The prefabrication of houses

Foundation Albert Farwell
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OF HOUSES
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THE
PREFABRICATION
OF
HOUSES

A Study by the Albert Farwell Bemis
Foundation of the Prefabrication Industry
in the United States

__________________  By BURNHAM KELLY

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"... he that strives to touch the starres, 
oft stombles at a strawe"

EDMUND SPENGER
The Shepheardes Calender
Foreword

Fourteen years ago Albert Farwell Bemis completed his important trilogy on housing, published under the general title, The Evolving House. The final volume of this work, Rational Design, was largely devoted by Mr. Bemis to exposition of his modular theory, a theory which has since found wide application in the standardization of the dimensions of building materials.

The volume also contained a long appendix which I had the privilege of putting together and which at the time of publication was perhaps the largest single compilation of the efforts of various people over the years to arrive at a design for a factory-made house.

This appendix had serious defects, and the greatest of these was one common to the times, and one from which prefabrication has not yet escaped, that is, an inordinate interest in the engineering detail of the various proposals and an inadequate interest in all the other factors which might determine success or failure.

It is true that I attempted to correct this by publishing a list of questions which a hopeful prefabricator ought conscientiously to ask himself, but even these were heavily weighted on the side of design; and, though the individual descriptions did attempt to state many facts about each proposal, these facts were obtained from the armchair, so to speak, by using the replies sent in by the sponsors themselves. Experience has shown that sponsors are universally overoptimistic.

In the process of putting together this appendix, we naturally accumulated very substantial files of information. Mr. Bemis died in 1936, while his last volume was in the press; in 1938 Mrs. Bemis and her children established the Albert Farwell Bemis Foundation for housing research at the Massachusetts Institute of Technology. I had the honor to be the first Director. The information files came with the Foundation to M.I.T.

We had scarcely put together a working team when war came along and scattered it. In 1945 when some of us came back I was soon succeeded as Director by Burnham Kelly, who is the author of this book.
The interest in prefabrication was even more intense in the postwar period than it had been in the thirties. The files of the Beinis Foundation, though far from complete, were certainly among the largest in the country. The Foundation was frequently sought out by visitors, especially from abroad, who were seeking the truth about a business concerning which many half-truths or untruths were being said. In the light of this interest it soon became apparent that we needed much more information than we had, and of many different kinds, if an approximation to truth was going to be possible. It was also clear that much of this information could be obtained only by personal observation in the communities of the various entrepreneurs. It was this that started the Foundation to collecting more information by the process of field survey. It is the results of this field survey and the conclusions which may be drawn from them that the reader will find in this book.

Prefabrication, or the factory manufacture of houses, means many different things to different people. To some it is a variegated Golconda; the seeker for a house who finds that what he does not want costs more than what he wants to pay imagines that houses produced like automobiles or radios ought to be nearer his heart’s desire; the entrepreneur imagines that he may be another Ford; the manufacturer of conventional building materials wonders whether he may not sell more of these by making them into some sort of package; the manufacturer of building equipment fancies that he may have all his latest apparatus in every house if he provides the package as well; a national president faced with depression may look to it as a new industry to lead from the morass; the opponent of subsidized housing may see a chance of arresting the tide if the cost of the housing unit can be materially reduced through factory methods. And all these hopes would have some justification if only the successful commercial manufacture of houses on a large scale could be achieved.

To others prefabrication is a source of fear and not of hope. The investor who is overcommitted in loans on real estate may legitimately wonder whether a sudden and significant downward shift in the cost of a house may not be disastrous; the building-trades laborer who pursues an antiquated craft with little of the joy of the onetime building craftsman may fear technological unemployment; the realtor who is not wise about real estate and is really nothing more than a peddler of some one else’s property may have the same apprehension; and to a certain extent every present homeowner can share the fear of the investor although he may display it in an attitude towards the appearance of the product. All these vested interests are precisely the same in kind as those which have historically opposed every other innova-