

# INDUSTRIAL HOUSING

With Discussion of Accompanying Activities; Such as  
Town Planning—Street Systems—Development of  
Utility Services—and Related Engineering  
and Construction Features.

BY

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## INTRODUCTION

This book has been the result of a realization, on the part of the author and his associates, of the interdependence of many agencies and the need of the coördination of several professions in the development of a successful town plan and in the up-building of a contented industrial community.

Unusual and unprecedented experiences, as a result of the Great War, followed several interesting earlier opportunities to become acquainted with and take part in various functions of the development of residence sections of towns for housing industrial workers. These ranged from the direction of large and comprehensive projects, providing for many thousands, to studies of smaller mining camps, to replace the heretofore customary groups of ill-assorted shanties. They also covered engagements from the beginning of investigations for determining needs to the fulfillment of a completed program. Thus the need of the budget, to balance requirements against resources, and of a rational plan from beginning to end of the enterprise, impressed itself as an early and ever present necessity.

Certain factors have become outstanding and fostered from time to time, in the development of housing programs.

*First*—following a belief that something must be done better to provide for workmen during the living hours of the day, attractiveness in houses has frequently been predominant.

*Second*—pleasant surroundings have apparently loomed large and change from barrenness to blossoms has resulted, while gardens have also become an important feature.

*Third*—the idea of community recreation, with playgrounds, swimming pools, municipal centers with buildings, meeting places, etc., has been developed, with a sudden realization of the need and desire for community expression.

All of these steps and ideas have been good in themselves, but no one, however complete in itself, fills all the need of community life and spirit, and all too frequently attractiveness and pleasant surroundings have not meant healthfulness and correct sanitation, which are so fundamental to permanent good living. So it has eventually been recognized that not only must the home be well

planned for economy and efficiency, but also the utilities and facilities that go to make up the town and its business and social life.

The author and his organization had the good fortune to participate in the early months of our entrance into the war, in the creation of quarters for troops at one of the National Army cantonments, and one of the National Guard tent camps, built during 1917. Later, being called to assist in the building of towns for the housing of ship workers, it was his good fortune to sit in on the consideration of the plan and scope of the program for this purpose. Both were unique experiences and intensified the belief (if this were necessary) that no one profession is competent to cope with the difficulties of housing.

Gathered together from all parts of the country were men from all walks of life; imbued with the idea of helping to build homes, to attract to ship yards, to build ships, to send the troops and supplies to France, to help win the war. Many had never heard of each other and several only knew of the other's reputation in his chosen line. Most of the recruits were strong individualists, had done things worth while; and many had not, at least for years, worked under the direction of others or in multiple harness. What wonder, then, that it took some time to settle down and get up speed, which later so characterized the work as to win the commendation of the Senate Committee, which was called upon to investigate these activities of the Emergency Fleet Corporation of the United States Shipping Board. The writer would not have missed this opportunity for service, nor this development of new experience, for all of the chapters in his life which had gone before.

He deems it a stroke of good fortune that he had the privilege of associating with the pioneers who were the leaders in the program and who, with all the background of personal accomplishments, sank personality in the common purpose. Early and always there was an appreciation by all that team work, esprit de corps, fitting of endeavors as well as of abilities together, were needed to bring about the result. And the result was achieved. Witness the home-like communities from Maine to the Gulf, along the Atlantic and on the Great Lakes and even on the Pacific, which testify to the wisdom and excellence of the program. It is also a tribute to the far-sightedness of the planning and the personal magnetism of the leaders of the organization.

It is evident that without the team work which actuated and permeated the conference, the committee study and joint departmental action, nothing like the concerted effort could have been put forth. The necessity for the site-and-investigation-committee to consider all phases of the project—social, living, working, topographical and physical conditions, the utility facilities and material possibilities—was but a forerunner of the further coöperation needed by the town planning, architectural, engineering and real estate branches of the Housing Division, in order to develop, in an orderly but at the same time prompt manner, facilities needed to house workers expeditiously.

The author, therefore, with all of this background and with a growing appreciation of the necessity for expanding the program for home building in the future—believing that if the enterprise is not approached in a comprehensive way with large-scale production, it will be utterly inadequate and fail of its purpose—conceived the idea of chronicling some of the conclusions from this experience. In this manner it is hoped they may be available to others who have not had a like opportunity to participate and secure such results.

The endeavor has been to develop the things which must be considered by orderly procedure in providing not merely houses but homes, with all the attendant attributes of a living and livable town. Not all of the features discussed in the following chapters will be applicable to any one place, as the requirements are dependent upon isolation, contiguity to other places and facilities already existent. But all must be considered, so that if it be really unnecessary to provide for any one of them, then the reason will be known. It is certainly apparent that houses alone, however attractive, will never supply a complete town. It is prerequisite to consider these and the whole town in relation to others in the vicinity; also the appropriate planning of streets, blocks and lots; parks and recreation facilities; the utilities, such as drainage, sewerage, water supply, gas and electricity, transit and transportation, health and sanitation. Thus we have the need to consider every feature and to use more than one profession; the need of coördination of all under able leadership is apparent.

While appreciating that engineering and its related activities of construction have a mighty part to play in the expenditure of money and the future cost of the town and its success, and although

the author is a practicing engineer himself, this book is not written solely for the engineer or from his point of view alone; neither is it a treatise on technical practice. It has been written in the realization of a fact now generally acknowledged that, in addition to the architect, who is first thought of because we are thinking in terms of houses and homes, there must be present the town planner, the landscape gardener, the engineer, the sanitarian, the utility designer, the constructor, the realtor, the civicist and the public spirited business representative.

To all of these and to city officials—particularly the City Managers, Directors of Public Works and Municipal Engineers and Architects—this book is dedicated, with an earnest hope that it will appeal as filling a need where no adequate treatise has heretofore existed.

PITTSBURGH, PENNA.,  
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MORRIS KNOWLES.

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