Persons making application for grants from the Rumford Fund are expected to inform the committee of the nature and method of the research, so that a clear judgment can be formed as to whether it comes within the scope of the fund; also as to whether any similar applications have been made for grants from other funds for the same research. Researches aided by the Rumford Fund may be published in any place or form, with the proviso that due recognition be made therein as having been aided by the fund. A complete copy of each such publication should be presented to the academy.

Applications for grants should be addressed to the Chairman, Rumford Committee, American Academy of Arts and Sciences, 28 Newbury Street, Boston, Mass. Such an application may be made by any duly qualified person in North America, or any of the American islands. It should specify the nature of the research and the pecuniary amount desired.

A. E. KENNELLY,

*Chairman of the Rumford Committee*

## QUOTATIONS

## THE WORK OF DR. KARL LANDSTEINER

KARL LANDSTEINER, since 1922 a member of the Rockefeller Institute for Medical Research in New York, is the recipient of the 1930 Nobel Prize in medicine. Since the beginning of his scientific career, more than thirty years ago, Landsteiner has made contributions of great significance to medical science. He has thrown much new light on the nature of paroxysmal hemoglobinuria. With Popper he first produced infantile paralysis in the monkey, a demonstration that was followed by the intensive experimental work to which we owe practically all that is known of the nature of the causative agent of the disease. Undoubtedly Landsteiner's greatest and most brilliant work is his study through many years of fundamental problems in immunity, particularly the chemistry of the specificity of immune reactions. In this field, that is, the relations of the mechanisms of immunity to chemical structure, he has been and is a great leader, making no hasty or extravagant claims but

standing always on solid ground. The main motivation for awarding to him the Nobel Prize in medicine appears to have been his discovery of the human blood groups or the phenomenon of iso-agglutination. His first statement about human iso-agglutination appears in a footnote to an article in 1900 about the antifermentative, lytic and agglutinating actions of the blood serum and lymph. In this footnote he says that the serum of normal persons agglutinates not only the blood corpuscles of animals but also the corpuscles of other persons. It remains, he continues, to determine whether this phenomenon depends on natural, individual differences or on injurious influences perhaps of bacterial nature. In fact, he had found the action especially pronounced in blood from patients with severe diseases. Before long he demonstrated conclusively by careful observations that iso-agglutination depends on individual, physiologic differences in the blood. Here was a concrete and clean-cut discovery that was destined to have wide applica-