AN ABSTRACT OF THE THESIS OF

Elizabeth Alice Cameron
-----------------------------for the--in--
(Name) (Degree) (Major)

Date Thesis presented--Sept. 2, 1938

Recommendations for Planning a Home Management House

Title---------------------------------------------------------
for Oregon State College Based on a Study of Needs

-------------------------------------------------------------

Abstract Approved

(Major Professor)

This study was undertaken to determine the housing needs of the Home Management House group at Oregon State College and to offer recommendations which an architect may use in planning and building a Home Management House for this institution.

The material for this study was obtained from the analysis of the needs of the home management house groups at Oregon State College and from the results of a questionnaire sent to other land-grant colleges and universities.

The house was planned to accommodate eight students, a resident supervisor, and a baby. Students carry regular college work while in residence. Household duties are rotated among six of the eight students. The girls perform all household tasks except laundering of bed linen, heavy cleaning, and care of lawn and heating plant. Entertaining done by the groups includes dinners, luncheons, and teas. The nursery is frequently visited by members of Child Care classes.

The site available for the next Home Management House is adjacent to one now in use. It is near the center of women's campus activities, and faces west. The lot is 100' x 100'.

In planning the proposed Home Management House certain definite steps were followed in arriving at the recommendations for specific space units. First, a detailed check list was prepared of all functions served by the Home Management House. Second, the functions were grouped into centers and allocated to rooms. Third, the kind and location of the various rooms necessary were listed with particular attention to the size and placement of the functional centers within each room. Fourth, proposed locations for various areas were evaluated, as an aid in making compromises in the course of the development of floor plans.
Main first floor rooms recommended are as follows:
Main living room; second living room (office, reception room); main dining room; breakfast room; kitchen; auxiliary work area; student room; nursery and nursery bath.

Three entrances are needed on the first floor:
Street entrance; student entrance; and service entrance.

Central areas needed on this floor are:
Bath; coat closet; cleaning closet; and telephone booth.

Second floor rooms recommended are as follows:
Three student rooms; sleeping porch; supervisor's suite consisting of living room, bedroom, and bath; sewing and pressing room.

Central areas needed on this floor are:
Bath; closets to supplement wardrobe storage; cleaning closet; linen closet; and telephone booth.

Basement areas recommended are as follows:
Recreation room; laundry room; luggage room; heater room.

It is recommended that the house be placed as far to the north and west as possible, in order to obtain the maximum garden area between it and Kent House.

Floor plans were prepared which carry out the recommendations made for the Home Management House at Oregon State College. The house is large, the area of the first floor exclusive of halls being 1668 square feet. This area however, is very little greater than the amount needed to include all of the rooms listed, to provide for the minimum dimensions required for each room, and to provide for the efficient arrangement of rooms.

The second floor plan represents the recommended use of the space above the main part of the first floor, assuming full two-story construction. This space is more than sufficient to provide all recommended areas. The basement likewise, was planned to utilize the space under the main part of the house, and is more than sufficient for the recommended areas.
RECOMMENDATIONS FOR PLANNING A
HOME MANAGEMENT HOUSE FOR OREGON STATE COLLEGE
BASED ON A STUDY OF NEEDS

by

ELIZABETH ALICE CAMERON

A THESIS
submitted to the
OREGON STATE COLLEGE

in partial fulfillment of
the requirements for the
degree of

MASTER OF SCIENCE

June 1939
In Charge of Major

Chairman of School Graduate Committee

Chairman of State College Graduate Council
ACKNOWLEDGMENT

The writer wishes to express her appreciation to Miss Eleanor Spike, Director of Home Management Houses; to Miss Maud Wilson, Professor in Charge of Home Economics Research, and to H. R. Sinnard, Associate Professor of Architecture, for their constructive criticisms and suggestions in the handling of this material; also to Dr. Vera Brandon, Acting Head of the Department of Household Administration, for her kindly assistance and encouragement during the period of this study.

Appreciation is also expressed to the various campus superintendents for the suggestions and information given in interviews; and to Rheta Morrison, and Harry Jacoby for their assistance in the drawing of the suggested house plan and other plates.

E. A. C.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I  DEFINITION AND AIMS OF HOME MANAGEMENT HOUSE.</td>
<td>1</td>
</tr>
<tr>
<td>II HOME MANAGEMENT HOUSES AT OREGON STATE COLLEGE.</td>
<td>3</td>
</tr>
<tr>
<td>History and Present Set-up.</td>
<td>3</td>
</tr>
<tr>
<td>Comparison with Other Schools.</td>
<td>8</td>
</tr>
<tr>
<td>III PURPOSE OF THE STUDY</td>
<td>13</td>
</tr>
<tr>
<td>IV HEALTHFUL HOUSING.</td>
<td>14</td>
</tr>
<tr>
<td>V CONSIDERATIONS IN BUILDING A HOME MANAGEMENT HOUSE FOR OREGON STATE</td>
<td>15</td>
</tr>
<tr>
<td>COLLEGE.</td>
<td></td>
</tr>
<tr>
<td>Proposed Site.</td>
<td>15</td>
</tr>
<tr>
<td>Climatic Considerations.</td>
<td>15</td>
</tr>
<tr>
<td>Materials and Construction.</td>
<td>19</td>
</tr>
<tr>
<td>Local Codes.</td>
<td>20</td>
</tr>
<tr>
<td>VI ANALYSIS OF REQUIREMENTS OF HOME MANAGEMENT HOUSES.</td>
<td>21</td>
</tr>
<tr>
<td>VII AREAS IN HOME MANAGEMENT HOUSE</td>
<td>22</td>
</tr>
<tr>
<td>Kinds of Areas.</td>
<td>22</td>
</tr>
<tr>
<td>Placement of Areas.</td>
<td>26</td>
</tr>
<tr>
<td>VIII RECOMMENDATIONS FOR PLANNING SPECIFIC AREAS.</td>
<td>28</td>
</tr>
<tr>
<td>Living Rooms.</td>
<td>29</td>
</tr>
<tr>
<td>Nursery Group.</td>
<td>30</td>
</tr>
<tr>
<td>Student Rooms.</td>
<td>32</td>
</tr>
<tr>
<td>Bathrooms.</td>
<td>34</td>
</tr>
<tr>
<td>Sleeping Porch.</td>
<td>35</td>
</tr>
<tr>
<td>Supervisor's Suite.</td>
<td>35</td>
</tr>
<tr>
<td>Sewing and Pressing Room.</td>
<td>36</td>
</tr>
<tr>
<td>Storage, Preparation and Service of Food.</td>
<td>37</td>
</tr>
<tr>
<td>Areas Connected with First Floor Hall.</td>
<td>46</td>
</tr>
<tr>
<td>Areas Connected with Second Floor Hall.</td>
<td>49</td>
</tr>
</tbody>
</table>
**TABLE OF CONTENTS (cont.)**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basement</td>
<td>52</td>
</tr>
<tr>
<td>Out-of-Door Area</td>
<td>53</td>
</tr>
<tr>
<td>IX SUGGESTED HOUSE PLAN</td>
<td>54</td>
</tr>
</tbody>
</table>

**BIBLIOGRAPHY**

**APPENDICES**

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>HOME MANAGEMENT QUESTIONNAIRE</td>
</tr>
<tr>
<td>B</td>
<td>HEALTHFUL HOUSING</td>
</tr>
<tr>
<td>C</td>
<td>CONSIDERATIONS IN BUILDING</td>
</tr>
<tr>
<td>D</td>
<td>CHECK LIST OF FUNCTIONS OF THE HOUSE</td>
</tr>
<tr>
<td>E</td>
<td>STANDARDS FOR THE DIMENSIONS AND ARRANGEMENT OF THE DWELLING</td>
</tr>
<tr>
<td>F</td>
<td>ABBREVIATIONS USED ON THE PLATES</td>
</tr>
</tbody>
</table>
RECOMMENDATIONS FOR PLANNING A
HOME MANAGEMENT HOUSE FOR OREGON STATE COLLEGE
BASED ON A STUDY OF NEEDS

I
DEFINITION AND AIMS OF THE HOME MANAGEMENT HOUSE

A Home Management House, according to Dr. Louise Stanley, Chief of the Bureau of Home Economics, is a house in which groups of students organized as a family group live for varying periods, and apply their home economics training to the solution of different housekeeping and homemaking problems as they arise.

The purpose of the Home Management House varies somewhat with the times, with the type and location of the institution, and with individual group needs. At a conference on Child Training Courses and on Children in the Home Management Houses held in 1926 (1) the aims of Home Management Houses were stated as follows:

1. Contact with child or children in the house.
2. Use of time and money; food problems of the family.
3. Social life of the family.
4. Individual responsibility of the Home Management House groups, including adjustments of groups, use of leisure time, educational interests, needs of adults and children, health of family, and problems of house furnishings.
In general the set-up at Oregon State College conforms closely to the aims of Home Management Houses as outlined by the 1926 Conference. Duties are so scheduled that each girl takes her turn as hostess, host manager, cook, assistant cook, housekeeper, laundress, and child director. Since 1918 the care of a baby has been part of the Home Management House course, this school being second in the United States to make such provision.
II

HOME MANAGEMENT HOUSES AT OREGON STATE COLLEGE

History and Present Set-up

In June 1916, the School of Home Economics of Oregon State College added to its curriculum a home management house course, offered as an elective subject for juniors and seniors in home economics. The house chosen was one formerly occupied by ex-governor Withycombe and has been called Withycombe House.

The course was conducted by six members of the Home Economics staff for a period of six weeks each. This temporary arrangement was considered advisable for the first year and the most important result hoped from such a plan was a more thorough acquaintance and interest on the part of the school as a whole with the problems of the course, and, therefore, better solutions to these problems. The plan to have one instructor (preferably one who had experience in the house) in charge of the course during the subsequent years was put into operation in September, 1917.

The home management house course was an elective in Home Economics up to the close of the year 1925-26 when it was made a required course for all seniors. In order to accommodate the number of students affected by this change of requirements, it was necessary to open a second
home management house (Covell) which was also used as the nursery school until the year 1930-31. At that time Covell House was retained for nursery school purposes only, and Kent House was opened as the second Home Management House. In 1937 a third house (Dolan) was necessary to care for the number of students enrolled.

Withycombe is a two-story house with nine rooms and an unfinished attic which furnishes sleeping accommodations. Kent House has ten rooms on two floors. Dolan House is a two and one-half story dwelling with ten rooms and a sleeping porch. Each of the three houses has a basement containing heating apparatus, fuel storage, and laundry. Both Withycombe and Kent Houses are owned by the college and located on college property at the edge of the campus. Dolan House is rented by the college and is located about four blocks from the campus.

The houses are heated by oil furnaces and all three have wood-burning fireplaces. Electricity is used for lighting, washing machines, irons, vacuum cleaners, and small appliances. Water is heated by gas water heaters as well as by connection with the furnaces. Both gas and electricity are used for cooking and for refrigeration.

All three houses are similar in organization and management; the assignment of students to the houses is made by drawing when seniors register. The Home Manage-
ment family consists of six to eight college women, a resident supervisor, and a baby.

Most of the work of the household is performed by the students, extra help being employed in washing dishes for guest meals and occasionally to assist the student laundress. A boy is hired to care for fuel and wood supply, clean basements and walk, and wax floors. The yard is cared for by the college under the direction of the Superintendent of Grounds.

The houses are self-supporting from the standpoint of all general operating costs, by means of a fee of one dollar per day paid by each student and supervisor. Painting, calcimining, and such general repair is cared for by the college.

The activities in the house are divided into six groups, each scheduled for approximately one week. The duties are classified as follows:

**Host Manager:** Cares for the entire first floor with the exception of kitchen and service area, keeps all equipment used in this area in good condition, directs extra help, invites guests, and cares for general welfare of the family.

**Housekeeper:** Cares for the entire second floor, keeps cleaning closets and equipment on that floor in proper condition, helps clear table, stacks dishes, dries
and puts away glasses and silverware.

**Assistant Cook:** Assists with last-minute meal preparation, sets table, waits on table, answers door bell and telephone during meals, keeps dining room shelves and linen storage in order, cleans and keeps silver in order, washes dishes, cares for sink, table and refrigerator.

**Cook:** Plans meals and orders food, checks orders, stores food, and prepares meals. Cares for ranges, shelves, floor, windows and general condition of the kitchen. Keeps kitchen neat and in order while preparing meals, stores left-over food, keeps all bills, makes out food accounts, and summarizes food costs at close of week.

**Laundress:** Washes, irons, mends, stores and cares for all baby clothing. Launders bath towels and luncheon sets. Collects, sends out, and checks in all other laundry. Keeps all linen closets in order. With aid of house-keeper changes all beds once a week. Removes soiled linen and supplies fresh linen for entire house. Cares for laundry unit.

**Child Director:** Assumes all responsibility for care of baby, checks daily with supervisor and advises immediately of any irregularity in child's condition. Makes menus for baby, and prepares daily food which is stored in special shelf in refrigerator. Keeps child's dish-closet
and food in order, sterilizes dishes, and cares for nursery. Bathes, dresses, and feeds child, and puts it to bed. Permits only those free from colds and infections to enter nursery, and then not over two at a time. Schedules other girls to care for the baby when she is away from the house. Keeps all records for baby and turns in records at end of week.

There are some duties for which all members of the group assume responsibility such as: answer phone or door bell when near, keep personal belongings in order, make own bed, and take care of baby as scheduled. A definite schedule is made each week providing a student in the house at all times to care for the baby.

The girls attend classes as per college schedule, prepare lessons at home or in the college library, carry on their college activities as well as perform their duties in the Home Management House.

The main social activity of the house is the entertainment of guests at dinners, luncheons, teas, and breakfasts. Informal spreads after campus functions, radio programs, recreational reading, and games are the chief forms of leisure activity. Outdoor meals and sun bathing are special pleasures.

In case of slight non-contagious illness a girl may be cared for in the house. In severe or contagious ill-
ness the students are cared for at the college infirmary, this service being provided as a part of the registration fee.

Comparison with Other Schools

An analysis was made by Eleanor Spike, Director of Home Management Houses at Oregon State College, in which she compared the houses at this institution with the 40 houses (at 33 institutions in 23 states) studied by (2) Goodman of Kansas State College in 1932. At the time the comparison was made (1932) Oregon State had two houses. Major items in the comparison were first, that the number living in the 40 Home Management Houses ranged from four to 12 with an average of 7.3 people per house, as compared with the range at Oregon State College of five to seven persons with an average of six per house. Second, the number of rooms in the larger group of houses varied from five to 16 with an average of 8.6 for all houses, while Oregon State showed a range of nine to ten rooms with an average of 9.5. With reference to the number of weeks in residence, in the first study a range of three to 17 weeks was found with an average of 7.5, while Oregon State had a range of five to six weeks, with an average of 5.5 weeks. It was also found that 30 per cent of the 40 houses paid rent, 65 per cent, heat, 65 per
cent, lights, 57 per cent, water, and 62 per cent, miscellaneous expenses as janitor, cleaning, and maid service. The Oregon State situation was found to be comparable except in the payment of rent, as the houses were owned by the college. Expenses which were not paid by the majority of the other houses but which were paid by Oregon State houses were expenses of a baby, the greater portion of expense of replacement and equipment, and the expense of repair and labor.

In order to obtain more recent information of Home Management Houses at land grant colleges and universities, a questionnaire (Appendix A) was sent to 36 institutions and from the 33 answers obtained the results shown in the accompanying table were obtained.

By the 34 institutions (Oregon State being included) there were 49 Home Management Houses reported. The majority of these were adapted residences, only nine having been constructed for the purpose of Home Management Houses. The value of the adapted residences owned by the institutions ranged from $5000 to $20,000 with the average being $8000. The houses built for the purpose ranged in value from $7000 to $20,000 with an average of $13,555. Where rent was paid $63 was the average monthly amount reported.

The majority of houses were located on or at the edge of the campus with the greatest distance being eight blocks.
<table>
<thead>
<tr>
<th>State</th>
<th>School</th>
<th>Value in Dollars</th>
<th>Location with Regard</th>
<th>Number Indicates</th>
<th>Operation</th>
<th>Credits</th>
<th>Shded in House</th>
<th>Hold Service</th>
<th>Laundry Done in House</th>
<th>Form of Entertainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>Poly. Inst.</td>
<td>V 6 to 10</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td>Inst.</td>
<td>V 6 to 10</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arkansas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>California</td>
<td>State Agr. Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connecticut</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delaware</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>District of Columbia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Florida</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Georgia</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawaii</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Idaho</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indiana</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iowa</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kansas</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kentucky</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Louisiana</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maine</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maryland</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Massachusetts</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michigan</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minnesota</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mississippi</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missouri</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Montana</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nebraska</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nevada</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Hampshire</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Jersey</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New York</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Carolina</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Dakota</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oklahoma</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oregon</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhode Island</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Carolina</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Dakota</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tennessee</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Texas</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utah</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vermont</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washington</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Virginia</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wisconsin</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wyoming</td>
<td>State Coll.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* In no information, or number or amount not stated. ** Play school at Home Management House five mornings per week. *** As group desires.

# In every instance where a child was cared for as a part of the course the baby laundry was done in the house.
Concerning methods of heating the houses, 14 of the 34 schools indicated that they were heated by the central heating plant. On one campus two of the houses were heated by central plant and the third house by coal. Of those reporting separate heating facilities, two schools used oil, six, gas, five, coal, one used wood and coal, and five did not indicate type of fuel. Twenty-two colleges have fireplaces, two of these indicating use of gas.

Thirty-five of the 49 houses had full-time resident supervisors. Each school had one or more resident supervisors, depending on the number of houses to the school. Seven schools indicated that they were supervised by a staff member, and the remaining seven utilize graduate assistants.

With regard to other persons in residence besides the students and supervisor, 26 schools reported that no one else resided in the house, three schools had roomers, two schools, foreign students in residence, two schools reported assistant supervisors, and one school did not answer the question.

The average number of months per year for the House to be open was 9.66 with a range of from four to 11$\frac{1}{2}$ months. The number of girls per group ranged from four to ten with an average of 5.5 persons, and the weeks in residence ranged from four to 12, with an average of 6.97.
weeks. It was found that in all schools the girls reside in the house for the period of the course. Credits given on a term basis ranged from two to six with the average as 3.7. When given on a semester basis the range was two to five credits with an average of 3.24 credits.

Ten of the 34 schools reported caring for a child in the house. The approximate age at admission was from six weeks to 12 months with an average of 4.5 months.

Of the 34 schools reporting, 23 (67 per cent) indicated that the students did all or practically all of the housework. Six schools also reported maid service of from three to 12 hours per week with an average of 6.5 hours. Types of work hired done were laundry, dishwashing, heavy cleaning, waxing floors, caring for lawn and furnace, and care of the baby.

With regard to the amount and kind of laundry work done in the houses the majority of the schools indicated that they washed and ironed personal laundry, table linen, and kitchen linens.

The most frequent forms of entertainment listed were dinners, teas, and luncheons. Others listed were breakfasts, bridge parties, dances, and buffet suppers. Three of the schools did not specify the exact form of entertainment but stated that it depended on the desires of the individual groups.
III
PURPOSE OF THE STUDY

The purpose of this study is to analyze the housing needs of the Home Management House groups at Oregon State College, and to submit recommendations and plans which an architect may use in planning and building a Home Management House for this institution.

In line with the modern trend in domestic architecture this structure will be planned on a functional basis. It is intended to provide the best possible environment and laboratory set-up for the group. Time is of particular importance to the group, as regular college work is carried during residence in the house. Good time-management necessitates a well-organized set-up which is acquired by means of efficient equipment, planned storage space, and easy access to the campus. It is also intended to have the house serve as a demonstration in house planning. It is expected that members of the successive living groups will carry away ideas of efficiency in house planning that can be utilized in their homes.

It is likely that funds available for the next home management house at Oregon State College will be limited. Hence, the plans have been designed to provide as inexpensively as possible for the purposes to be served.
IV

HEALTHFUL HOUSING

One of the major objectives in planning the new Home Management House is to apply the basic principles of healthful housing set up by the Committee on the Hygiene of Housing, American Public Health Association. A copy of the preliminary report of this Committee is included in the appendix (Appendix B). The Principles and Specific Requirements, as stated in this report, are believed by the committee chairman, to be the fundamental minima required for the promotion of physical, mental, and social health.
CONSIDERATIONS IN BUILDING A HOME MANAGEMENT HOUSE
FOR OREGON STATE COLLEGE

Proposed Site

The site for the next Home Management House has been allotted by the College. It includes lots 19 and 20 in Park Terrace Division. The area, which is practically level, is 100 feet deep and 100 feet wide. It is bounded by a sorority house on the north; by a 12-foot alley with residences beyond, on the east; by a Home Management House (Kent) on the south; and by Twenty-sixth Street on the west. The area is near the center of campus activity, being about one and one-half blocks from the Women's Quadrangle. Twenty-sixth Street is a 40-foot street, paved 24 feet wide with a five-foot walk and a three-foot parking strip on either side. City regulations allow parking only on the east side of the street. (Map, page 16).

Climatic Considerations

Oregon State College is located in the Willamette Valley. Miss Wilson notes,(9)

Characteristics of the Willamette Valley climate that influence housing arrangements are these: cloudy and rainy weather during a large part of the year; occasional wind-driven rains, usually from the same direction for a given section;
two or three months of little or no rain; occasional low temperatures for periods of short duration; and occasional high temperatures, accompanied by low humidity, for periods of short duration.

In order to make the best of the local situation with respect to climate it is well to have these definite objectives in planning: Make the most of the winter sunshine; plan for the fullest possible enjoyment of the agreeable summer climate; keep mud and dust out of the house; minimize the inconvenience and discomfort of rain and extreme temperatures; keep all equipment and supplies under cover; protect from dampness bedding and clothing in current use; protect woolens and furs from moths; and provide safeguards to prevent falls on slippery walks or steps.*

Of the housing arrangements listed by Miss Wilson as desirable from the standpoint of climate those applicable to the planning of a Home Management House are the following:

- Hard-surfaced walks leading from all entrances to the edge of house yard or the drive.
- A well-drained back yard.
- A terrace or uncovered porch protected from the winter winds but reached by the sun's rays at midday.
- An automobile porch to permit the unloading of cars under cover.
- All entrances protected from rain. The nature of

*In this study frequent reference is made to Oregon Experiment Station Bulletin 320, "Planning the Willamette Valley Farm House for Family Needs" by Maud Wilson. This is the only available material of this type.
the protection will depend on whether the entrance is located on the side from which wind-driven rains usually come, but there should always be a dry space before the door large enough to permit one to stand while lowering an umbrella.

- Entrances located where possible so as not to face the direction from which wind-driven rains come.
- Protection of entrances extended where possible to include steps leading to them.
- Hand rails for steps not protected from rain.
- Cross-ventilation in living, sleeping, and work rooms.
- Basement work rooms provided with large windows and areaways deep enough to admit the sun's rays for as long a period of the day as possible.
- Living room located so as to make south windows possible.
- Windows of bedrooms so located that in order to provide adequately for ventilation they will not need to be opened on the side from which rains come.
- Provision for storage of all equipment and supplies used in the house.
- Place for drying wet outer-clothing.
- A place for drying clothes in rainy weather.
- Floor coverings like linoleum, from which mud and dust are easily removed.
Materials and Construction

Information concerning college standards for material and construction was obtained in interviews with the Superintendents of the various departments at Oregon State College. The detailed specifications are included in the appendix.

The Superintendent of Building recommended that the house be of frame construction, because of the importance of the lumber industry in the Pacific Northwest, and because lumber is the least expensive building material in this locality.

The Superintendent of Physical Plant stated that from the standpoint of convenience it would be desirable to have the heat for the Home Management House supplied by the college heating plant. However, until more than one house is connected in this manner the cost of the connection would be prohibitive. Until that time an automatic heating plant will be installed for the house. The most desirable system for comfort and convenience would be an automatic oil burner which heats the house by means of forced warm air. (An automatic sawdust burner is very satisfactory and less expensive than oil, but because of the labor involved in this particular set-up the oil burner is recommended.)
The Superintendent of Light and Power and the Superintendent of Plumbing and Steam Fitting made specific recommendations for fixtures and equipment to be used in the house.

Local Codes

The local code which governs placement on the lot calls for a 15-foot set-back from the front property line and four-foot side lawns, with a 10-foot area between the back of the house and the back property line. This site is in the residential district and building operations will have to conform to the city building codes and zoning regulations for this location.
VI

ANALYSIS OF REQUIREMENTS OF HOME MANAGEMENT HOUSE

In planning the proposed Home Management House certain definite steps were followed in arriving at the recommendations for specific space units. First, a detailed check list (see Appendix D) was prepared of all functions served by the Home Management House. Second, the functions were grouped into centers and allocated to rooms. Third, the kind and location of the various rooms necessary were listed with particular attention to the size and placement of the functional centers within each room. Fourth, proposed locations for various areas were evaluated, as an aid in making compromises in the course of the development of floor plans.
VII
AREAS IN HOME MANAGEMENT HOUSE
Kinds of Areas

The areas found to be needed in the Home Management House are listed below. The size and the site and the character of surrounding buildings indicate the desirability of a two-story rather than a one-story dwelling. The location of the areas has been decided on this basis.

First Floor:

Nursery and Student Group

Nursery
Nursery bathroom
Student room
Student bathroom

Food Preparation and Service
Dining room
Breakfast room
Kitchen
Auxiliary area

Living Area
Main living room
Second living room serving purposes of office, reception room, and recreation room

Entrances
Vestibule for west (main) entrance
Storage of guest wraps in connection with vestibule
Entrance which permits students to reach own rooms without passing through living room or kitchen
Storage of everyday wraps of students near student entrance
Areas Connected with Central Hall
Card table storage
Coat closet
Telephone booth
Cleaning closet

Second Floor:

Student Group
Three study rooms
Sleeping porch
Bathroom for student use

Supervisor's Group
Living room
Bedroom
Bathroom

Sewing and Pressing Room

Areas Connected with Central Hall
Linen closet
Cleaning closet
Telephone booth
Closet to supplement individual wardrobe closets

Basement:
Laundry Room
Heating Unit
Fuel Storage
Food Storage
Storage for Luggage, Sportswear
Recreation Room

Out-of-Door Areas
Terrace
Garden to be Shared with Kent House
Space for Drying Lines

The accompanying sketch gives the plot location with regard to various factors which will influence placement of areas within the house.
To Campus ← Twenty-sixth Street

Direction from which wind comes

Garden

Kent House ←

South ←

Shortcut to Home Economics Bldg.

Alley and Private Residences

Drying Yard

36' x 54'

North and Sorority House

Direction from which deliveries come

East
## Placement of Areas

<table>
<thead>
<tr>
<th>Area</th>
<th>Suggested Location</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursery</td>
<td>Windows on south and east</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Away from student traffic</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Accessible from main hall</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>without crossing service area</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Opening on protected porch or terrace</td>
<td>1</td>
</tr>
<tr>
<td>Student Room</td>
<td>Next to nursery</td>
<td>1</td>
</tr>
<tr>
<td>(First floor)</td>
<td>Near first floor bathroom</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Accessible from side entrance without passing through living room or kitchen</td>
<td>3</td>
</tr>
<tr>
<td>Living Room</td>
<td>Windows on south</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>With direct access to garden</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Adjacent to dining room</td>
<td>2</td>
</tr>
<tr>
<td>Second Living Room</td>
<td>Readily accessible to both student and main entrances</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Near other main living room</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Windows on south</td>
<td>2</td>
</tr>
<tr>
<td>Dining Room</td>
<td>Direct access to kitchen</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Windows on south</td>
<td>3</td>
</tr>
<tr>
<td>Breakfast Room</td>
<td>Directly accessible to kitchen</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Easy access to dining room</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>South or east exposure</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Directly accessible to main hall</td>
<td>2</td>
</tr>
<tr>
<td>Kitchen</td>
<td>Readily accessible to basement</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Direct connection with auxiliary area</td>
<td>1</td>
</tr>
<tr>
<td>Auxiliary Area</td>
<td>Readily accessible to basement</td>
<td>2</td>
</tr>
<tr>
<td>Area</td>
<td>Suggested Location</td>
<td>Evaluation</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Student Entrance</td>
<td>Convenient for students coming from campus</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Permits access to second floor without passing through living room or kitchen</td>
<td>1</td>
</tr>
<tr>
<td>Main Entrance</td>
<td>Convenient to Twenty-sixth street</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Protected from storms</td>
<td>1</td>
</tr>
<tr>
<td>Service Entrance</td>
<td>Provides ready access to kitchen, auxiliary area, basement, and service yard</td>
<td>1</td>
</tr>
<tr>
<td>Supervisor's Suite</td>
<td>Over nursery area</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Easy access from stairs</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Direct connection between bedroom and living room of suite</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>South east exposure</td>
<td>2</td>
</tr>
<tr>
<td>Sewing and Pressing</td>
<td>Near center of upstairs living area</td>
<td>1</td>
</tr>
<tr>
<td>Room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sleeping Porch</td>
<td>Quiet part of house</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Away from storms</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Easy access from hall</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Close to bathroom</td>
<td>2</td>
</tr>
</tbody>
</table>
RECOMMENDATIONS FOR PLANNING SPECIFIC AREAS

On the following pages there are suggested plans for specific units in the Home Management House at Oregon State College. Drawings have been included to illustrate some of the suggestions given.

In making these plans, the standards utilized for basic dimensions of storage areas, type and arrangement of equipment, and utilization of storage space, were those developed by the Department of Home Economics of the Oregon State Agricultural Experiment Station and contained in the publications of that department. These standards are listed in Appendix E.

In certain respects standards for the planning of areas in the home management house differ from those for corresponding areas in the family dwelling. These standards have been noted in connection with the areas to which they apply.

Much of the storage space required in the Home Management House has been cared for by built-ins, because they save time and labor, because they can be made to suit specific needs, and because they are usually less expensive than furniture.
Living Rooms

It is desirable that the living room of the Home Management House provide adequate seating arrangement for twenty persons. It is felt that provision for this number, plus the additional seating provided by the other living areas, will be sufficient to care for any type of entertaining likely to be done in the house. Other requirements are a fireplace, a woodlift, shelving for 100 books, and wall space for a small piano. A space of 16' x 24' was found to be adequate when the room was planned with the fireplace on the north side, windows on the west side, dining room to the east, and the vestibule to the south. A living room of this size with a suggested furniture arrangement is illustrated on Plate 8.

It is recommended that the main living room have two exposures, one of which is south; and that it open to a terrace with direct access to the garden.

There is a definite need for an area other than the main living room which will serve as an office for household business, as a reception room, and as a recreation room. To meet this need a second living room, or den, was planned which will accommodate a small davenport, a desk and chair, easy chair and end table, and a game center. The den should be conveniently located with reference to both the student and main entrances, the best location
having windows on the south.

Nursery Group

A nursery unit, consisting of nursery, bathroom, and carriage porch, is advisable for ease in caring for the child. Under the present program at Oregon State College the age of the child in the Home Management House ranges from three to 12 months and the nursery unit has been planned with this in mind.

The nursery should be located on the first floor for several reasons. One consideration is the safety of the baby, and such a location would reduce the danger of falls by the girls carrying the child, according to the Cook County Study (6). Another, is the matter of saving time and steps for the students. Also, the Home Management House babies are observed by Home Economics classes in Child Development and Nursery School, and it is easier and more convenient for the group to observe the infant when the nursery is on the first floor. The desirable location for the nursery is the one that will give the most all-year sunshine, and this would be on the south-east corner of the house.

Floor space in the nursery should be adequate for the bed, play pen, high chair and carriage, and for an adult size table, straight chair, and rocker.
The nursery bathroom should be equipped with a juvenile
tub for ease in bathing the infant, a wash bowl,
juvenile toilet, baby scales, and a bath table, 24" x 36".

Articles for which storage is needed in the nursery
and bathroom are listed below:

**Clothing and linens**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 doz. crib sheets</td>
<td>1</td>
</tr>
<tr>
<td>1 doz. carriage sheets</td>
<td>1</td>
</tr>
<tr>
<td>6 rubber sheets</td>
<td>6</td>
</tr>
<tr>
<td>2 doz. pads</td>
<td>2</td>
</tr>
<tr>
<td>2 spreads</td>
<td>2</td>
</tr>
<tr>
<td>2 carriage robes</td>
<td>2</td>
</tr>
<tr>
<td>2 flat pillows</td>
<td>2</td>
</tr>
<tr>
<td>1 doz. play suits, rompers, etc.</td>
<td>1</td>
</tr>
<tr>
<td>3 sweaters</td>
<td>3</td>
</tr>
<tr>
<td>3 doz. diapers</td>
<td>3½</td>
</tr>
<tr>
<td>½ doz. dentons</td>
<td>6</td>
</tr>
<tr>
<td>6 gowns</td>
<td>6</td>
</tr>
<tr>
<td>4 sleeping robes</td>
<td>4</td>
</tr>
<tr>
<td>1 doz. bibs</td>
<td>1</td>
</tr>
<tr>
<td>1 doz. shirts</td>
<td>1</td>
</tr>
<tr>
<td>1 doz. table covers</td>
<td>½ doz. bath towels</td>
</tr>
<tr>
<td>1 doz. wash cloths</td>
<td>1</td>
</tr>
</tbody>
</table>

**Toilet equipment and supplies**

The dresser space necessary to care for linens allotted
to the nursery was found to be 32" wide by 51" high.
The space below the bath table is sufficient for the
clothing and linens used in the bath room. Plate 5
illustrates the nursery dresser and bath table. Above
the latter is shown a studding cabinet for toilet supplies.

To save space within the nursery, the mattress and
blankets from the baby carriage may be removed at night
and the carriage left on the carriage porch. The storage
of the mattress and blankets may be combined with that
needed for child's garments kept on hangers, and toys. These articles would require a cabinet 30" long by 15" wide by 46" high. A 10" drawer below will provide storage for carriage bedding and mattress; 18" of the upper part of the chest will be needed for the rod for sunsuits and rompers, and the remaining 12" for the shelving for toys.

Another desirable feature of the nursery group would be a clothes chute separate from that of the house.

Student Rooms

A minimum of four student rooms is needed. One of these should be on the first floor, adjacent to the Nursery. The first floor rooms would need to provide sleeping quarters as well as study and dressing areas, whereas the second floor student rooms may be supplemented by a sleeping porch. Single beds are recommended. Other recommended furnishings include individual desks and desk chairs, book shelving, and studio couches for the second floor rooms.

With the change of duties it is necessary for the girls to move up and down stairs. To aid in moving, it is desirable that the drawers in the various rooms be identical. The wardrobe type of closet is recommended because it has been found to be the most satisfactory from the standpoint of efficiency.
in use and arrangement. In estimating the space needed for this unit, reference was made to a study by Lorena Jack (3) in which she obtained information concerning the wardrobe of the average girl in the dormitories at Oregon State College. This wardrobe was found to include approximately the following:

3 short dresses
4 long dresses, evening wraps
5 knit dresses, sweaters
3 coats, raincoats
2 suits
4 skirts
7 jackets, blouses
2 bathrobes, lounging pajamas
7 pairs shoes
1 pair boots, galoshes
4 hats, caps
1 sports wear garment
6 pair hose
16 articles of lingerie
3 sleeping garments
22 handkerchiefs
9 accessory articles

In arriving at minimum dimensions for clothing storage allowance should be made for the fact that usually the girl in the Home Management House needs garments for only one season, as the students are only in residence for five or six weeks. It is recommended that the luggage storage room be so located and arranged that any piece stored there is readily accessible, that sports clothing be stored in the basement, that a central closet be provided for formal wear, and that a coat closet near the student entrance be sufficiently large for one coat for
each student. When these recommendations are followed, the area found to be necessary to care for the remaining wearing apparel for two students, and to provide them with dresser facilities, was a closet space $3\frac{1}{2}$" long, 22" wide, and 80" high, and a dresser space $3\frac{1}{2}$", 18" wide and 40" high. These areas were put together in a 14' unit with a full-length mirror above a $27\frac{1}{2}$" drawer in the center, in the arrangement illustrated in Plate 4.

**Bathrooms**

It is recommended that a bathroom be located on the first floor for the use of the occupants of the downstairs student room. This bathroom should be accessible from the main hallway for the day-time convenience of guests and the house group. A preference for showers is shown by the students and for this reason a shower stall is recommended; other necessary items of equipment include wash basin, toilet, mirrors, towel rods, and shelving or drawer space for personal toilet articles of the students and a first-aid kit for the house group.

The bathroom on the second floor should be easily accessible to the sleeping porch and student rooms. This room is in demand by the whole group at certain times of the day, as in dressing in the morning, preparing for meals, or undressing at night, and for this reason
it is recommended that the room be of adequate size to care for a tub and shower, a shower stall, two toilets, two wash bowls, mirror space, scales, towel racks, and storage for toilet articles for six girls. Both tub and shower fixtures are recommended for this bathroom.

Sleeping Porch

A sleeping porch is desirable because it permits of greater freedom in the time of retiring, and because many persons like to sleep in cool rooms. In planning the location of the sleeping porch several factors should be considered: (a) the direction from which storms come, (b) the necessity for a quiet area, and (c) the desirability of easy access to the bathroom and student rooms. In arriving at a possible minimum dimension for a sleeping porch arrangement accommodating six single beds the standard for bedrooms given in Oregon Station Bulletin 320 (9) is recommended: "width of space at side of bed, for convenience of person making it, 20"; width of passage at foot of bed, 20".

Supervisor's Suite

The need for quarters for the supervisor separate from those of the students may be met by the provision of a suite consisting of living room, bedroom and bath. The
living room should be large enough for a desk, couch, and two occasional chairs.

Since the supervisor is in residence the full year there should be provision for storage of all her clothing and personal belongings. It is assumed that the instructor will make use of the luggage room, and central closets for coats and formal-wear. With this in mind, a four-foot wardrobe would be sufficient to provide in her bedroom.

**Sewing and Pressing Room**

It is recommended that a sewing and pressing room be provided on the second floor, easily accessible to the student rooms. This room should be of sufficient size to accommodate two students at a time, with the ironing board always in position for use, and with provision for a cutting table to be used in conjunction with the sewing machine. Besides immediate pressing and mending this room will be used by the members of the house group who are enrolled in clothing classes at the college. Minimum dimensions of such a room, assuming that the door and window would be opposite each other, and that the cutting board would be hinged to the wall and out of the way when not in use, were found to be 6' by 5'6".
Storage, Preparation and Service of Food

In planning the food-storage, preparation, and service units in the Home Management House, provision should be made for three meals a day for nine persons, and daily food preparation for a child under one year of age. Extra food preparation consists of one guest dinner a week requiring service for from one to six guests, luncheons once or twice a term including up to twenty-five guests, and at least one tea a term for from fifteen to one hundred and fifty guests.

**Kitchen**

Provision should be made for a sink unit with work counters on both sides. The fixture recommended is a flat-rim, two-compartment double sink equipped with mixing faucet. It is desirable to utilize the space above and below the work counters for the storage of frequently used dishes, pans and small utensils used at the sink, dish washing supplies, and china and cooking equipment used in feeding the baby. Such a sink unit is illustrated by Plate 1. The space necessary to care for china storage, when planned as a cabinet above a sink work counter, would be 46" long by 11" wide by 44" high. Such a cabinet would provide for the following articles of china used for breakfasts and luncheons:
Article and Size

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Dimensions, as Stored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dinner plates, 10 1/2&quot;</td>
<td>12</td>
<td>3&quot;, stacked</td>
</tr>
<tr>
<td>Salad plates, 8 1/2&quot;</td>
<td>12</td>
<td>3&quot;, stacked</td>
</tr>
<tr>
<td>Bread-Butter plates, 6 1/2&quot;</td>
<td>12</td>
<td>3&quot;, stacked</td>
</tr>
<tr>
<td>Fruit dishes, 5 1/2&quot;</td>
<td>12</td>
<td>4&quot;, stacked</td>
</tr>
<tr>
<td>Cereal bowls, 6&quot;</td>
<td>12</td>
<td>3&quot;, stacked</td>
</tr>
<tr>
<td>Saucers, 6&quot;</td>
<td>12</td>
<td>3&quot;, stacked</td>
</tr>
<tr>
<td>Cups, 4&quot;</td>
<td>12</td>
<td>3 1/2&quot;, stack of 2</td>
</tr>
<tr>
<td>Creamer and sugar, 3&quot;</td>
<td>2</td>
<td>3&quot; each</td>
</tr>
<tr>
<td>Platter, 12&quot;</td>
<td>1</td>
<td>2&quot;, high</td>
</tr>
<tr>
<td>Platter, 14&quot;</td>
<td>1</td>
<td>2&quot;, high</td>
</tr>
<tr>
<td>Bowls, 8&quot;</td>
<td>2</td>
<td>4&quot;, stacked</td>
</tr>
<tr>
<td>Vegetable dishes, 10 1/2&quot; x 9 1/2&quot;</td>
<td>2</td>
<td>3&quot;, stacked</td>
</tr>
<tr>
<td>Coffee server</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tea pot, large</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other equipment needed in everyday meal service:

Pitchers
- pewter, 2 qt.
- glass, 2 qt.
- ice pitcher, 2 qt.

Trays
- 1 serving tray, large
- 2 small serving trays
- 15 meal service trays, 16 1/2" x 13 1/2"

For convenience in preparing the baby's food it is recommended that a special cabinet be planned, which will allow for the storage of the necessary china and utensils. The area needed, when planned as an upper cabinet, would be 24" long by 11" wide by 44" high. Hooks on the doors would allow for the hanging of forceps, strainers, sterilizing tongs, etc. Other equipment to be stored in this cabinet would be as follows:

- 2 Trays, 12"
- 6 Ramekins, 3"
- 2 Sauce dishes, 4"
- 1 Baby cup, 3"
- 1 Pint jar, 6"
- 9 Bottles, 7" x 2 1/2"
- 2 Baking dishes, 3 1/2"
- 4 Ice box dishes, 4"
- 2 Measuring cups, 3 1/2"
- 1 Juice extractor, 6"
- 2 Strainers, 3"
- 1 Forceps
- 1 Sterilizing tongs, 10 1/2"
- 1 Sterilizer
- 1 Milk warmer, 6"
- 1 Double-boiler, small, 5"
Silver: 4 tsp., 2 dessert 1 Double-boiler, large, 6" spoons, 1 knife, 1 fork 1 Frying pan, 6" 1 Measuring spoon 1 Saucepan, 5"x3" 1 Glass, 4"

Kitchen textiles as well as articles and supplies used in serving may be assigned to the cabinet below a sink work counter. The necessary space for these articles, when stored in drawers, would be 41" long by 22" wide by 38" high. This specific area would care for serving utensils, a bread drawer, a cake drawer, one dozen dish cloths, three dozen tea towels, two dozen glass towels and a half dozen pot holders.

The storage directly below the sink was found to be adequate for a dish-towel dryer, waste paper basket, dish drainer, soap, cleanser, and other sink equipment.

When the lower cabinet space at the other side of the sink is used for the articles in the following list, it will need to be 30" long:

5 Mixing bowls, nested (½ qt. to 2 qt.) 12"
6 Ice box dishes, 5"x4" to 5"x8"x3"
18 Custard cups, 3½" diameter
1 Fruit juice extractor, 6"
1 Chopping board and knife, 10"
1 Colander, 11"
3 Casseroles or baking dishes, 1qt, to 2 qt.
1 Steamer, 6 qt. kettle, 10" diameter

A preparation unit would include refrigerator, cooler, mixing table with bins for flour, sugar, and other bulk supplies, and shelving for utensils and packaged supplies. A movable utility table may be provided to supplement the
work space of built-ins. The drawers of the mixing table should be large enough to hold scoops, sifters, etc. The storage areas and dimensions necessary for such a food preparation center are illustrated by Plate 2.

The refrigerator in the Home Management House should have a capacity of at least 8 cubic feet because of the amount of entertaining done in the house as a part of the course, and because one entire shelf of the refrigerator is allotted to the storage of the baby's formula and food.

The cooler will provide space for storage of perishable foods such as vegetables and fruits for daily consumption, oranges for the baby, and opened jars not requiring refrigeration storage. It is recommended that this cooler have a tight-fitting door and removable shelves of heavy wire construction which are adjustable as to distance apart. Drawers are preferable to shelves for the storage of vegetables and fruit. A satisfactory cooler size for the Home Management House would be 18" x 18" and of ceiling height.

The cooking unit would include the range, food storage space, and storage for cooking equipment used at the stove. Because the use of wood as a kitchen fuel is common in this section, it seems desirable to specify a wood range. Because of the importance of time-saving in
the Home Management House, the type recommended is a combination wood-and-electric or wood-and-gas.

A wood lift is recommended, since fuel is likely to be stored in the basement. The space above the lift may be used for the storage of utensils or supplies used at the range.

A floor-to-ceiling cabinet is a convenient method of storing the remainder of the articles used at the range and mixing table. The dimensions of this cabinet were found to be 39" long and 18" wide. The utensils and supplies which can be stored above the wood lift and in the floor-to-ceiling cabinet are listed below:

2 Coffee makers
1 Tea kettle
3 Square cake pans, 10"
1 Oblong loaf cake pan, 10" x 5"
4 Layer cake pans, 2"
3 Cookie sheets, 12"
1 Tube cake pan
3 Sets muffin pans
5 Pie tins
3 Wire cake coolers
4 Sauce pans, covered, 2-4 qt.
3 Lipped saucepans, lpt., 1½ pts., 1 qt.
1 Saucepan, covered, 6-10 qts.
2 Double boilers, 1½ qts.
3 Frying pans, ⅛", ⅜" 10"
1 Griddle
1 Deep-frying kettle
1 Wire basket to fit
1 Roasting pan, 15" to 10"
1 Waffle iron
1 Bean pot
1 Egg poacher
1 Potato ricer
1 Food chopper
1 Butter cutter
2 Egg beaters
1 Beater, whip
1 Flour sifter
3 Wire strainers, 3", 6", 6"
2 Ring molds
1 Potato masher
2 Butter paddles
1 Basting spoon
2 Tsp., for tasting
2 Wooden spoons, 10", 1¼"
1 Set cookie cutters
1 Cake turner
1 Funnel
1 Grater
1 Apple corer
1 Dough blender
3 Standard measuring cups (2 glass, 1 aluminum)
1 qt. measure
1 Timbale iron  2 Thermometers
1 Electric mixer  1 Toaster

An illustration of the floor-to-ceiling cabinet will be found on Plate 2, Figure A.

An incinerator is recommended as the means of garbage disposal for the Home Management House. This should be of a standard type and installation, such as suggested in the reference on Incineration in the Home (14). A hopper door (see Plate 2) would open directly into the chimney flue, connected directly to a chamber in the basement at the base of the chimney. This chamber would be large enough to hold an accumulation of several days' trash without overflowing, allowing for slow air-drying of most materials and making it more readily combustible.

**Auxiliary Work Area**

The term "Auxiliary Area" is used to designate an area devoted to work it is desirable to do under the house roof but outside the kitchen and living rooms. It is assumed to be a part of the rear entrance to the house and just off the kitchen. The equipment suggested for this area in the Home Management House includes:

1. A small sink with adjacent counters, for supplementary food preparation and arrangement of flowers. Storage at sink for vases, scissors, string, knives, vegetable scraper,
screw driver, and hammer. Provision for garbage and waste disposal. Space below sink for stool. The vase storage, when planned as a cabinet below a work counter at the side of the sink, would require a space 36" long by 18" wide by 39" high; the shelves being 12", 6", and 8" apart respectively. Drawers for scissors, string, etc., would need to be 14" wide and 3" deep. The storage available below the other sink counter is adequate for stores of paper towels, wax paper, etc., when this area is 36" long.

2. Adequate storage space for vegetables and fruit in large amounts, such as potatoes in 100# lots, and apples by the box. A floor-to-ceiling cabinet, ventilated to the outer air, is recommended for this purpose. The two shelves (10" and 12" apart) in the upper part of this cabinet would provide ample storage for quart jars and half-dozen-lots of canned goods used in the house. Overall dimensions of this food storage area are 48" long by 18" wide.

3. A cleaning closet 20" wide by 70" high by 16" deep, with shelf space above, would provide the necessary storage for a broom, dustpan, wet mop
pail, cloths, kerosene, and soap.

4. A package receiver, which may be a small door, whereby groceries, supplies, and packages may be delivered without entrance to the auxiliary room.

5. Window area sufficient for light required in day time.

6. Entrances conveniently located with reference to kitchen and basement

Breakfast Room

The morning and noon meals in the Home Management House are apt to be hurried because of the shortness of time in connection with regular class schedules. For this reason, and also because students like a smaller and more informal room for these meals than the main dining room, a breakfast room is recommended. The area might be used in connection with the dining room when larger groups were being entertained. Chairs for this room should be of a type usable in the dining room.

The breakfast room should be planned to seat nine adults. The minimum measurements were found to be 9' x 13', when planned to have windows across one end of the room and a buffet two feet wide across the other end, with dining room and breakfast room doors directly opposite each other and in front of the buffet.
Storage in the form of a buffet is recommended for this room, to care for all of the china, glassware, silver, and linens used in the dining room, for the glassware and silver used in the breakfast room, and for electrical equipment, table decorations, etc. Following is a list of these articles:

<table>
<thead>
<tr>
<th>Article and Size</th>
<th>Number</th>
<th>Dimensions, as Stored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dinner plates, 11&quot;</td>
<td>18</td>
<td>Stacked 7 1/8&quot;</td>
</tr>
<tr>
<td>Salad plates, 8 1/4&quot;</td>
<td>18</td>
<td>Stacked 4 1/4&quot;</td>
</tr>
<tr>
<td>Bread and butter plates, 6 1/2&quot;</td>
<td>18</td>
<td>Stacked 4 1/2&quot;</td>
</tr>
<tr>
<td>Fruit dishes, 5 1/2&quot;</td>
<td>18</td>
<td>Stacked 5&quot;</td>
</tr>
<tr>
<td>Soup dishes, 7 1/2&quot;</td>
<td>18</td>
<td>Stacked 4 1/2&quot;</td>
</tr>
<tr>
<td>Saucers, 6&quot;</td>
<td>18</td>
<td>Stacked 3 1/2&quot;</td>
</tr>
<tr>
<td>Cups, 4&quot;</td>
<td>2</td>
<td>1 high 3&quot;</td>
</tr>
<tr>
<td>Cream and sugar, 3&quot;</td>
<td>2</td>
<td>2 Stacked 4&quot;</td>
</tr>
<tr>
<td>Platters, 16&quot;</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Vegetable, 11&quot; x 10&quot;</td>
<td>3</td>
<td>3 Stacked 4 1/2&quot;</td>
</tr>
<tr>
<td>Gravy dish, 8&quot;</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Guest silver: set of 18
- knives and forks, salad forks, (3 dozen)
- butter knives, cocktail forks and spoons, soup spoons
- 3 dozen teaspoons, half dozen tablespoons,
- 1 carving set, 2 sugar spoons and tongs
- 1 butter knife, 2 pie servers

Daily use silver: set of 12
- knives, forks, butter knives
- 18 teaspoons, 18 salad forks

Glassware:

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 water glasses</td>
<td></td>
<td>5 1/2&quot; x 3 1/2&quot;</td>
</tr>
<tr>
<td>18 parfait</td>
<td></td>
<td>4-3/4&quot; x 2 1/2&quot;</td>
</tr>
<tr>
<td>18 cocktails</td>
<td></td>
<td>3-3/4&quot; x 3 1/2&quot;</td>
</tr>
<tr>
<td>18 sherbets</td>
<td></td>
<td>3 1/8&quot; x 3 5/8&quot; x 3 1/2&quot;</td>
</tr>
<tr>
<td>2 creamers and sugars</td>
<td></td>
<td>3&quot; x 3&quot;</td>
</tr>
<tr>
<td>1 jelly dish</td>
<td></td>
<td>5&quot; x 5&quot;</td>
</tr>
<tr>
<td>1 pickle plate</td>
<td></td>
<td>5 1/2&quot; x 11&quot;</td>
</tr>
<tr>
<td>1 celery plate</td>
<td></td>
<td>5&quot; x 10&quot;</td>
</tr>
<tr>
<td>2 sandwich plates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 cake plate</td>
<td></td>
<td>12&quot;</td>
</tr>
<tr>
<td>1 flower bowl and 6 candle holders</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12 plain glass goblets
12 juice glasses
1 mayonnaise bowl
1 salad bowl
1 punch bowl

Linen:
1 banquet cloth with 18 napkins
1 table cloth, 3 yds., 12 napkins
1 lace cloth
1 table pad
3 luncheon sets (runners and place mats), 24 napkins
5 card table cover, 24 napkins

It is recommended that a silver drawer be planned which will contain cut-out insets to care for the flat silver. The inset illustrated on Plate 3, Figure B, is in use at Kent House at the present time.

Dining Room

It is desirable that this room provide adequate seating for 16 adults. The minimum dimensions of a room seating this number were found to be 13' x 19', when a buffet was placed on the long side of the room.

It is recommended that storage for linen, china, glassware, and silver used in this room be provided in the buffet in the breakfast room. This unit has been previously described.

Areas Connected with First Floor Hall

It is recommended that a mail receiver be placed on the wall of the den or side hall, and that this receiver be protected from the weather.
It is desirable to have a closet for everyday wraps of the students, located near the student entrance. A rod 40" in length would be necessary to care for 6 wraps. Shelving is needed for books, purses, hats, rubbers, etc., and hooks for dry umbrellas. This closet would also provide a place for guest wraps when entertaining.

It is recommended that privacy for telephone conversations be obtained by telephone booths on the first and second floors of the house.

Since telephone conversations carried on at home are apt to be long, it is well to install the instrument at sitting height, and to provide a shelf as an elbow rest and a place to write. An ordinary 16-inch backless stool is a satisfactory seating arrangement. A rectangular shelf should be at least 16 inches in depth and 28 inches in width. If triangular, the shelf should measure at least 28 inches on a short side. A shelf placed below this provides convenient space for telephone directories.

The booth provided would be at least 30" x 30" and would be accessible to both the kitchen and the main hallway.

It is desirable to have a space provided for the storage of at least six card tables. These tables would be used either in the dining room, living room, den, or terrace, and it would be convenient to have this storage off the main hallway. The minimum dimensions of the storage space are 18" wide by 34" deep by 34" high.
A planned area to care for cleaning supplies and equipment is of major importance, because such provision adds to the appearance of the service areas, and also makes for ease in daily cleaning.

Cleaning closets may be constructed at small cost. The inside wall may be of wall board, treated so that it is smooth and impervious to oil by giving it a coat of enamel or lining the closet with oilcloth or linoleum. The floor should be raised about two inches to keep lint from coming in under the door, as well as to keep inside the closet the dirt which may adhere to the cleaning equipment.

The lower part of the closet should be fitted with hooks for equipment that will hang, while the upper is best equipped with shelves. The amount of shelf space may be increased by extending the closet to the ceiling. If this is done, it is well to provide separate doors for the upper and lower sections and let the first shelf serve as a divider. Upper shelves should be narrower than the lowest one.

Ventilation for the lower compartment may be provided by leaving a space between the base of the closet and the bottom of the door, and by putting in holes or notches at the top. (10)

Overall dimensions of the cleaning equipment to be stored in a central place are listed as follows:

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacuum cleaner</td>
<td>49&quot; high, 16&quot; wide, 14&quot; deep; hose 9&quot; long</td>
</tr>
<tr>
<td>Dust mop</td>
<td>61&quot; long, mop end 9&quot; wide</td>
</tr>
<tr>
<td>Wall brush</td>
<td>60&quot; long, 10&quot; wide, 3&quot; deep</td>
</tr>
<tr>
<td>Dustpan</td>
<td>34&quot; long, 13½&quot; wide, 3&quot; deep</td>
</tr>
<tr>
<td>Broom</td>
<td>5½&quot; long, 14&quot; wide, 2&quot; thick</td>
</tr>
<tr>
<td>Carpet sweeper</td>
<td>5¼&quot; long, (box 1½&quot; x 10&quot; x 5&quot;)</td>
</tr>
<tr>
<td>Waxer</td>
<td>head, 9&quot; x 5&quot; x 3&quot;</td>
</tr>
</tbody>
</table>

Table leaves may be included in this storage area where their length makes it difficult to provide a more
five convenient place of storage. Storage for table leaves will need to be 6" wide by 13" deep by 51/4" high.

Standards and practices for storing cleaning equipment are given in Appendix E. The arrangement recommended is an adaption of Plan V, Cleaning Closets. (10). This will necessitate an area 48" long, 16" wide, and 69" high, providing separate compartments for the vacuum cleaner and the table leaves. A shelf 12" by 48" directly above the main part of the closet will care for storage of waxes, oils, cloths, and other necessary supplies.

It is recommended that a dust chute be provided, opening from the first floor hall. The chute should be approximately 18" by 12". The laundry chute for household linen should be at least 16" by 12". It should be separate from the chute for nursery linens.

Areas Connected with Second Floor Hall

It is desirable to locate the linen closet close to the sleeping porch, and opening directly into the hall.

In planning a definite place for the linens reference was made to the Closet Bulletin (10) for standards:

Trays or drawers are desirable for all articles in frequent or occasional use, the chief advantage of trays over drawers is that they may be placed on supports adjustable as to distances apart. Trays have a decided advantage over shelves in making the contents visible and accessible, and should be used in closets over 18" deep.
Shelves may be used at the top of the closet, since this space is not readily accessible and is only suitable for articles seldom used. Shelves should be readily removable and adjustable as to distance apart. A sorting shelf is a convenience. It may be a drawer front or compartment front hinged at the bottom, or a board which fits under a shelf.

A depth of 18" to 24" accommodates articles commonly stored in bedding closets, including sheets and spreads as they are usually folded after ironing. If bed coverings and pillows are kept elsewhere, the closet may be only 14 inches in depth.

Plate 6 illustrates a closet planned to accommodate the linen and bedding to be stored on the second floor. The size of the closet is 36" x 24". Following is the list of articles to be stored:

Amount of Linens

3 doz. sheets, folded 9" x 19", 12 stack 9" to 1 1/2"
1 1/2 doz. slips, folded 8" x 17", 12 stack 2 1/2"
1 doz. mattress pads, folded 16" x 18", 2" thick
1 1/2 doz. bed spreads, folded 9" x 19", 3 stack 5"
1 1/2 doz. blankets, folded once and tightly rolled
2 doz. bath towels, folded 7" x 19"
2 doz. hand towels, folded 6" x 14"
2 doz. face cloths, folded 6" x 6", 6 stack 4"
1/2 doz. bath mats, folded 18" x 24"
1 1/2 doz. dresser scarves

In arriving at the above dimensions the bath towels and hand towels were folded in three lengthwise folds and one crosswise, the face cloths in two square folds, the pillow slips in three lengthwise and one crosswise.
fold, and the sheets and spreads were doubled to form a rectangle, approximately 10" by 20". Mattress pads were folded into 16" x 18" rectangles. Dresser scarves were stored flat and bath mats folded once. Storage was provided in the linen cupboard for only twelve blankets, the total number being in storage only over vacations, when the empty dresser drawers will accommodate the extra supply. These blankets were folded once lengthwise and tightly rolled. Pillow storage, during vacation periods, can be cared for in the same manner.

The closets in the student rooms are planned for the storage of everyday wearing apparel. For the protection of perishable garments, as evening gowns and wraps, it is recommended that a special closet to supplement individual wardrobe units be provided, which would be equipped with a high rod. Allowing three garments per girl, the necessary storage area would be 42" long. To accommodate coats, a closet 45" long would be needed.

It is desirable to have the second-floor phone booth so situated that a sliding panel can be installed between the booth and the supervisor's room.
The cleaning closets on the second floor will need to provide storage for the following articles:

- **Wet mop**: 57" long, mop end 7" wide
- **Pail**: 13" diameter, 10½" high
- **Dust mop**: 61" long, mop end 9" wide
- **Dustpan**: 3½" long, 13½" wide, 3" deep
- **Carpet sweeper**: 5½" long, (box 14" x 10" x 5")
- **Broom**: 5½" long, 14" wide, 2" thick
- **Dust cloths, clean storage of, jar of oily ones**
- **Furniture polish, cleanser, kerosene**
- **Wet rag dryer**

The area required for these articles is 24" long by 18" deep. A 14" shelf located in the upper part of the closet will provide for the storage of soap, cleanser, oil, etc.

**Basement**

It is recommended that the new Home Management House have a basement providing areas for recreation room, laundry, heating and for the storage of fuel, food reserves, and luggage and sports wear.

The recreation room should be located at a distance from the nursery and convenient to the student entrance. This room should be large enough to accommodate a small davenport, several comfortable chairs, a ping-pong table, card table and chairs, and shelves for storage. A fireplace would be desirable.

The laundry unit, which in the Home Management House is in daily use, should provide adequate space for set
tubs, washing machine, ironing board, service table, clothes dryer, and the receivers for the laundry chutes. It should be readily accessible to the drying yard.

The luggage room should provide space to store 20 suitcases and boxes, and four trunks. It should contain a movable table, and a ventilated closet equipped with shelves, rod, and hangers for storage of sports wear.

The heater room should provide adequate space for an automatic oil furnace, and an 80-gallon hot water heater. Storage of fuel for use in the fireplace and kitchen range should be easily accessible to the delivery chute and to the wood lifts.

Out-of-Door Area

A terrace should be planned on the south side of the new Home Management House, to be used as an out-door dining and living area. This will be adjacent to a garden area planned with the adjoining Kent House.

Yard space for drying lines in good weather should be provided.
Plates 8, 9, and 10 present floor plans for the Home Management House at Oregon State College based on the recommendations made in this study. In line with these recommendations, the main entrance is to the west, the student entrance from the direction of the campus center, and the service entrance is from the north-east. All of the rooms on the first floor adequately provide for their specific purposes.

Because of the necessity for having the nursery on the south-east corner of the house, the student room adjacent to the nursery, the breakfast room placed to the east, the kitchen on the service side of the lot, and the living rooms with south light, the location left for the dining room does not admit of a southern exposure. Since, however, it is expected that the breakfast room would be used for everyday lunches, noon-day sun in the dining room is of relatively minor importance.

The den is conveniently placed with reference to the student and main entrances. A mail receiver has been planned for this room, the mail to be dropped through a slot onto the top of the shelves at the game center.

French doors in the main hallway will provide the desired privacy for the house group, when the living
room, dining room, den, and vestibule are in use for entertaining.

The buffet which was recommended for the breakfast room has been adapted to form a circular arrangement between this area and the kitchen. A china cabinet is planned for the south wall of the kitchen which is adequate for the storage of dishes used in the breakfast room, for the larger articles originally assigned to the breakfast room buffet, infrequently used utensils, and table leaves. This cabinet opens into the breakfast room for part of its length.

Cooler space has been planned as a part of the sink unit, with the expectation that the vent between the upper and lower sections will be placed in the wall. It is planned with drawers in the lower section.

Bin storage has been planned for the lower left sink cabinet, and shelving in the upper cabinet for packaged groceries. A movable table provides the mixing surface.

The floor space available for the floor-to-ceiling cabinet and wood lift was insufficient for units of the dimensions recommended. For this reason, the lift is located in the base of the floor-to-ceiling cabinet, and the space above and at the side of the lift is allotted to the larger cooking utensils and flat articles.
The lower right sink cabinet will be adequate for the remaining articles.

Drawers at the extreme right of the sink unit provide storage for kitchen textiles.

The plan for the auxiliary room carries out all recommendations with the exception of a package receiver.

The plans for the nursery unit and adjoining student room carry out all of the recommendations for these areas.

The central hall provides for a cleaning closet, telephone booth (with opening across the buffet into the breakfast room), dust chute, and coat closet of the specified sizes. The shelving (above the wood-lift) opens into the hallway, adjacent to the coat closet. This provides ample storage for hats, books, purses, etc. A built-in cabinet in the student room is open on the hall side, affording ample storage space for card tables.

The second floor plan consists of three student rooms, a sleeping porch, bathroom, sewing and pressing room, supervisor's suite of living room, bedroom, and bath, and the specified central closets. The student rooms are all of ample size to accommodate the recommended furnishings. The dust chute opening off the hall is large enough to permit one to shake a mop.

The sewing and pressing room is much longer than the minimum requirements, but the added space is an advantage
because it is possible to leave the cutting table and machine in position for use at all times.

There was space available for a triple mirror alcove, in the central part of the upstairs hallway. This alcove will serve the purpose of the full-length mirrors, which were recommended for the student rooms, and will also be a fitting-mirror for the sewing room. A sketch of this triple mirror alcove was obtained from the Architectural Forum (7), and has been included on Plate 7. The success of the lighting arrangement depends on a single overhead fixture, the mirrors themselves being so arranged in conjunction with the light that they act as the principal reflectors for the system.

The fire-escape is conveniently located with reference to the sleeping porch, and at the back of the house. Access from the supervisor’s suite is provided by a balcony opening from the bedroom.

The basement plan allows for a large recreation room, with fireplace and open stairway. The luggage room is conveniently located to the stairs and student entrance on the first floor, and it is large enough to permit any piece of luggage to be reached without difficulty. Wood storage has been combined with the heater room, which is a satisfactory arrangement because the amount of wood to be stored is small. The laundry room
is on the desired east wall of the basement, at the foot of the stairs leading to the out-door drying area. The laundry is equipped with a heated clothes dryer, trays, and work table. There is ample space for indoor drying lines.

A food storage room has been included in the basement area, in order to permit the purchase of canned and long-keeping foods in larger amounts than the storage available on the first floor would permit.

The terrace is ample in size, and satisfactory as to location. Screen plantings would be needed to provide protection on the west.

The greatest length of the house is 65', and the greatest width is 47'. When this structure is placed on the lot as far to the north and west as the local codes permit, the garden area between it and Kent House would be approximately 50' by 100'.

The house is large, the area of the first floor exclusive of halls being 1668 square feet. This area, however, is very little greater than the amount needed to include all of the rooms listed, to provide for the minimum dimensions required for each room, and to provide for the efficient arrangement of rooms.

The second floor plan represents the recommended use of the space above the main part of the first floor, as-
suming full two-story construction. This space is more than sufficient to provide all recommended areas. The basement likewise, was planned to utilize the space under the main part of the house, and is more than sufficient for the recommended areas.

Reduction in the size of the recommended house plan may be necessary because of cost or architectural consideration. The specific areas which might be reduced are listed, below in the order in which it is recommended that reductions should be made. The list shows that reduction in basement areas is preferable to reduction in the area of the second floor.

1. Fuel storage
2. Luggage room
3. Recreation room
4. Laundry
5. Student rooms (Second floor)
6. Student room (First floor)
7. Nursery

If reduction in the house plan necessitates the elimination of areas as well as reduction in sizes, the following list may be taken as a guide. These changes are ranked in order of utility, that having the least functional value being placed first.
1. Reduce fuel storage
2. Reduce size of luggage room
3. Reduce size of recreation room
4. Reduce size of laundry room
5. Eliminate space for indoor clothes lines (Use clothes dryer for all laundry)
6. Eliminate food storage room
7. Reduce size of student rooms on second floor
8. Eliminate sleeping porch
9. Eliminate recreation room
10. Reduce size of student room on first floor
11. Eliminate sewing and pressing room
12. Eliminate supervisor's bedroom
13. Reduce size of nursery
14. Eliminate second living room
15. Eliminate supervisor's bathroom
16. Eliminate one stairs to basement
17. Eliminate student entrance
18. Eliminate nursery bathroom
19. Eliminate breakfast room

The elimination of areas could not be accomplished without corresponding reduction in the value of the Home Management House as a laboratory, and without complicating the problems of management.
PLATE 2.

Figure A. FLOOR TO CEILING CABINET

Figure B. INCINERATOR DOOR

Figure C. MIXING TABLE
PLATE 3.

Figure A. BUFFET

Figure B. INSET FOR SILVER DRAWERS
Fig. A  BATH TABLE

Fig. B  DRESSER
PLATE 7

ELEVATION

SECTION

PLAN

From: ARCH. FORUM
March 1938

Figure A MIRROR ALCOVE
PLATE 9
SECOND FLOOR PLAN

PLAN FOR HOME MANAGEMENT HOUSE
OREGON STATE COLLEGE 1936

TERRACE (Ground)
PLATE 10
Basement Floor Plan

Fuel Storage
Wood Lift
FUEL AND
CHUTE

HEATING
20'X10'

WOOD LIFT

FUEL AND
SUPPLY

CLOTHES DRYER

UNEXCAVATED

UNEXCAVATED

RECREATION ROOM
10'X35'6"

CLOTHES HAMPERS
TABLES ABOVE
LAUNDRY
15'X9'6"

CLOTHES LINES

CLOTHING
SHelves

LUGGAGE SHELF

CLOTHES
HAMPER

LUGGAGE ROOM
13'9"X14'6"

CLOSET

PLAN FOR HOME MANAGEMENT HOUSE
Oregon State College
1935
BIBLIOGRAPHY


2. Goodman, Bonnie Virginia. Relation of the cost of furnishings and equipment in home management houses to value of the house and lot and to the approximate income represented by the house and to the income of the state in which the house is located. Kansas State College Thesis, 1932.


Wilson, Maud. Planning the Willamette Valley farm kitchen. Corvallis, Oregon State College, Agricultural Experiment Station, Bulletin 356, August 1938.
APPENDIX A

HOME MANAGEMENT QUESTIONNAIRE

1. Is your Home Management House a former residence adapted to the purpose____; an apartment____; a building constructed for Home Management House purposes____; or other arrangement____

2. How close to the campus is your house?_____.

3. Is the house owned by the institution____, if so, approximate value____. If not, what rent do you pay?____.

4. For how many months of the year do groups of students live in the house?____.

5. For how many weeks does each group of students occupy the house?____.

6. Do student live in the house throughout the period?_____. If not, state what period the house is used:
   (a) Monday to Saturday, meals and lodging_____.
   (b) Monday to Saturday, meals only___________.
   (c) Other arrangement_______________________.

7. Give number of girls in residence at a period_____.
   Number of credits given for course____. If on a term basis, check here_____. If on semester basis, check here_____.

8. What arrangement do you have for supervision?
(a) Full-time resident supervisor.
(b) Other arrangement.

9. Does another person or persons live in the house? 
   _____ If so, state status: (as boarder___, assistant supervisor___).

10. Do you care for a child in the house? Yes_____ 
    No_____. If so, give approximate age in months 
    at which child is received________________________.

11. Check types of washing done in the house:
    (a) Bed linen_____; Bath towels_____; Kitchen 
        towels_____; Table linen_____; Personal 
        laundry of students_____; Personal laundry of 
        supervisor_____; Baby clothes__________________.

12. Check types of ironing done in the house:
    (a) Bed linens and towels_____; Table linens_____; 
        Personal ironing of students_____; Personal 
        ironing of supervisor_____; Baby clothes_____.

13. What type of heating facility do you have in the 
    house?
    (a) Furnace_____; Oil_____; Gas_____; Wood_____; 
        Coal_____; Other arrangement__________________;
        Fireplace_____.

14. Do the students do all of the housework? _____ Do 
    you have maid service?_____. If so, approximate 
    hours per week._____. Other arrangement__________.
If not, what types of work are hired done:
as laundry; cleaning; cooking;
care of child; anything else.

15. Is entertaining in form of:

<table>
<thead>
<tr>
<th></th>
<th>Yes.</th>
<th>No.</th>
<th>Average number at function</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Breakfasts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Luncheons</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Dinners</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) Teas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e) Bridge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f) Dancing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B

HEALTHFUL HOUSING
Basic Principles of Healthful Housing*

Preliminary Report

COMMITTEE ON THE HYGIENE OF HOUSING

AMERICAN PUBLIC HEALTH ASSOCIATION

C.-E. A. Winslow, Chairman

Frederick J. Adams
Rollo H. Britten
F. Stuart Chapin
Joel I. Connolly
Robert L. Davison
Earle S. Draper
James Ford

J. André Foulhoux
Greta Gray
James E. Ives
Morton G. Lloyd
B. M. Pettit
George C. Ruhland
H. A. Whittaker

Allan A. Twichell, Technical Secretary
Philip E. Nelbach, Field Secretary

*This Report has not been approved as a standard publication by the American Public Health Association's Committee on Research and Standards, but has been endorsed by that Committee for release so that it may be made available for study.
APPENDIX C

CONSIDERATIONS IN BUILDING

Specific recommendations for building construction were made by E. P. Jackson, Superintendent of Buildings at Oregon State College, in an interview, July 1938, as follows:

Type of Structure
- frame building recommended

Framework
- 2" x 6" studding, 2" x 12" joints of Douglas fir
  #1 common S4S

Outside
- shiplap (diagonal #1 common)
- covered with 1 ply asphalt roof paper
- finished outside with shakes (14" to the weather)

Inside
- two coats hard wall plaster, over wood lath,
  finished in sand float
- kitchen and bathrooms: finish ceiling and walls smooth with hard wall plaster

Roof
- 2" x 6" #1 Common S4S Douglas fir rafters -- sheet this with #1 common fir sheeting -- cover this with 1 ply rubberoid roofing -- then shingle with 5-2 Perfect Red Cedar Shingles, laid 4" to weather
Woodwork
- Douglas fir -- finish left to interior decorators

Floor
- all floors: laid first with rough floor of either 1" shiplap or 1" tongue-and-groove, this should be #1 common, well-nailed
- over this use deadening felt or a deadening quilt
- oak floor throughout with exception of kitchen and bathrooms -- use Eastern white quarter-sawed oak 13/16" thick (standard)
- bathroom floor: rolled corners -- lead pan underneath equipped with drain -- over this inlaid linoleum or similar material
- kitchen floor: inlaid linoleum or similar material

Windows
- weight windows (double sash best), except to terrace, where use French Doors
- windows glazed with Libeone double strength A grade glass

Basement
- full, cement floor and walls
- floor: double construction cement; 3\(\frac{1}{8}\)" cement, waterproof with 2 coats asphaltum gum, another cement floor 2\(\frac{1}{8}\)"
any type of desired finish may then be used

**Sleeping Porch**

- all enclosed: with screens and movable windows, double-hung preferred

In an interview with D. B. Stuart, Superintendent of Light and Power at Oregon State College, July, 1938, the following recommendations were made by him for types of wiring:

**Type of Wiring**

- rigid iron conduit pipe

**Circuits Necessary**

- sufficient number very important
- twin outlets preferred; allow 1000 watts per outlet--heaters made in 1000 watt units
- range and water heater on circuits by themselves

**Switching**

- master entire switch
- three point switch for any room with two or more doors
- flood switch for yard: flood from new house south, and from Kent north

**Illumination**

- confine illumination to wall brackets and stand lamps
other than this use indirect lighting entirely; lamps of 3\(\frac{3}{4}\)" overall length -- 5 watts per square foot of floor area -- based on creme walls and ceilings, with mat finish of creme walls will give 20 f.c. --
minimum for fine reading calls for 20 f.c. power
indirect lighting desirable for study
dressing lights by mirror: white Lumiline lamps
bathroom or any place subjected to vapors, moisture, etc., must have water tight fixture, "vapor tight condulet"
all wiring must conform with regulations of Board of Fire Underwriters

Detailed recommendations for plumbing fixtures and equipment were made by C. G. Wiltshire, Superintendent of Plumbing and Steam Fitting, August 1938, as follows:

**Kitchen Sink**
- Crane, C 19356X, size 42" x 22" x 8"
- equipped with combination sink mixing faucet with 1\(\frac{3}{4}\)" number 11 guage C. P. trap

**Auxiliary Sink**
- Crane, C 19356X, size 24" x 18"
- equipped with combination sink mixing faucet of same type as for kitchen sink
Laundry Trays
- two trays of Crane, C 21221, fitted with laundry tray combination swinging spout
- provide sewer opening in floor to handle wash water

Bathroom Fixtures
- all toilets should be Crane Company, "Santon," C 10554, Siphon jet closet combination. Measurements, from wall to front of seat, 29½", width of tank, 22".
- first floor bathrooms should have wash basins of Standard Manufacturing Company, "Othello," P 4205RZ, size 19" x 17".
- second floor bathrooms should have Pedestal wash basins, Standard Manufacturing Company, "Towerlyn," F 110 G, size 24" x 20".
- nursery tub: Crane Juvenile vitreous china bath on china pedestal, C 3092A, size 24" x 36" x 13" depth, floor to rim top 31".
- Pembroke bathtub and shower complete, with right hand fixtures, P.2351T, or with left hand fixtures, P.2317T, size 5½' x 3'. Complete with shower curtains and pins.

Shower Stall
- six pound lead pan with Fleming shower room drain
Water Tank
- water storage tank should have a capacity of 80 gallons, coiled to furnace, and with automatic gas heating control besides.

Gutters
- four inch O. G. galvanized gutter, 26 galvanized iron, to be painted inside and out with oxide paint, with 3" downspout
APPENDIX D

CHECK LIST OF FUNCTIONS OF THE HOUSE

A. Household Operation

1. Preparation and service of food
   a. activity area
      - prepare regular meals
      - plan menus
      - check over groceries
      - service door or table
   b. storage
      - perishable foods
      - opened package staples
      - canned goods
      - reserve food supplies requiring cool, dry place
      - reserve food supplies requiring cool, damp place
      - equipment ordinarily used in preparation of meals
      - equipment not ordinarily used in preparation of meals
      - empty food containers used in kitchen
      - kitchen linens, aprons, etc.
      - recipes
      - place for bills and daily ordering

2. Service of meals
   a. activity areas
      - serve family meals
         table or trays
         breakfast room
         outdoor service
      - serve guest meals
         dinners
         luncheons, tea, etc.
   b. storage
      - china and silver for family meals, and for guest meals
A. 2. b. - amounts for teas, luncheons, breakfasts, buffets, etc.
- table linen (runner service, dinner cloths)
- electric cooking utensils
  - waffle iron, toaster, etc.
- extra table leaves
- extra supplies
  - candles, table decorations, favors, etc.

3. Washing and drying of clothes
   a. activity areas
      - regular washing
        - table linen
        - towels
        - baby clothes
        - personal wash
      - drying indoors in poor weather
      - drying outdoors in good weather
   b. storage
      - washing equipment and supplies
      - drying equipment
      - soiled clothing
        - chute (household and baby's)
      - soiled household linen

4. Ironing
   a. activity area
      - iron clothes usually
      - press clothes for immediate use (upstairs)
      - dampen clothes
      - air ironed clothes
   b. storage
      - un-ironed clean clothes
      - ironing equipment
      - pressing equipment
      - ironed articles until put away

5. Sewing and mending
   a. activity area
      - household mending
A. 5. a. - baby mending
   - personal mending
   - press while sewing
   b. storage space
      - sewing machine
      - supplies and minor equipment

6. Other renovations of clothing and textiles
   a. activity areas
      - dry wet outer garments
      - air garments
      - sponge and press garments
      - dry cleaning
      - clean shoes
   b. storage
      - cleaning fluid
      - shoe cleaning equipment
      - personal item

7. Care of members of the household
   a. activity areas
      - bathe baby
      - dress baby
      - change baby
      - feed baby
      - food preparation and storage
      - record of baby
   b. storage
      - soiled clothes
      - clean clothes
      - equipment for bathing, weighing, changing
      - equipment for feeding, storage and preparation of food
      - records kept in nursery
      - outdoors equipment
      - carriage, play pen, etc.
A. Business of household

a. activity area
   - household desk
     keep records
   - telephone
     extension

b. storage
   - household accounts, forms, charts, etc.
   - instructional material

9. Operation and maintenance of home and grounds

a. activity areas
   - empty vacuum cleaner
   - shake dust mop
     first and second floor
   - arrange flowers
   - other needs
     disposal of sweepings, combustible refuse
     mail receiver
     wet umbrellas

b. storage
   - wet mops and cloths
   - cleaning equipment for first and second floors
   - tools at fireplace
   - furnace fuel
   - fireplace fuel
     immediate and main supply
   - kitchen fuel for combination range
     immediate and main supply
   - ash removal
   - non-combustible refuse until taken away
   - storage of vases, flower materials, baskets, etc.
   - storage of awnings, yard and porch furniture

B. Personal Needs and Interests

1. Sleep and rest

   a. activity area
      - night rest
        supervisor's room
B. 1. a. - students in rooms or porch
   - child director near nursery
   - nursery
   - care of guests

b. storage
   - bed linen
   - extra bedding
   - extra cots, mattresses, etc.

2. Dressing: storage of clothing and accessories
   a. activity areas
      - dress usually
        - supervisor
        - student
      - put on outer garments
      - place to put outer garments for help

b. storage
   - garments on rods and shelves
   - wearing apparel in drawers (supervisor, student, infant)
   - wraps: family and guests
   - evening garments
   - supervisor's year-round storage
     - furs, wool, etc.

3. Toilet and health
   a. activity area
      - tub (upstairs)
      - showers (upstairs and down)
        - girls only, consider height of water-play
      - toilet, (upstairs and down)
      - lavatory
        - convenient to nursery, kitchen, bedrooms
      - wash hair
      - dry hair
      - treat accidents

b. storage
   - toilet articles used in bathrooms
     - individual space for girls and supervisor
     - baby's needs
B. 3. b. - toilets supplies  
   - towels used in bathroom  
   - medicines  
   - first aid kit

4. Leisure activities and hospitality
   a. activity areas
      - reading "centers"
      - guests
        - size of room  
        - number of guests
      - games
      - radio
      - piano
      - sheltered place in sun, out of wind  
        - use of students
        - use of baby

   b. storage
      - music
      - books
      - magazines
      - chairs, needed for guests
      - guest wraps, cars
      - supervisor or student cars
      - game table
      - out-of-season equipment, as yard and porch
        - furniture

5. Baby's care
   a. indoor
      - nursery
      - play pen

   b. outdoor
      - protected porch
      - carriage

6. Personal correspondence, study, business
   - student desk
     - book case
   - supervisor's desk
     - files, records, etc.
B. 7. Other personal requirements
- be alone
  rooms
- telephone
  upstairs and down
  private
  out of way
  message facilities
- fire escape
- luggage storage
- baby carriage storage

C. Entrance and Approach
1. Front entrance
2. Direct approach to kitchen door
3. Outside entrance to basement
4. Entrance other than main one for student use
5. Entrance protected from rain
APPENDIX E

STANDARDS FOR THE DIMENSIONS AND ARRANGEMENT OF THE DWELLING

Sources

Publications of the Department of Home Economics,
Oregon State Experiment Station

Bulletin 320, "Planning the Willamette Valley Farm-house for Family Needs."

Bulletin 348, "Standards for Working-Surface Heights and Other Space Units of the Dwelling."

Bulletin 355, "Planning the Willamette Valley Kitchen."

Mimeograph, Bureau of Home Economics, U.S.D.A., "Closets and Other Storage Arrangements for the Farm Home."

Kitchen

Standards for heights:

Height of sink (floor) -- 32 1/4"
Height of mixing table -- 32"
Maximum height of shelf for articles in frequent use:

a. No obstruction
   If light weight article -- 79"
   Article requiring both hands -- 74"

b. Obstruction 12" wide (as in reaching over work counter)
   If light weight article -- 76"
   Article requiring both hands -- 71"
Floor areas:

Minimum width of space between two centers, -- 48"
Space in front or at side of open oven door or wood stove -- 30" (Measure taken from edge of door when open)
Space in front of wood lift (if below counter) -- 36"
Space before drawers:
For pulling out the drawer, 6" less than depth of counter or table (if drawer occupies its entire depth.)
For standing in front or at the side of the drawer, 21"
Space at left of sink before turn in work counter, 18"
Minimum passage:
Between equipment of less than elbow height, 17"
Between cabinets above elbow height, 21"
Standards for utilizing storage space:
Standards applying to all work centers
Packaged supplied stored in single rows, except when two or more packages of the same articles are kept on hand. Unopened packages may then be stored behind the opened ones, where width of shelf permits.
Containers for supplies stored with the narrowest dimension parallel with the shelf
Plates, kettles, bowls, etc., nested if there are duplicates or used together, otherwise stored singly.

Articles of equipment consisting of several pieces, as grinders and pressure cookers, are assembled for storage.

Hooks provided for articles which will hang, excepting certain small utensils, which it is sometimes desirable to store in drawers.

Drawers for small utensils are sectioned. Racks within drawers are provided for cooking knives, spatulas and scissors.

Margins allowed:

- 2" in front of largest article stored on shelf
- 2" between tallest article and shelf above
- 3" between a hook and the lower edge of an article hung above it
- 4" between utensils hung back-to-back

Allowance for disorder should be made above articles in drawers, the amount of space being determined by the nature of the articles stored therein.

Standards applying to the sink and serving centers

In planning the storage of dishes the heavier
or clumsier articles should be placed on the lower shelves, while those lighter in weight or easier to grasp are placed on the higher ones. However, dishes are grouped as to height wherever this makes for a better utilization of space between shelves than the grouping by weight.

In determining distances between shelves, a margin of 2" is needed above the tallest articles on the shelf if they must be grasped from the top in removing them (as piles of plates). A margin of ½" to 1" is needed above those which are grasped from the side, as cups.

Duplicates (cups, goblets, etc.) may be placed behind one another, when the width of the shelf permits.

Whenever only small, individual pieces are allotted to a shelf, it may be made only 6" wide. The use of the narrow shelf adds to the convenience of the one below it.

Articles of the same size and serving the same purpose should be stacked together; plates, saucers, and sauce dishes in piles of twelve or less; cups and glasses in pile of two.
All of the "everyday" and "company" dishes should be stored on shelves 72" or less from the floor.

Silver and utensil drawers should be sectioned.

Standards applying to the mixing center

Separate bins are desirable for cereals and sugar in lots of 25 pounds or more.

Movable insets in sectioned drawers are useful for 8 to 10-pound lots. Bins and sectioned drawers should provide space for the amounts customarily purchased, plus an allowance for the amount on hand at the time of a new purchase, and space for scoop. The flour bin should be large enough for sifter and rolling pin also.

Allowances for construction

Thickness of doors and sides of cabinets where hooks are placed -- 1"

Thickness of doors and back and sides of cabinet, other than above -- 3/4"

Thickness of fronts of drawers -- 3/4"

Thickness of sides and backs of drawers -- 1/2"

Thickness of back of cabinet -- 1/4"

Width of vertical strips at sides of cabinet doors, or between drawers -- 3/4"
Width of lateral strips between drawers -- 3/4"  
Thickness of counter top -- 1"  
Width of piece below counter top -- 3/4"  
Thickness of dividers in sectioned drawers -- 1/4"  
Thickness of shelves -- 3/4"

**Food Storage Room**

Satisfactory ways of storing the various products are:

Method of storage

- Fruit jars and tin cans, 2 rows to the shelf
- Bottles and small jelly glasses, 3 rows to the shelf
- Tin cans, stacked two deep, 2 rows to the shelf
- Heavy articles on movable slatted platforms, set on 2" x 4" pieces

Use a 12" board for shelves for small containers. This width accommodates two rows of glass jars or tin cans, or 3 rows of bottles or jelly glasses.

To estimate the distance between shelves, add 2 inches to the height of small containers, and 8 inches to those too heavy to move easily.

Heights of containers in common use are:

**Glass jars:**

- Half gallon: 9½" to 10½"
- Pint: 4" to 5½"
- Quart: 7 to 7½"
- Half pint: 3½" to 4"
Stone jars:

<table>
<thead>
<tr>
<th></th>
<th>2 gallon</th>
<th>half gallon</th>
<th>10&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 &quot;</td>
<td>one gallon</td>
<td>10&quot;</td>
</tr>
<tr>
<td></td>
<td>10 &quot;</td>
<td></td>
<td>18&quot;</td>
</tr>
<tr>
<td></td>
<td>15 &quot;</td>
<td>No. 2½</td>
<td>5&quot;</td>
</tr>
<tr>
<td></td>
<td>20 &quot;</td>
<td>No. 10</td>
<td>7&quot;</td>
</tr>
</tbody>
</table>

Jugs:

<table>
<thead>
<tr>
<th></th>
<th>10&quot;</th>
</tr>
</thead>
</table>

Tin cans:

<table>
<thead>
<tr>
<th></th>
<th>5&quot;</th>
</tr>
</thead>
</table>

Jelly glasses:

<table>
<thead>
<tr>
<th></th>
<th>2½&quot; to 4&quot;</th>
</tr>
</thead>
</table>

Bottles:

<table>
<thead>
<tr>
<th></th>
<th>12&quot;</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2&quot; to 3&quot;</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>3½&quot;</th>
</tr>
</thead>
</table>

Crate, 30 pound 5"
Apple box, 60 pound 11"
Potato sack, 50 pound 28"
Potato sack, 100 pound 32"
Basket, one bushel 18"

Dining Areas

Minimum dimensions:

Between wall and occupied chair
To permit person to take own seat -- 9"
Passage to seat beyond -- 18"
For person serving table -- 24"

Clothes Closets

Fittings and arrangements:

The size, shape, and arrangement of a closet should be such as to make readily accessible all articles which are in frequent use.
The closet and fittings should be dimensioned to accommodate the tallest person liable to use it; for efficiency in storage of clothing and for ease of access. Should be possible to arrange the closet to accommodate persons of varying heights.

Closet should have sufficient natural or artificial light so that its contents may be easily seen.

Every closet should be ventilated, either by a window or openings in the door.

Two or more narrow doors for a wide closet are more convenient than one wide door.

The floor of the wardrobe closet should be at least 2\" above that of the room to prevent lint from collecting.

Drawers or trays are more convenient than shelves for the storage of folded clothing.

The closet rod should be placed high enough to allow 6\" below garments hanging from it, in order to permit cleaning the floor without disturbing the garments.

The preferred position for the rod is parallel to the doorway, for convenience in seeing and placing the garments.

Maximum width of opening of closet is 24\".
Recommended dimensions:

Rod: to determine length, for garments on hangers, allow space per garment as follows:

- House and street dresses: $1\frac{1}{2}''$
- Skirt: $2''$
- Jacket: $3''$
- Evening dress: $2''$
- Coat without fur collar: $5''$
- Coat with fur collar: $6''$

Distance from center of rod to wall: $12''$

Distance between floor and top of rod or wardrobe hooks (assuming use of hanger which places top of garment $4''$ from top of rod):

- Garments of adults, general use: $63''$
- Short coats, skirts, shirts: $45''$
- Evening gowns: $72''$
- Garments stored in moth-proof bags: $72''$

Distance between top of rod and bottom of shelf above it: $2\frac{3}{4}''$

Hook:

- Distance between hooks: $7''$
- Distance hook to corner: $2\frac{1}{2}''$
- Depth of space occupied by garment on hooks: $4''$
- Distance between top of hook and bottom of shelf above it: $4''$
Shelves:
Hat needs space 12" wide, 12" long, 8" high
Hat box needs space 14" wide, 14" long, 9" high
Shoes need space 10" wide, 7½" long, 7" high

Cleaning Closets

Recommended dimensions:
Height of base, 2"
Distance from base to first shelf, 67"

Fittings and arrangement:
"In arriving at the minimum dimensions of a cleaning closet and in deciding on its arrangement, the following standards and practices of storing and equipment and supplies were assumed:

Any article can be removed without taking out another article.
Each article hung should have space enough to hang free.
Dirty and wet articles are grouped together.
The wet mop should not be stored in the same compartment with the electric sweeper.
All brushes, brooms, and mops are provided with hooks or rings at the ends of handles, so they can be hung. The oiled mop may be stored with the mop part in a can. The wet mop is suspended over the bucket which stands on the floor. The broom and dust mop are hung where they are readily accessible.
The dustpan is hung so that the front edge will not be dented or jammed, and so that it is readily accessible.
The handle of the waxer is removed, and the head is turned so the weight does not rest on the bristles.
The vacuum cleaner is stored in a clean, dry place and can be removed without lifting.
The hose for the vacuum is hung over a hook
on the wall. The smaller attachments are kept in an apron with pockets made especially for the purpose. Dust cloths are hung on hooks or if oily they are kept in a can or jar. Table leaves are stored in a special case, which may be movable if desired. Where leaves of more than one length are to be stored, the upper spacer, or device for holding the leaves in place, may be installed at the back, and the case closed at the top by a shelf. The wall of the closet may serve as one side of the case, but if the leaves are polished, the other side should protect them against scratching. Seldom-used articles and reserve supplies are stored on the top shelf. The lower shelf is kept for articles more frequently used. Clean rags are kept in a box on the shelf.

**Telephone**

Recommended dimensions of shelf in booth:

Size -- 16" x 28"

Height from floor -- 28"

**Sewing-Pressing Room**

Allowances around equipment

Ironing board:

Space at open end of board -- 6"

Space at back of board -- 6"

Cutting table:

Width of table -- 38" x 42"

Space between ends of table and adjacent high objects -- 3"

Machine (open)

Space at back -- 2"
Height of cutting table -- 35½"
Height of ironing board -- 32½"

Arrangement of room:
Ironing board at right angle to window
Cutting table at right angle to window

**Linen Closet**

Recommended allowance between top of pile of linen and shelf above it:
Shelves at elbow height or above -- 4"
Shelves below elbow height -- 6"
Drawers or trays -- 2"

Minimum distances between shelves:
If 15" to 18" wide -- 10"
If 18" to 24" wide -- 12"

Height of sorting shelf from floor -- 30" to 40"
### APPENDIX F

#### ABBREVIATIONS USED ON THE PLATES

**Plate 1. Figure B.**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pch.</td>
<td>pitcher</td>
</tr>
<tr>
<td>C.S.</td>
<td>coffee server</td>
</tr>
<tr>
<td>T.P.</td>
<td>tea pot</td>
</tr>
<tr>
<td>C &amp; S</td>
<td>creamer, sugar</td>
</tr>
<tr>
<td>Pl.</td>
<td>platter</td>
</tr>
<tr>
<td>B.</td>
<td>bowls</td>
</tr>
<tr>
<td>V.D.</td>
<td>vegetable dish</td>
</tr>
<tr>
<td>S.</td>
<td>saucers</td>
</tr>
<tr>
<td>C.B.</td>
<td>cereal dish</td>
</tr>
<tr>
<td>F.D.</td>
<td>fruit dish</td>
</tr>
<tr>
<td>P.</td>
<td>plates</td>
</tr>
</tbody>
</table>

**Figure C.**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.B.</td>
<td>double boiler</td>
</tr>
<tr>
<td>M.W.</td>
<td>milk warmer</td>
</tr>
<tr>
<td>J.</td>
<td>jar</td>
</tr>
<tr>
<td>B.D.</td>
<td>baking dishes</td>
</tr>
<tr>
<td>I.B.D.</td>
<td>ice-box dishes</td>
</tr>
<tr>
<td>B.C.</td>
<td>baby cup</td>
</tr>
<tr>
<td>R.</td>
<td>ramekins</td>
</tr>
</tbody>
</table>

**Plate 5. Figure A.**

- Dentons: sleeping garments

**Figure B.**

- Woolens: caps, knitted wear

**Plate 6. First floor plan**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cl.</td>
<td>closet</td>
</tr>
<tr>
<td>Cl.Cl.</td>
<td>cleaning closet</td>
</tr>
<tr>
<td>Cab.</td>
<td>cabinet</td>
</tr>
<tr>
<td>Ref.</td>
<td>refrigerator</td>
</tr>
<tr>
<td>Mov.T.</td>
<td>movable table</td>
</tr>
<tr>
<td>C.</td>
<td>chair</td>
</tr>
<tr>
<td>Tbl.</td>
<td>table</td>
</tr>
<tr>
<td>Sec.</td>
<td>secretary</td>
</tr>
<tr>
<td>Shr.</td>
<td>shower</td>
</tr>
<tr>
<td>Scies.</td>
<td>scales</td>
</tr>
</tbody>
</table>
Plate 9. Second floor plan
  Mch.  machine
  Frmls.  formal wear

Plate 10. Basement floor plan
  Lndry.trys.  laundry trays