

SEWERAGE AND SEWAGE PURIFICATION

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Sewerage and Sewage Purification by M. N. Baker

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By M. N. BAKER, Ph. B., C. E.

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"BRITISH SEWAGE WORKS,"

Fifth Edition, Revised and Enlarged.



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• 25 Park Place.

1913

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PREFACE.

One of the earliest volumes in this series was "Sewerage and Sewage Utilization," by Professor W. H. Corfield, of the University of London. Appearing in 1875, when only a few score American cities had sewerage systems worthy the name, and when sewage purification was practically unknown in this country, the little book was and for many years continued to be of great service this side the water.

When, after twenty years, the publishers requested the author to revise the book, he found revision, or even re-writing, entirely out of the question, so ill-suited were its matter and method to modern American conditions.

There being a strong demand for a brief but comprehensive book on the subject, it was decided that an entirely new one should be written.

Professor Corfield entitled his discussion

"Sewerage and Sewage Utilization." The present author prefers to use "Purification," rather than "Utilization," in his title. In making this change he does not wish to detract from the importance or possibilities of utilization, but simply to put purification, or the sanitary problem, first, and utilization, or the commercial problem, second. In addition, utilization is only one of several processes of purification.

There are now in the United States some fifty cities and villages, many institutions, manufactories and houses, employing one or another system of sewage purification. The studies of the Massachusetts State Board of Health have given an impetus to intermittent filtration of late, but chemical precipitation is practiced in many places and broad irrigation is quite common, especially in the West, where "Water is King," and the sewage is used for plant drink rather than plant food.

It is hoped that this little book will be of use to some engineers, especially those whose practice has been in other lines of

engineering, and to that vast and rapidly growing body of sewer commissioners and superintendents, boards of public works, boards of health, mayors and city councilmen, and public spirited citizen in general, all of whom are of late taking a growing and most promising interest in sanitary problems.

M. N. B.

104 Tribune Building,
New York, Dec. 31, 1895.

PREFACE TO THE SECOND EDITION.

In the nearly ten years that have elapsed since the appearance of the first edition of this little book, the newer and so-called bacterial processes of sewage treatment have been announced, passed through an experimental stage and come into extensive use. Meanwhile the author has improved many opportunities to visit American sew-

age purification works, old and new, and during 1904 spent several months abroad, chiefly in Great Britain, visiting sewage works and meeting a number of the men prominently connected with British progress in this field. As a consequence of the events named above, the section of this book which deals with the purification of sewage has been largely rewritten and somewhat extended. Few changes in the other section, on sewerage systems as contrasted with disposal works, have been deemed necessary.

M. N. B.

220 Broadway,
New York, May 5, 1905.

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