INTRODUCTION

Industrial communities that consume large quantities of bituminous coal suffer more or less from what has come to be called the "smoke nuisance," and in many of them steps have been taken by private or public agencies to abate it. In the fall of IOII Professor Robert Kennedy Duncan. Director of the Department of Industrial Research of the University of Pittsburgh was provided by a Pittsburgh business man with a fund for making an investigation into this subject with particular reference to Pittsburgh. Prominent citizens had frequently expressed themselves to the effect that the smoke problem is the greatest single civic problem confronting Pittsburgh. The donor of the fund was actuated by the belief that a thorough investigation would reveal not only the nature, extent, and precise causes of the smoke nuisance, but also the remedies that would make its abolition possible and practicable.

At the present time the investigation is being carried on by a staff of twenty-five specialists, six of whom are giving their entire attention to this work, while the remaining nineteen have been entrusted with the preparation of special reports concerning particular phases of the subject.

The investigation as a whole may be divided roughly into two parts,—the analytical or diagnostic, and the constructive or remedial part. Under the first head may be grouped the Meteorological, the Botanical, the Chemical, the Physical, the Architectural, the Hygienic and Medical, and the Economic researches, as well as certain sections of the Engineering and of the Legal and Administrative investigations. Under the second caption may be grouped the Experimental and Educational activities of the staff, as well as the more important phases of the Engineering investigation.

Apart from these two main divisions of the work, provision has also been made for a brief History of the Smoke Nuisance in Europe and in the United States, and for an exhaustive Bibliography of the subject surpassing in scope and thoroughness anything hitherto attempted in this line.