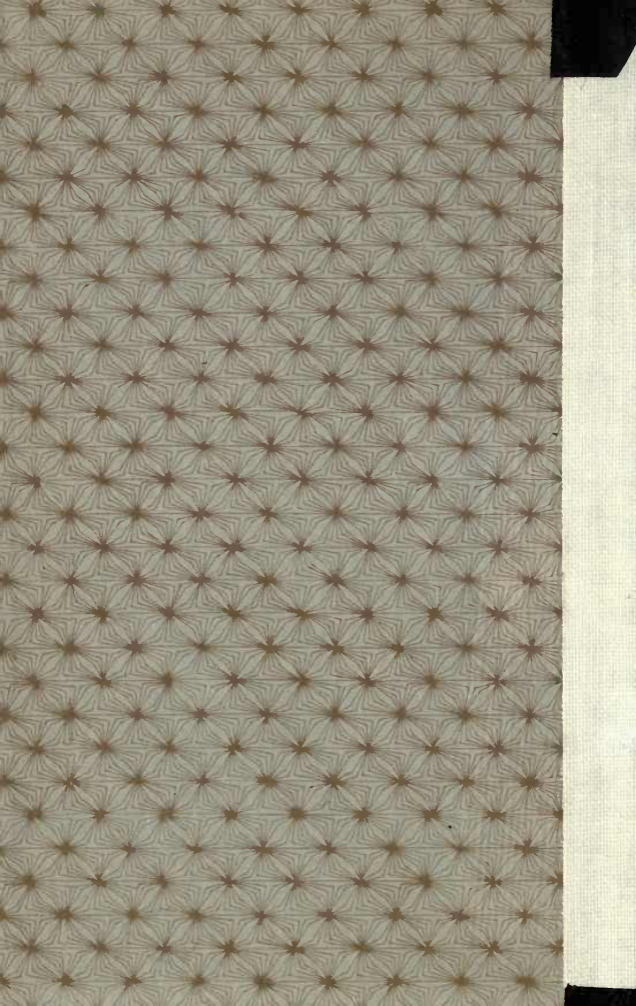


UNIVERSITY OF TORONTO



3 1761 01450127 4

HOUSE PLANNING







175

Art
Arch
O

NOTES ON THE

ART

OF

HOUSE - PLANNING.

BY

C. FRANCIS OSBORNE, ARCHITECT,

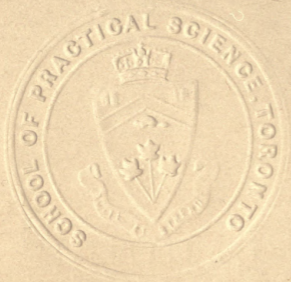
(Assistant Professor of Architecture in the Cornell University.)

89829

1018108

NEW YORK:
WM. T. COMSTOCK.

1888.



COPYRIGHT
C. FRANCIS OSBORNE.
1888.

NA
7115
082
1888

PREFACE.

The following pages embody a portion of the notes used with my classes in the Cornell University, and were originally printed in the pages of BUILDING. Their reception seemed to indicate that they had encouraged the cultivation of a field left practically untouched, as to detail, since, a generation ago, Professor Kerr put forth his most excellent work, *The Gentleman's House*.

It is hoped that, in this more permanent form, they may stimulate a younger generation of architects to embody in their work the principles of good planning. Only the simplest elements of this are, however, here set forth, for it has been thought best not to extend the investigation further at present, since a larger book would have defeated its own purpose.

Some explanation is due as to the heterogeneous appearance of the illustrations. Prepared, originally, solely for the ephemeral use of a periodical, with no intent of putting them into permanent shape, they were reproduced in some instances by re-engraving, and in others by photo-reduction from

the original hasty sketches which seemed sufficient, at the time, to illustrate the text.

I hope (should time and occasion serve) to issue a companion volume, showing some particular applications of the principles here suggested, to the widely varying problems of everyday practice.

C. F. O.

Ithaca, N. Y., Aug. 21, 1888.

TO
CALVERT VAUX,
ARCHITECT,
WHO
BY PRECEPT AND EXAMPLE
FIRST INSPIRED ME
WITH A LOVE FOR MY PROFESSION,
THIS BOOK
IN GRATEFUL REMEMBRANCE
IS
(BY PERMISSION)
DEDICATED.

CONTENTS.

| | |
|--|-----|
| CHAPTER I. | |
| INTRODUCTION, - - - - - | 7 |
| CHAPTER II. | |
| THE METHOD OF INVESTIGATION, - - - - - | 13 |
| CHAPTER III. | |
| THOROUGHFARE, - - - - - | 17 |
| CHAPTER IV. | |
| ENTRANCE, - - - - - | 22 |
| CHAPTER V. | |
| THE DINING ROOM, BREAKFAST ROOM AND THE DINNER ROUTE, - - - - - | 35 |
| CHAPTER VI. | |
| ASPECT, - - - - - | 53 |
| CHAPTER VII. | |
| THE DRAWING ROOM AND PARLOR, - - - - - | 59 |
| CHAPTER VIII. | |
| THE LIBRARY, - - - - - | 74 |
| CHAPTER IX. | |
| THE KITCHEN, - - - - - | 82 |
| CHAPTER X. | |
| THE BILLIARD ROOM, - - - - - | 90 |
| CHAPTER XI. | |
| THE BED ROOM FLOOR, - - - - - | 96 |
| CHAPTER XII. | |
| CONCLUSION, - - - - - | 104 |

CHAPTER I.

INTRODUCTORY.

Planning may be defined as the art of so shaping and disposing the various interior divisions of a building that it shall best serve the uses of the occupants for whom it is designed.

In its simplest form, therefore, the art of planning is identical with the ascertaining of the various definite needs of the person or persons who propose to use a room or collection of rooms, and then designing such room or rooms so as to meet the several interests involved in the completest and most direct manner. But, as we shall presently see, the art of planning soon takes on a higher form of development; and, ceasing to be merely a question of arrangement to suit *all* requirements, involves the duty of duly weighing the claims of various *conflicting* interests, determining in such cases of conflict which are the more important, and so skillfully adjusting and arranging our rooms as to produce for all concerned the best average results—a process which, it may easily be imagined, requires a considerable amount of skill, and forethought of a higher order than is called for in the solution of the problem in its simpler form.

It is therefore evident, that whatever may be the nature of the building upon which the planner's skill is to be exercised, his method of procedure is clear ;

and inasmuch as the same fundamental principles underlie all good planning, we may explain the elements of the art by illustrations taken from any branch of its practical application. And since the one most readily appealed to and easy of comprehension is that which has to do with the arrangement of our dwelling houses, we will confine our attention entirely to that, with the assurance, however, that any principles which seem generally applicable there, shall not be wholly inapplicable when we come to deal with other classes of buildings.

It has been well said that the history of house planning is the history of civilization;* and were we to consider the subject from that most interesting point of view, we could scarcely afford to ignore the lives and customs of those for whom the castle and palace and manor-house were built. Indeed, any study of the general history and consistent development of the art of architecture which is not based upon a simultaneous investigation of the ethnological and political history of the builders and users of those structures which have made that history, must be as profitless and barren of sound fruit as though it were but the study of conchology on a larger scale—a science of domology in which the life of the inhabitant is quite ignored, or considered as a mere incident at most.

This is especially true as regards the work of the skillful planner, who, that he may be the better able to adapt his buildings to the comfortable use of his clients, must understand their special wants and natures; and so must often, to be thoroughly success-

*Stevenson. *House Architecture*, Vol. II., Chap. 1.

ful, stand for the time being in the relation of father-confessor, to whom must be unfolded all the inner life of the family, the tastes and even peculiarities of each member of it, in order that the house may be molded to them and not they to the house.

A consideration of this principle leads us at once to the appreciation of two facts not generally recognized: First, that planning is nearly or quite an exact science; and secondly, that a thoroughly well-planned house is perfectly adapted to the needs of the family for whom it is designed, and for no other. We may, indeed, liken a man's house to his coat, in that the more perfectly it fits the owner the less likely it is to fit anyone else.

A perfectly designed house, therefore, whether consisting of one room or one hundred, will be so arranged as to provide for its occupants the greatest amount of convenience and comfort possible under the given limiting conditions; and so far as a plan fails of doing this, it fails of doing its duty.

To sum up then: as our houses are built to live in, the purpose they are expected to serve is that we shall be enabled to live in them comfortably, conveniently and decently. This result is to be obtained by duly determining general rules which are to govern the planning of the various classes of rooms of which our houses are composed, and then the various individual wants of those who are to use them; embodying both, as far as possible, in the final arrangement. We shall, therefore, submit our house to a careful analysis, discussing separate divisions of it and deducing rules as we proceed; and then, reversing the process, produce the ideal

house from its constituent elements so determined and defined.

If it be worth while, in our search for first principles, to recur to a point so far back as the axiom that there are bad plans and good, let us refer for a

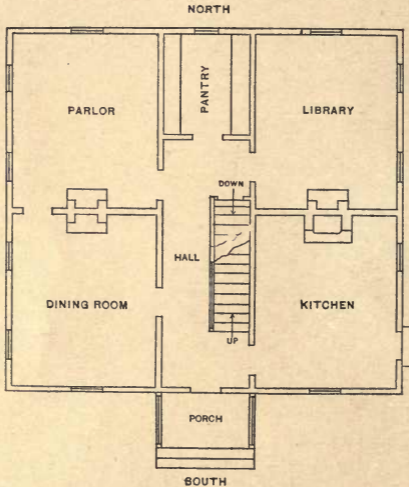


FIG. 1.

moment to the elementary example sketched in Fig. 1. Mere inspection of this arrangement should be sufficient to condemn it; but if a bill of particulars be asked for, it is only necessary to say, not to go too much into detail, that the kitchen is most

unfortunately placed, with its door, the principal entrance and the main stairs forming a most unhappy combination; that all traffic between the kitchen and the dining-room must pass in full view of the entrance, and the traffic between the kitchen

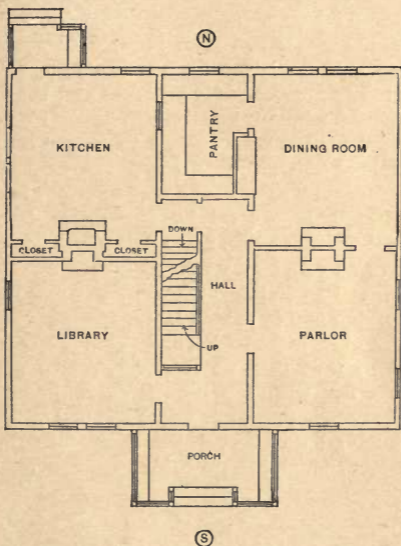


FIG. 2.

and the cellars must pass the doors of all the principal rooms; or, in other words (to anticipate a little), that the family and service thoroughfares are inextricably confused. Further, that the parlor

is placed at the coldest corner of the house and away from its natural position at the front; and that the pantry, while sufficiently serviceable, perhaps, as a mere store-room, is shorn of all its usefulness as the connecting link between the dining-room and the kitchen, which is its natural function in so small a house.

In Fig. 2 chaos has been reduced to something like decent order. The kitchen has been properly relegated to a subordinate position, and the dining-room placed where it will be less public; a portion of the pantry has been utilized to form a recess for the dining-room sideboard, and the pantry itself now assumes its natural and characteristic function. The kitchen is cut off by two doors from the principal thoroughfare, and all traffic between the kitchen and cellar may now be transacted entirely *sub rosa*. The dining-room will receive the rays of the morning sun (a potent factor in the make-up of a cheerful breakfast table), and the stairs have been turned so that they no longer interfere with the entrance nor with the library door. Some other improvements appear upon the plan, and still others might have been effected, but as an illustration of our axiom enough has probably been done.

CHAPTER II.

THE METHOD OF INVESTIGATION.

Before proceeding with a detailed study of the house-plan in its several parts, it will be better to first lay out a scheme of procedure; or rather to sketch out a map of the territory, over which we shall pass in our investigations, lest in our minute attention to details we lose sight of their inter-relation to each other and to the subject as a whole.

If we carefully consider a series of well-arranged house plans we shall find that however much they may differ in matters of detail, or in the accommodation offered, they will one and all readily yield to a certain system of analysis; and that, when we have carefully differentiated the functions of the various divisions of the plan, we may easily reach conclusive results, somewhat as follows:

We shall see, first, that almost every plan is made up, generally, of two classes of divisions. The first, consisting of those separate parts of the plan in which the persons sheltered by the house live, work or sleep; and second, of those other parts or divisions of the plan which serve for purposes of communication between the living, working and sleeping apartments. The first class we call rooms, and the second, thoroughfares.

Now, as to the rooms, we shall see that they, also, are amenable to further classification. First, there

are those rooms which are used exclusively by the family, and which we may therefore call the *family rooms*, and secondly, those rooms used by the servants, either in performing the service of the house or as their own private apartments. These, therefore, we will call the *servants' rooms*. The family rooms, again, may, according to their use, be further classified as *public* and *private*, the principle of this distinction being that those rooms which are open to all members of the family, on equal terms, are to be classed as public, and those which are for the exclusive use of one or more members only, to the exclusion of the rest, except through the formality of knocking to obtain admission, would be classed as private. So, too, with the servants' rooms; those used in the service of the house being classed as service rooms, and those for the servants' exclusive use as private.

The thoroughfares, too, may be divided in the same way. For we may readily see that some of them are for the family only or principally, and we may so classify them.

We shall, therefore, find that if we take first the principal rooms which are usually to be found in houses (though not all of them necessarily in the same house), and arrange them in accordance with the principles here suggested, and the thoroughfares in the same way, the whole will group together in a tabulated form, somewhat as follows :

Analysis of the House Plan.

| | | | | | | | | | | | | |
|--------------------------|---------------|-----------------------|----------------|----------------|---|---|--|--|--|--|--|--|
| <p>THE HOUSE.</p> | <p>ROOMS.</p> | <p>THOROUGHFARES.</p> | <p>Family.</p> | <p>Public.</p> | <p>Reception Room (Pu.).</p> <p>Parlor (Pu, Pi).</p> <p>Drawing Room (Pu., Pi.)</p> <p>Library (Pu, Pi.)</p> <p>Billiard Room (Pi.).</p> <p>Picture Gallery (Pu.).</p> <p>Dining Room (Pi., S.).</p> <p>Verandas.</p> <p>Etc.</p> | | | | | | | |
| | | | | | <p>Private.</p> | <p>Study (Pi).</p> <p>Boudoir (Pi.).</p> <p>Bed Rooms (Pi.).</p> <p>Dressing Rooms (Pi., S.).</p> <p>Bath Rooms (Pi.).</p> <p>Verandas.</p> <p>Etc.</p> | | | | | | |
| | | | | | | <p>Service.</p> | <p>Kitchen (S., Sp.).</p> <p>Pantries (S).</p> <p>Laundries (S.).</p> <p>Dairies (S.)</p> <p>Store Rooms (S.).</p> <p>Etc.</p> | | | | | |
| | | | | | | | <p>Private.</p> | <p>Servants' Hall (S., Sp.).</p> <p>“ Bed Rooms (Sp.).</p> <p>“ Bath “ (Sp.).</p> <p>“ Verandas.</p> | | | | |
| | | | | | | | | <p>Family.</p> | <p>Principal Porches.</p> <p>Vestibule.</p> <p>Entrance Hall.</p> <p>Inner Hall.</p> <p>Etc.</p> | | | |
| | | | | | | | | | <p>Private.</p> | <p>Family Stair Hall.</p> <p>Family Corridors.</p> <p>Etc.</p> | | |
| | | | | | | | | | | <p>Service.</p> | <p>Between Family and Service Rooms.</p> | |
| | | | | | | | | | | | <p>Private.</p> | <p>Bet. Servants' Rooms, or Servants' and Service Rooms.</p> |

NOTE.—Letters in brackets indicate the proper thoroughfares upon which the room should be found ; where two thoroughfares are indicated the room may or should be upon both ; Pu., public family ; Pi., private family ; S., service ; Sp., servants' private thoroughfares.

This table will be found useful, not only as giving a clear idea of the general house plan, in the abstract, but also as a test whereby may be tried any desired plan. For, although circumstances may arise in which some deviations may be necessary, the principle upon which it is based is correct and its application general.

It is a critical study, then, of the separate parts included in the foregoing analysis, which is the foundation of the science of house planning—the art of it being exhibited rather in the synthetical construction of the plan as a whole to meet the requirements of special problems.

The scope of these notes does not admit of a very exhaustive study of the separate divisions of the plan, some typical illustrations being taken here and there, sufficient to illustrate the principles involved.

CHAPTER III.

THOROUGHFARE.

In the anatomy of the house-plan, the thoroughfare may be considered as the skeleton, whose gen-

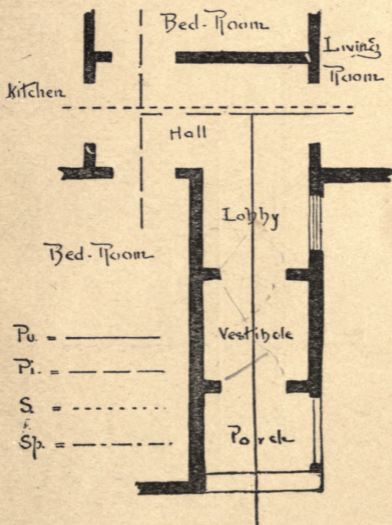


FIG. 3.

eral conformation both exhibits and determines the

characteristics of any specimen under consideration. So clearly is this true, that an examination of the thoroughfare plan alone, is quite sufficient, in any

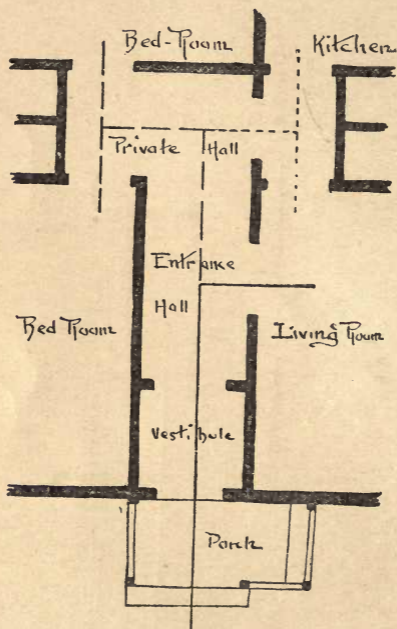


FIG. 4.

case, to give the skillful student a perfectly clear idea of the complete plan of which it is an integral part; and the conditions of the problem of which the

given plan is offered as a solution, being known, an inspection of the thoroughfare will easily show to what extent those conditions have been met.

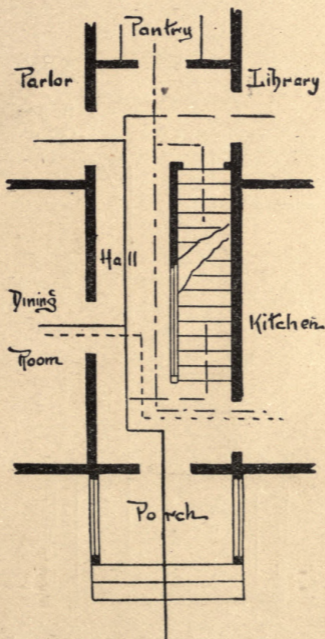


FIG. 5.

Reserving to a later chapter a more detailed study of the thoroughfare, one or two illustrations are here shown, of sufficiently developed form to illus-

trate the general idea, and render easily understood the allusions to thoroughfare which will be found in the immediately succeeding chapters.

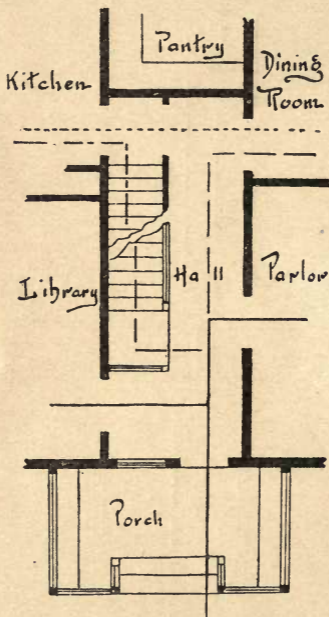


FIG. 6.

In Fig. 3 we have an example of the thoroughfare plan reduced to its simplest form, the germ of the whole system, in fact, and but one step removed

from the conditions of the earlier historic plans in which there was no thoroughfare distinctly developed, access to different parts of the house being had through the rooms themselves.

Now, remembering the distinction of thoroughfare shown in the analysis of the preceding chapter, and adopting the notation shown above, we see that an attempt at analysis in this case results in confusion, because the thoroughfare is imperfectly developed.

Expanding the germ idea shown in Fig. 3 so as to produce a more orderly arrangement, and applying the same notation, we see at once that our plan has reached a distinctly advanced stage of development.

We may make an interesting application of this same test to the case illustrated in Figs. 1 and 2.

As in the last illustration, we have here first, disorder and confusion, then, by the exercise of a little intelligent forethought in the second case, harmony and a reasonable arrangement. We see, then, that each room may abut upon its own proper thoroughfare, due consideration must be given to its distinctive function as a part of the house, and to its relation to adjoining rooms, and also why the thoroughfare plan is the key to the whole arrangement.

CHAPTER IV.

THE ENTRANCE.

For present convenience, we may consider *the entrance* to be composed of three parts: (1) porch, (2) the vestibule, and (3) the entrance hall.

In early times, or in places where, at the present day, niceties of planning are not much regarded, we often find the entrance door entirely unprotected from stress of weather, so that the first advance

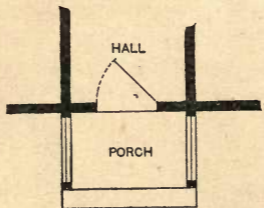


FIG. 7.

would evidently be made by placing over the door a canopy or hood supported upon brackets; and further, to obviate the great inconvenience and awkwardness of a material change of level directly at the door itself, we find inserted between it and the steps a platform of greater or less breadth, according to circumstances. The necessity of a pro-

tecting railing at the sides, or a framework to which, in exposed positions, may be attached a storm siding in severe weather, would next suggest the arrangement shown in Fig. 7.

Here the canopy no longer depends upon brackets for its support, but stands firmly fixed upon four legs or posts, and the sides are adequately protected by rail or siding, or a combination of the two, as circumstances may require. This plan we may take as our present point of departure.

A bench or seat may be justly considered as an

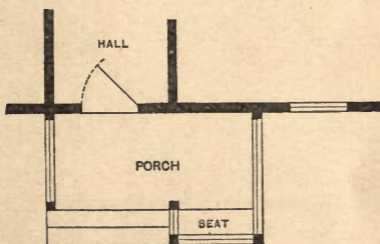


FIG. 8. |

indispensable feature of all well-regulated porches, not so much for the accommodation of the family as for the use of persons waiting at the door whom it may not be convenient or desirable to ask within.

To make room for this it will be necessary to lengthen the porch to one side or the other (or to both, if so much accommodation of that kind be necessary) with the result suggested in Fig. 8, taking care that the seat is thrown so far to the side that the use of it may not block the thorough-

fare between the steps and the door. If, as is often desirable in small cottage plans, we wish to make this feature of the entrance serve at the same time as a veranda, we may adopt some such arrangement as that shown in Fig. 9. It is highly desirable in this and all similar cases where such a combination exists, that a difference be made between the width of the porch and that of the veranda. A method of accomplishing this where the porch, as is often

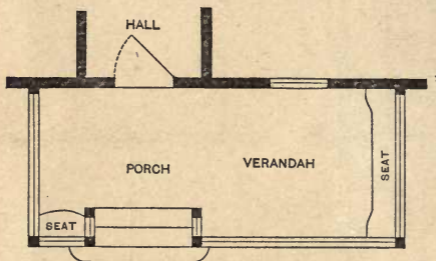


FIG. 9.

necessarily the case, occurs in the middle of the veranda, is suggested in Fig. 10.

The opening of the entrance door directly into one of the living rooms, though a very prevalent arrangement in the early history of house-planning, was soon felt to be attended with so many inconveniences that one of the first changes made was the insertion between the living rooms and the outer door of a separate division of the house, which we may call the entrance hall. In its simplest form we find it as shown in Fig. 11.

Though an improvement upon the earlier system, this particular plan has several inconveniences, more especially as regards the position of the entrance door with reference to the door of the living-room. This might be obviously avoided by throwing it further forward, as in Fig. 12.

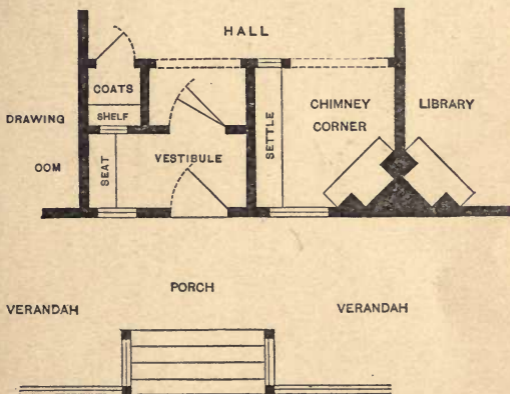


FIG. 10.

In cold climates, and especially in exposed situations, the need of still further protection was felt, whereby the injection into the body of house air, every time the outer door was opened, of a blast of external air of a temperature at or often below zero, might be avoided. Hence, the very general adoption of the device of a second door, interposed between the entrance hall and the entrance door. The pro-

cess of this development may be well illustrated by adding this feature to the arrangement of Fig. 12, producing the completer form shown in Fig. 13.

This is, in effect, an air-lock or valve, whereby free communication may be had between the inner and the outer air without the necessity of ever breaking the seal by opening both doors at the same time. The only rule which it is worth while to note here as affecting the vestibule is, that its function should never be destroyed by opening an inner door into any other part of the house than the entrance

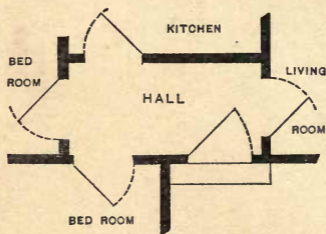


FIG. 11.

hall. Reference might be made to published plans in which a second door opens from the vestibule into a reception room or parlor, or in other cases into a lavatory or coat closet. In either case we have no longer a vestibule, but merely an extension of the entrance hall; in the latter case especially, the arrangement noted is particularly inexcusable, for the reason that we are either exposing the lavatory and its plumbing fixtures to the certainty of the frequent introduction in cold weather of chilling (if not freez-

ing) blasts of air, or, in the last case, we are practically offering, in the city, the hospitality of our coat closet to every passing sneak thief, or, in the country, to his elder brother, the tramp.

The plan shown in Fig. 14, although unusual in some of its features, shows a fairly complete scheme for an entrance; the porch, vestibule, and interior divisions being in proper relations to each other.

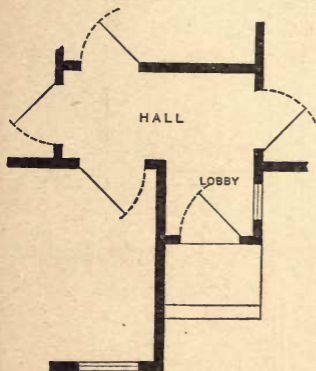


FIG. 12.

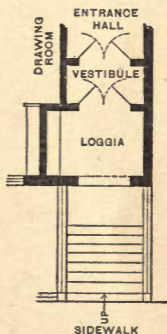


FIG. 13.

The controlling principle in the planning of the entrance should be, that it is the one feature of the house with which the outside public are most immediately concerned, and about whose position and function, therefore, they should be left in no manner of doubt. It should be placed not only in an easily accessible position, but it should, in some way, be emphasized or accented as part of the design, and the approach to it rendered so distinct that it would

be impossible to mistake it for anything else. Error in this respect is often fallen into by either having too many prominent features in the façade—an over-italicization, so to speak, by means of towers, gables,

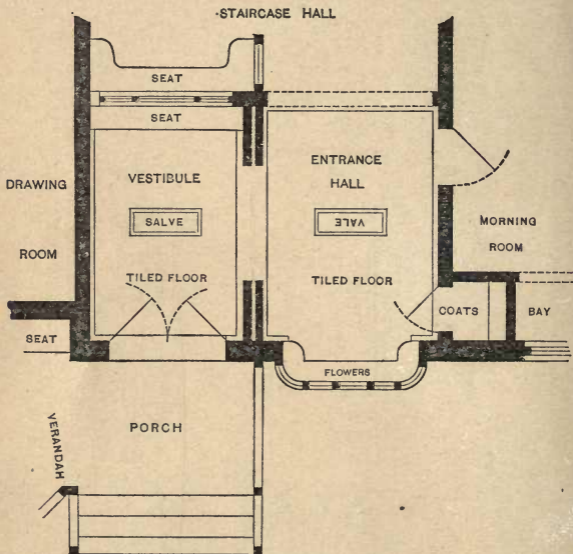


FIG. 14.

porches, doors, etc.—that the principal entrance is not to be distinguished without a great deal of misplaced consideration ; or it is, on the contrary, of such an unobtrusive character, opening directly from the side of the house on a mere step or two, or

hidden at the back of a wide veranda with no marking gable or other feature, that we have the impression forced upon us that visitors at such a house would be unwelcome. Both extremes are to be avoided, and an entrance for the general public should be unmistakable in its position and hospitable in its appearance, offering shelter and rest to all comers.

There is one feature of the entrance to which no allusion has yet been made—the *porte cochère*, or

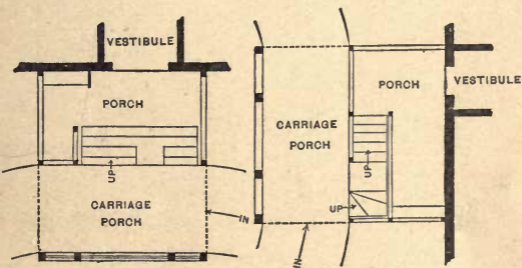


FIG. 15.

FIG. 16.

carriage porch. In country or suburban houses this is a valuable and even a necessary addition to the thoroughfare plan. It consists, essentially; of a roof extending from one of the entrance porches over the driveway, so arranged that visitors may pass from their carriages into the house without exposure to the weather. Figs. 14, 15 and 16 show such arrangements.

In Fig. 14 there is a direct combination of the carriage and entrance porches. It will be noticed that a block three steps high is provided. The proper

position for the block is near the entrance end of the carriage porch, in order that when the carriage stops, both driver and horses may be under shelter.

Fig. 16 shows a plan adapted to a side entrance (for guests arriving at receptions, etc.), and Fig. 17 an admirable arrangement for combining the carriage porch with the principal entrance as to entirely avoid any interference between them—a difficulty

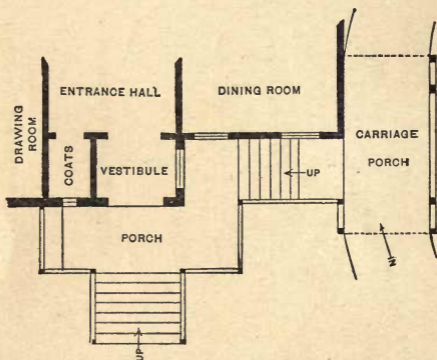


FIG. 17.

very apt to occur when the combination shown in Fig. 15 is adopted. As to dimensions: a minimum width in the clear would be eight and a half or nine feet by fifteen or sixteen long, and eleven to twelve high.

As to the aspect of the entrance there is, unfortunately, seldom much liberty of choice. South or southerly is best; next easterly. Between west and

north there is nothing to choose. The most that can usually be done is in the direction of modification. If the aspect is west it is important that there should be some protection from the cold northwest winds of winter. We may often effect this by taking advantage of some projection of the house (see Fig. 10) or, in very exposed situations, by making one for the purpose. If this cannot be done, the north and west

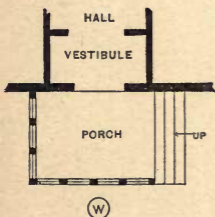


FIG. 18.

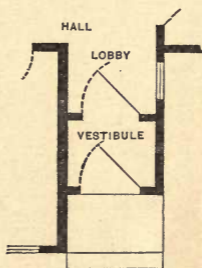


FIG. 19.

side of the porch may be enclosed and the steps placed to the south, as in Fig. 18.

In extreme cases it may be necessary to place the principal entrance at the south side of the house, although the front may still remain to the west. If skilfully managed this may be done without in any way disturbing the general arrangement of the plan as a whole.

Typical entrances as adapted to city houses are shown in Figs. 19, 20, 21 and 22.

The first is adapted to a lot twenty-five feet wide, and the second to a lot thirty-five feet wide.

The plan shown in Fig. 21 is arranged for a house on a corner where, as is usually more desirable, the entrance is upon the side street.

Fig. 22 is planned for a house upon the French system, with the principal rooms *au premier*.

Fig. 20 would be much improved if the step immediately at the entrance door were omitted, and if the platform of the outside flight of steps were at the top instead of at the bottom; as accidents would

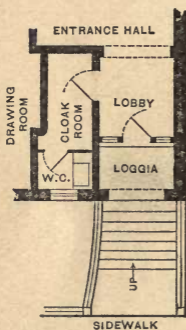


FIG. 20.

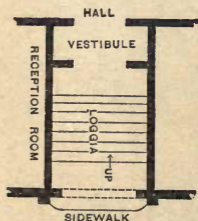


FIG. 21.

be very likely to occur if the arrangement shown were carried out.

Briefly reviewing all the facts discussed in connection with the subject of entrances, we may feel justified in laying down the following general rules:

1. That the principal entrance should be easily accessible and of a distinctive character.

2. That it should have, where possible, a southerly or easterly aspect.

3. That its component parts (carriage and entrance porches, vestibule and entrance halls), should be properly arranged with reference to each other and to the surrounding parts of the house, so as to cause no interference with their legitimate use.

When the question of thoroughfares comes to be more fully considered, other rules will suggest them-

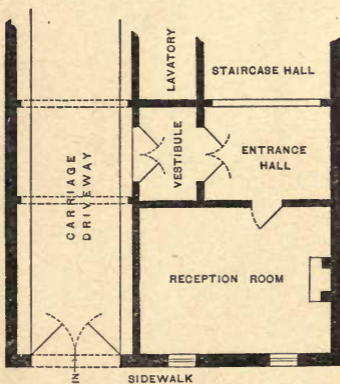


FIG. 22.

selves in this connection, but for the present these are sufficient.

It should be noted, however, in connection with these rules, and with others to be given hereafter, with reference to other parts of the house, that they

are to be considered as tentative rather than final. Special circumstances will sometimes arise which may tend to render them nugatory. But they may, nevertheless, be taken as a guide in all cases where nothing decidedly appears to the contrary.

CHAPTER V.

THE DINING ROOM, THE BREAKFAST ROOM, AND THE DINNER ROUTE.

There is no single division of the house which can better be made to serve as an illustration of the true theory of the art of planning than the dining room.

Let us suppose, by way of example, that we were required to plan such a room large enough to comfortably seat six persons; a smaller room than this it would hardly be profitable to build, so that we may assume this to be the minimum of this class of room. First, how wide should it be? A dining table narrower than three feet is scarcely useful. Persons sitting at the table require not less than sixteen inches from the edge of the table to the back of the chair. Space for serving between the back of the chair and the wall should not be less than two feet and eight inches. This gives a minimum width for the room of eleven feet, which, however, makes no allowance for furniture (such as chairs, sideboard, etc.) standing against the wall, unless it be placed in the corners of the room. Now, as to the length. Twenty-eight inches is only a reasonable allowance for the space each person will occupy lengthwise of the table, which gives, with two on each side and one at either end, a total length of seven feet for the table, or scarcely less than eight feet if the table have rounded ends, so that we may say eleven feet

wide and twelve feet six inches long for a dining room reduced to its lowest terms ; and Fig. 23 shows such a room, with a small sideboard squeezed into one corner and a grate into the other at one end.

A dining room, however, should be something more than a mere eating box, and a room of the contracted dimensions shown in the last figure is seldom met with or called for. Sufficient width at sides and

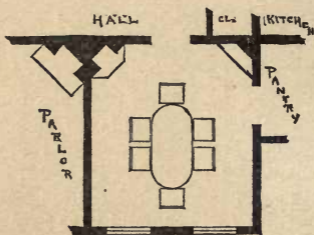


FIG. 23.

ends for furniture, together with greater seating capacity, would indicate a room about fourteen and a half or fifteen feet wide by seventeen or eighteen feet long. A greater width than seventeen feet is scarcely necessary except in special cases, and dining rooms longer than twenty-two feet are seldom needed in houses of moderate size.

As to internal fittings, it is desirable that the sideboard should be placed in a recess specially arranged for it, and near the pantry door. It should be, if possible, opposite or at right angles to the principal light, as nothing is more destructive of any artistic effect that may be gained by the judicious display of plate or glass than the killing light produced by hav-

ing a window directly over it. Such an arrangement may be made to look well in a drawing, but seldom or never in actual practice.

The principal light should be from one end rather than from the side of the room, for the reason that fewer of those sitting at the table will be inconvenienced by having the light shining directly in their eyes. If the light be from the side, moreover, the plates of one-half of those at table will be in shadow, as will also be their faces, which is unpleasant

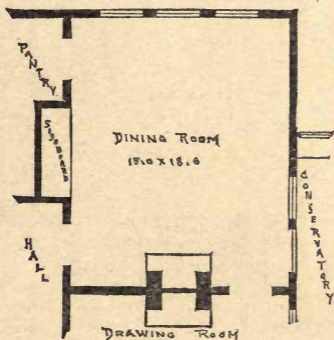


FIG. 24.

all around. Care should, however, be taken, not only here but in all similar cases where the room can be lit only from one end, not to fall into the error of grouping the windows at the middle of that end, but to separate them rather toward the corners (see Figs. 23 and 26), as in the former case the concentrated light causes every object in the room to cast

a shadow. It is best, where possible, that a secondary light should be afforded by a window near the further end of the room, as in Figs. 24 and 25.

The reasons which seem to indicate the end of the room as the best direction from whence to admit the light, would also suggest the end as the best place for the open fire-place, if there be one, since many persons are rendered very uncomfortable by having

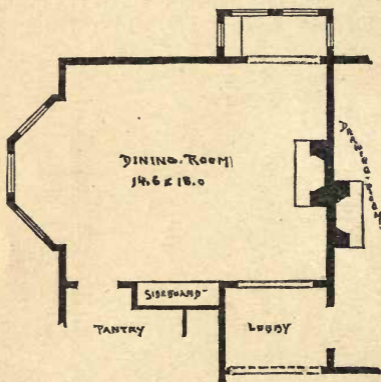


FIG. 25.

a fire directly at their back at dinner. An arrangement which would doubtless meet with approval would be to have the principal windows at the head of the table, with the fire-place at the foot, so that the "head of the house," with the light in his eyes and the fire at his back, may be in a fitting frame of mind to make himself "as entertaining as possible."

Although the strict necessities of the case would

indicate a room oblong, rather than square, with no projections other than a bay window at the end (see Fig. 25), still the comfortableness of the room will be much increased if its shape be not quite so strictly formal. Fig. 26 indicates a method of placing the fire-place at the side in a recess, where it will cause no inconvenience, but will add very much to the

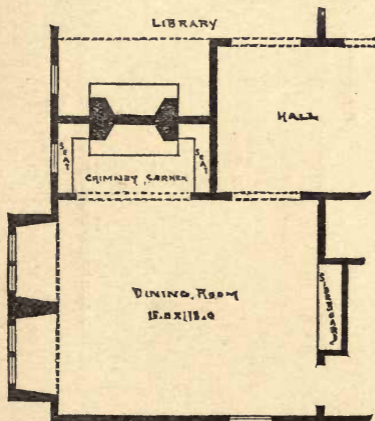


FIG. 26.

home-like effect of the room, and afford a pleasant retreat for an after-dinner cigar with a congenial guest or two.

Whether a dining room should communicate directly with any other of the rooms of the principal suite, is a question which can only be decided according to the circumstances in each particular case. On

general principles, considering the use of the room and its more or less intimate connection with the service rooms, especially just before and after meals, it would seem by all means best that it should have no such direct communication. Yet in small houses,

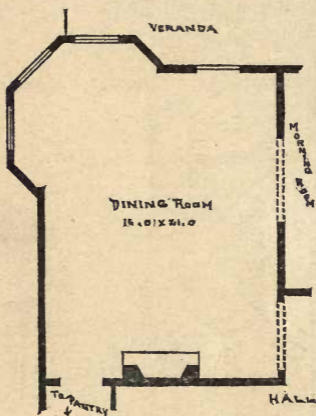


FIG. 27.

especially in those where we find the principal suite consisting only of parlor and dining room, there is no other possible way of "opening up the house" and causing a desirable circulation of guests at an evening party. Such a throwing together of the rooms would seem to be a necessity. In other cases, however, more or less direct communication may be had by the methods suggested in Figs. 25 and 26. The plan shown in Fig. 27 is from a seaside cottage,

and illustrates a method of arranging the end bay when the direction of the principal view is not coincident with the longer axis of the room.

A dining room with a western aspect is open to two serious objections. In the first place, the comfort of those seated at the table at the hour of the evening meal, whether dinner or tea, would necessitate the closing of all the western windows in order to exclude the almost level rays of the late afternoon sun; and, secondly, such a room would be very cheerless on a winter morning, if not uncomfortably cold, which latter it is most likely to be at the breakfast hour in houses heated by hot-air furnaces. On the



FIG. 28.

contrary, a dining room on the east or south side of the house will be warm and cheerful on a winter morning, and cool on hot summer afternoons, and by no means uncomfortable on a summer morning; we may, therefore, feel justified in saying that *easterly* is the best aspect for a dining room, or at the south-east corner of the house, other things being equal. It will, however, be nearly as favorable if the dining room be on the east or south side of the house, provided, however, that in the latter case there be no

obstruction of the early rays of the winter sun, as suggested in Fig. 28. If, however, there be another room which is used to breakfast in, the easterly aspect of the dining room is not of so much importance, and it may be placed anywhere, except toward the west. In cases where the room is forced into unfavorable aspects by the necessities of the site, much mitigation may often be afforded by the judicious use of bay windows and like projections from the main body of the room, examples of which will appear later on.

The breakfast room, to which allusion has been made, is usually a room near to or adjoining the dining room, in which breakfast and luncheon are served, and which may also be used as a sort of informal family gathering room, during the morning hours. It may depend either upon the dining room pantry for its service, or it may have a small pantry of its own, communicating conveniently with the kitchen. In the former case, the breakfast room should be next the dining room with a door between, but in the latter this is not important if its own pantry be near to the base of supplies. The plan shown in Fig. 29 is a good example of a more complete arrangement. In this case the dining room is lighted from the north, while the windows of the breakfast room face the southeast. So far as aspect is concerned, this arrangement leaves nothing to be desired.

The relation of the dining room to the adjoining parts of the house, and especially the details of its communication with the kitchen, are of the greatest consequence in the attainment of a well-regulated plan. The service connection between the dining

room and the kitchen has been graphically named the "dinner route," and the principles upon which

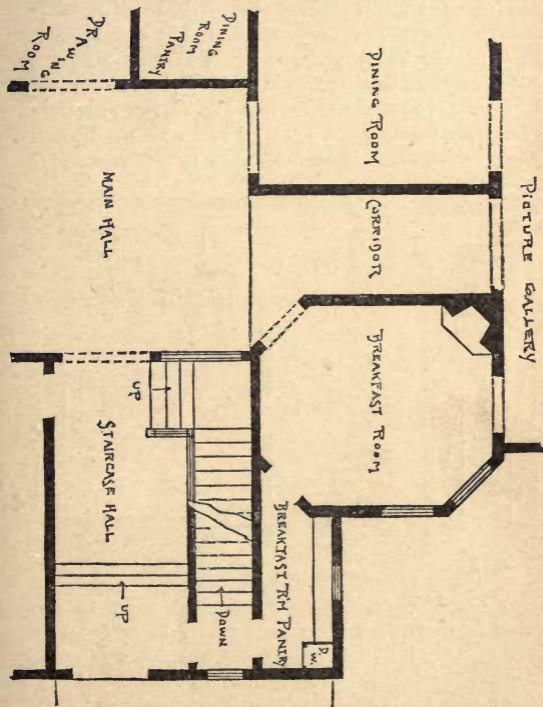


FIG. 29.

its successful adjustment depend may be stated as follows :

The first important point to be noted is that this service route should be entirely distinct and separate from the family thoroughfares. With a basement kitchen the arrangement would be a simple one. The dining room pantry being next the dining room, communication would be had with the kitchen by means of a dumb-waiter (see Fig. 30, from the plan of a city house) or lift, opening below into a kitchen pantry which should be next to or across a corridor



FIG. 30.

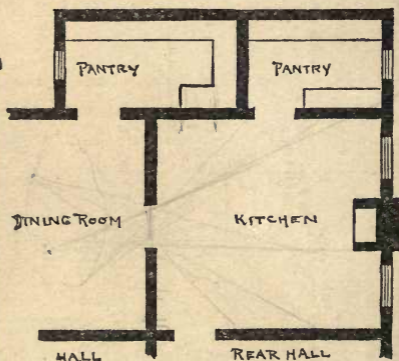


FIG. 31.

from the kitchen. It may be noted here, before going further, that the dumb waiter should never open directly into the dining room, nor, below, directly into the kitchen, but at one or, if possible, at both ends into a pantry or adjoining service room, whereby the upward draught of all odors of cooking will be materially lessened, and the transmission of sound from the kitchen altogether stopped.

If the kitchen be on the same floor as the dining room, the problem of arranging the dinner route may be either simple or complex, according to circumstances. It is scarcely necessary to say that in a house of any pretensions whatever to decent planning, the kitchen should never, under any circumstances, have *direct* communication with the dining room. A more stupid piece of planning than that shown in Fig. 31 it is scarcely possible to conceive. Having blundered into an arrangement which only needed one finishing touch to make it successful, the author of this plan did the one thing which was most

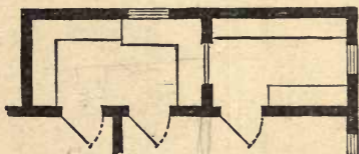


FIG. 32.

wrong and opened a door between the kitchen and dining room, with the result as shown. Fig. 32 is a good illustration of the fact that scientific planning is by no means necessarily the same thing as expensive planning. By transferring the door between the two rooms to the dining room pantry, and by opening a pass-window between the latter and the kitchen pantry, the arrangement of Fig. 30 is converted, by these simple means, in one almost above criticism. (See Fig. 32.) It is always best, however, that something more than a single wall should intervene between the kitchen and any one of the family rooms, and if nothing better can be done, closets should be

interposed as in Fig. 2. When the kitchen is only separated from the dining room by the pantry itself, it is best to avoid, if possible, placing the pantry doors opposite each other, in order that a direct view from the dining room to the kitchen may not be had ; at the same time the doors should not be placed so far apart that the pantry becomes merely a thoroughfare between the two rooms. If a corridor or lobby can be interposed between the pantry and the

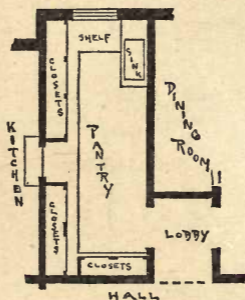


FIG. 33.

dining room (see Fig. 33) or between the pantry and the kitchen, so much the better ; especially if this corridor have a window next to the open air.

In a recent issue of a technical journal there appeared, upon the same page, two plans, from which the sketches shown in Figs. 34 and 35 are taken. The houses themselves are of the best type, as regards exterior design, and cost, the one twelve and the other thirty thousand dollars. Both are by architects of deservedly distinguished repute, and yet,

while the second (Fig. 35) is an admirable example of one of the arrangements suggested above, the first (Fig. 34) seems so hopelessly inexcusable and illogical under any conceivably extenuating circumstances that, taken in connection with the name of the author, it could scarcely be supposed but that the plan, as drawn, is either the result of a draughtsman's error, or of the positive instructions



FIG. 34.

of an eccentric client who would not be gainsaid. What makes it especially unfortunate is the possibility, from the general arrangement of the plan as a whole, of direct vistas from both the parlor and library, through the hall and dining room, into and across the kitchen itself.

The arrangement of Fig. 36 is from the plan of a well-known house at Newport, and presents, perhaps,

the best possible type of communication between the dining room and the kitchen, when both are on the same floor. It will be seen that, while both rooms practically abut, through their respective pantries, foot thoroughfare is only to be had through a quite different and properly subordinated corridor, so that, while the dinner route is easy and exceedingly convenient, direct communication, whether of persons, sounds, or odors of cooking, is quite impossible.

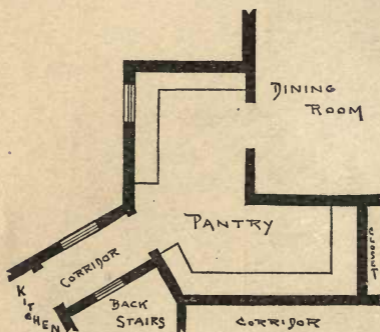


FIG. 35.

Fig. 37 shows a similar arrangement, better, perhaps, than the last, in that the butler's pantry is not made quite so much a part of the foot thoroughfare.

In England, where the Irish Question, though sufficiently perplexing, has not assumed that painfully domestic form so common on this side of the water, it has long been the practice to keep the dining room

and kitchen as widely separated as possible. In many cases this has been carried to an excess that seems simply ridiculous; although a large and well-

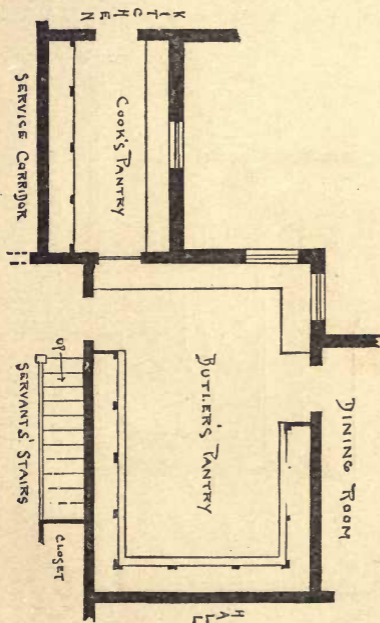


FIG. 36.

trained staff of house servants would, of course, somewhat reduce the inconvenience of such an arrangement. But in the plan of *Mentmore*, as given

by Professor Kerr,* the kitchen is more than one hundred and thirty feet distant from the state dining room, and the only apparent communication between the two is either through the library or across the main hall at the foot of the principal staircase.

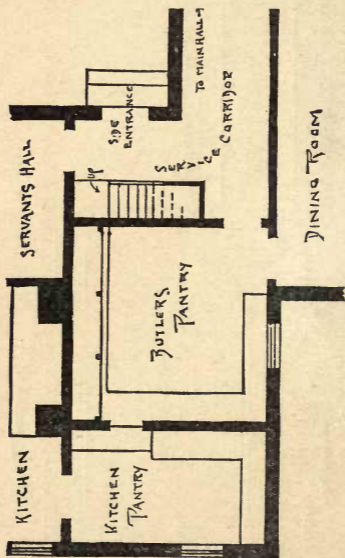


FIG. 37.

Even in the plan of *Bearwood*, † by Professor Kerr himself, the dinner route, although more private than in the last case, is even longer. Such in-

* "The English Gentleman's House," p. 448.

† *Id.*, p. 456.

stances of extreme separation are by no means uncommon even now; still the tendency is, doubtless, towards greater compactness and convenience, and Fig. 38 shows the limit to which it can well be carried under the conditions of service prevailing in this country. The arrangement here shown is from the plan of the residence of an eminent English architect, and is a good example of the very admirable way in which the plan as a whole is put together. It will be observed that the dining room itself communicates with two distinct divisions of the thoroughfare, namely, the staircase hall and the service corridor. The latter includes the dining room (by the service door), the butler's pantry, etc., the business room, the housekeeper's room, the back stairs, and so much of the kitchen as is immediately necessary, that is, merely a pass-window; the kitchen door it-

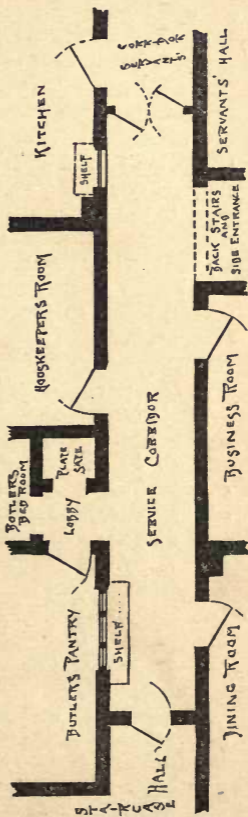


FIG. 38.

self opening on to another division of the thoroughfare—the servants' corridor. This careful and very accurate subdivision of the thoroughfare effects a proper subordination of the various classes of rooms, and completely shuts off the kitchen, not only from the principal thoroughfares at the front of the house, but from the dining room itself. The dinner route, of course, is from the kitchen, by the pass-window, to the butler's pantry, and thence, after due arrangement, through that pass-window across the service corridor into the dining room.

A review of all the facts in the case, so far presented, seems to justify the following preliminary statement of rules governing the planning of dining rooms:

1. *If used as a breakfast room the aspect should be easterly; a location at the southeast corner of the house giving, perhaps, the best results.*

2. *To be always within easy and convenient communication with the kitchen, but under no circumstances should the communication be direct. The dinner route to be shorter and more direct than the front thoroughfare, where the two are separate.*

3. *To be placed, if possible, not directly upon the entrance thoroughfare, but rather upon the private family thoroughfare near its junction with the public family thoroughfare.*

4. Excepting the breakfast room, or, in the smallest class of houses, the parlor, it is best that the dining room have no direct communication with any other room of the public suite, but rather indirect, as in Figs. 25 and 26.

CHAPTER VI.

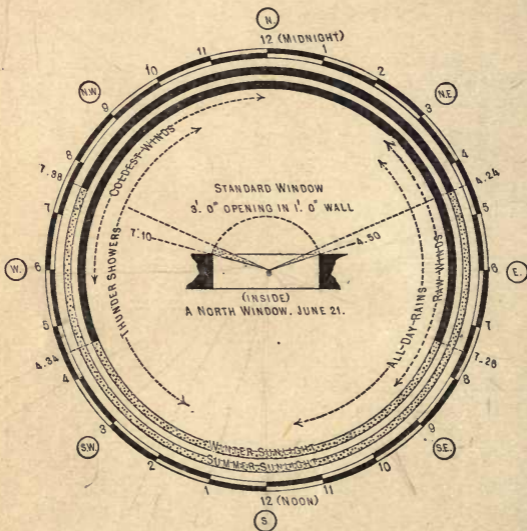
ASPECT.

As the question of aspect has entered in such an important way into several of the problems which have already been dealt with, and as it will enter in even more important ways into many others yet to come, it will be well, perhaps, to consider it somewhat in detail just at this point.

At, or near, the equator, where the temperature is scarcely variable from one end of the year to the other, and where the sun shines, in winter, upon the east, south and west sides of a house, and in summer upon the east, north and west sides, little attention, it would seem (local influences aside) need be paid to any question of aspect. But in temperate climates, and especially in our own latitude, where north is, generally speaking, synonymous with cold and south with heat, and where sunshine and vigorous health are co-ordinate factors from a sanitary point of view, gross errors at least might be avoided in our house plans, if there were kept in mind some of the more general principles which may be deduced from a study of the relation between the weather and the points of the compass.

Taking advantage of the fact that hours of the day, as marked by the sun's position in the heavens, bear certain definite relations to the points of the compass, Professor Kerr, in his admirable work

on English houses — “The English Gentleman’s House,” page 81 — makes use of an arrangement which he has named the *aspect compass*, a modified form of which is shown in Fig. 39. It consists,



ASPECT COMPASS.

ARRANGED FOR THE LATITUDE OF NEW YORK

FIG. 39.

essentially, of an outer circle divided into twenty-four hours, beginning with twelve o'clock, midnight, and with the principal points of the compass shown in their proper position, thus making 6 o'clock,

A.M., coincident with *east*; 12 o'clock, noon, with *south*, and 6 o'clock, P.M., with *west*, etc. Two inner circles are so divided as to mark the duration of direct sunlight on the longest day in summer, and of the shortest day in winter, and so, simultaneously, the points of the horizon at which the sun rises and sets on those days. Certain other elemen-

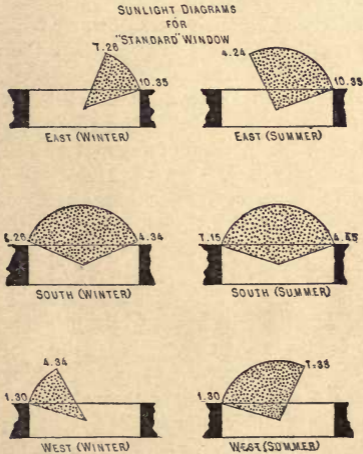


FIG. 40.

tary facts, to which reference will be made later on, are also noted upon it.

It is shown here chiefly for the purpose of demonstrating the relative amount of direct sunlight which windows facing in different directions will admit. This may be ascertained with sufficient accuracy by

placing any given window, duly drawn to scale, in the center of such a diagram, and drawing lines from the center to the earliest possible position of the sun and to the latest, as shown in the figure. For purposes of comparison, a standard window has been assumed, having an opening three feet wide in a wall one foot thick; and Fig. 40 shows, in a very graphic way, the relative amounts of sunshine which will be admitted by such a window, as it is made to assume positions facing in succession the cardinal points of the horizon.*

In interpreting these diagrams † it should, of course, be borne in mind that the quality of the sunlight varies with the time of day and with the season of the year. So that, from a hygienic point of view, the relative values of the positions shown cannot be strictly estimated by measuring the length, in each case, of the sunlight arc. ‖ The morning sun is always pleasant, even in summer. In winter, the mid-day sun is low, and floods our rooms with its welcome warmth and light, while in summer it is too high for its heat to overbalance the cheerfulness caused by its presence. The western sun, in winter, offers a welcome mitigation of the coldest aspect, but in summer the afternoon sun is seldom other than something to be shunned and shut out, especially toward the close of day, when its almost level rays enfilade our rooms with radiant lines of heat.

* The theoretical maximum of direct sunlight which such a window can admit is about nine hours and thirty minutes, though this may often be more or less reduced by local circumstances.

† The diagrams, as shown, are not perfectly accurate, for the reason that the sun's declination has not been taken into account; they are sufficiently so, however, for all practical purposes.

These diagrams, however, confirm to a striking degree the popular estimate of the sanitary value of "a south window," as it is clearly shown to be the only window capable of receiving and admitting the maximum amount of direct sunlight, and that, too, when the quality of the sunlight is at its hygienic best.

As a further evidence of the value of such a window in an extreme case, note the example taken from actual practice, shown in Fig. 41. Here we have a bed room with west and north aspects, exposed to the coldest winds of winter and the hottest suns of summer. Now, if there were but the north and west windows in the room, during the shorter days of winter the duration of admitted sunshine could not possibly exceed, as we see by our diagram,

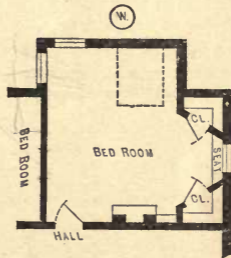


FIG. 41.

three hours and a half, while it would probably be much less than this, as the later afternoon sun in winter is very apt to be obscured by clouds. Taking advantage, however, of the slight projection from the main body of the house, a south window is inserted through which the sun would enter shortly before noon, thereby prolonging the period of sunshine to nearly five hours, besides giving the more genial warmth of the mid-day sun, and making the chances of seeing the sun at all much greater than they were before, since the sun is more likely to shine about noon than at any other time of the day,

In summer, too, this south window has its advantages. In the long afternoons, when the hot sun is beating upon that side of the house, the west window may be tightly closed and all sunlight excluded, while the south window may be opened wide to admit the southerly breeze, which is so apt to prevail at that time of the year. If desired, a hood might be placed over the south window, and so arranged that, while it would not at all interfere with the admission of the low winter sun, it would afford an effectual protection from the higher sun of July and August. There are other important matters involved in this question of aspect, but they will be reserved for discussion at another time, as will also the question of the relation between aspect and prospect.

CHAPTER VII.

THE DRAWING ROOM AND PARLOR.

The position, shape and size of the drawing room, or, as it is otherwise often called, the parlor, are quite as clearly based upon the use that is to be made of it as we have already found the dining room to be. The functions of the room now under consideration are sufficiently indicated by the names above noted, the one having reference to its use in connection with the dining room, and the other to its use as a general family sitting room and reception room for the entertainment (or otherwise) of our friends and neighbors. In the smallest houses, of the class at present included in these notes, we will usually find the ground-floor plan to consist of at least two principal rooms, that is to say, the dining room and the parlor. In such a plan the latter room will be occupied on all the occasions noted above, and will be in constant use, therefore, both during the day and evening. The strict economy of plan which usually obtains in such houses will limit the size of this room to somewhere about two hundred and thirty square feet of floor space. The predominating use of the room being that of a family sitting room, a shape as nearly square as possible will be found perhaps to give the best results, all things considered, though the reverse will be seen to be true

when we come to consider the larger class of drawing rooms.

Now, a square parlor may be made very cheerful and hospitable, or else hideously uncomfortable, according to its arrangement. The plan shown in Fig. 42 may be taken as a type of room unhappily too common, and one which has cast a gloom over the social life of every community where it has established itself as a leading feature in domestic planning. With its single door, its two windows



FIG. 42.



FIG. 43.

placed accurately in the center of the two outside walls, and the stove-pipe hole in the center of the fourth wall, without adequate or effective wall space for furniture, the chilling and prim regularity of its whole arrangement seems totally antagonistic to any spirit of social enjoyment.

In Fig. 43 we find the same room, but with a difference. The stove has given way to the open fireplace, the entrance doorway has been widened and is now closed only with a *portière*, the two windows

have been pushed along towards the corner and now form a single group, while a third has been inserted nearer the fire-place to give a pleasant reading light, and, finally, a door has been cut through into the next room (probably the dining room), to do away with the bottled-up feeling produced by a parlor with only one door. By a judicious arrangement of furniture and color, a cheerful, hospitable and social effect will be produced in this room which could not have been effected by any means whatever in the room first shown.

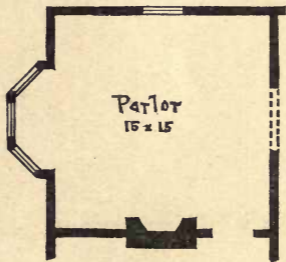


FIG. 44.

If the expense is not a bar, a much more effective room can be obtained by throwing out a bay on one side (preferably that opposite the entrance), which will materially add to the apparent size of the room (see Fig. 44). This addition of a projecting window will have the same desirable effect as will other special features, such as fire-places, etc., namely, that it will aid in breaking up the company at an evening party into separate groups, a result absolutely im-

possible of attainment in such a room as shown in Fig. 42. If the principal view be not coincident with either axis of the room we may place the bay in some such way as is shown in Fig. 45. In this plan especially, we have ample wall space for the effective grouping of furniture.

With regard to bay windows, it should be noted that, in order to make them most effective in small

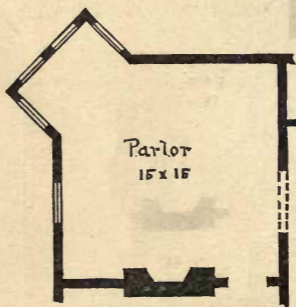


FIG. 45.

rooms, they should be arranged so as to appear as an extension, both on floor and ceiling of the room itself, and should not be separated by an arch or be raised above the general level of the floor.

In Fig. 46 is shown a simple way of obtaining a moderate irregularity of plan in a small parlor, with well-disposed furniture space and ample opportunity for the circulation of guests.

As to the position of the parlor in a small plan it should evidently be not far from the entrance door of

the house, nor far from the principal staircase. In a house of only two principal rooms it will obviously take its place at the front of the house, with the dining room next or near by, at the side or rear.

Let us here, for convenience, make a distinction between the drawing room and the parlor, applying the latter term to that class of room which serves as an informal family morning sitting and reception

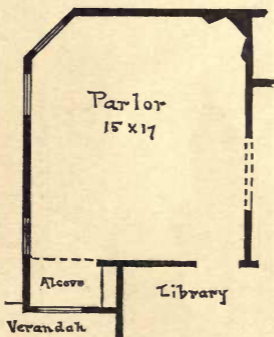


FIG. 46.

room, while the former will be used exclusively to denote an evening family room, and especially one which is to be adapted to the requirements of the more formal entertainment of the friends and acquaintances of the family, there being in the latter case a room serving as a morning room exclusively.

Bearing this distinction in mind, we shall find no difficulty in settling the details of best position, arrangement, etc.

As to position, the drawing room should evidently be directly upon the main public thoroughfare, though not next the entrance hall (if there be a further subdivision of thoroughfare), leaving that position as more convenient for the morning or reception

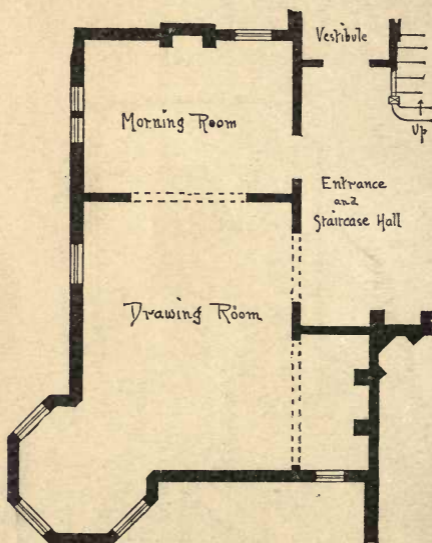


FIG. 47.

room. It may communicate by folding or sliding doors or, better, by a wide opening closed by a *portière*, directly with the main thoroughfare. Whether it should have direct communication with any

other room can only be decided by the special circumstances which obtain in each particular case, but as a general principle it is better that it should, since this affords the second door, already mentioned as being so desirable. Of the other rooms of the suite the morning room will most conveniently afford the desired outlet. In Fig. 47 is shown an arrangement

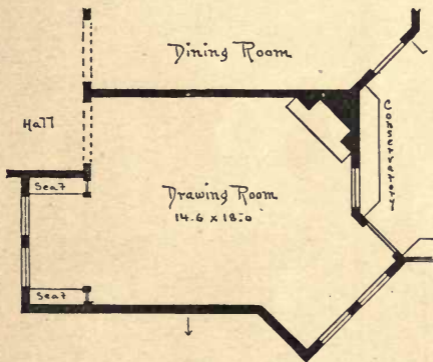


FIG. 48.

in which the morning room is merely an extension or prolongation of the drawing room itself.

So far as the shape is concerned, it is better oblong than square, as tending to that desirable separation of the company into smaller and more congenial groups, rather than the massing of them into an awkward and unmanageable body, which is the almost invariable tendency of all square rooms. For this reason, irregularity of plan is highly de-

desirable, which is to be brought about by the

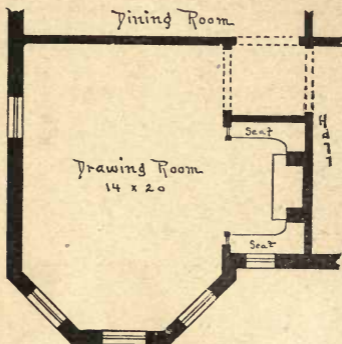


FIG. 49.

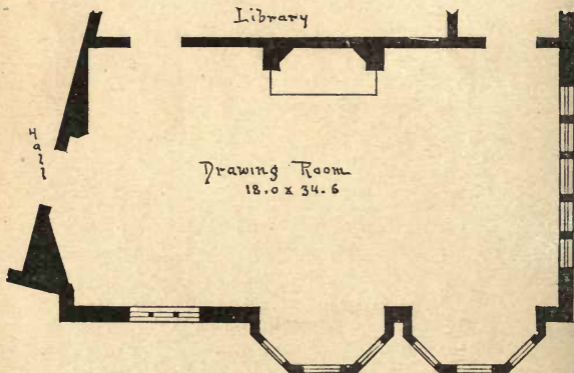


FIG. 50.

judicious introduction of bay windows and other

like features. The tendency in this direction in the best plans may be very clearly seen in the examples presented.

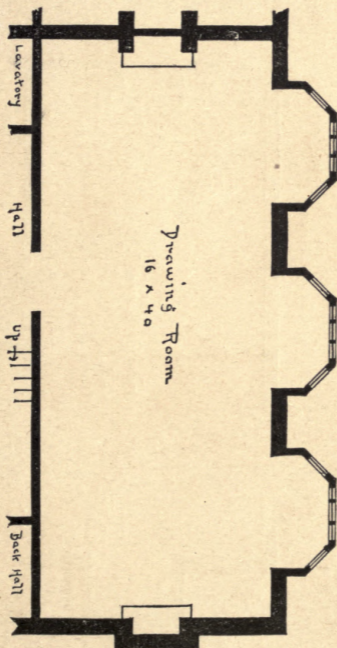


FIG. 51.

Fig. 48 is a plan which is well arranged to meet, on a small scale, all the requirements of the rules

above noted. One peculiarity of this plan is due to the fact that the view in the direction indicated by the arrow was rendered undesirable by the prominence of several unsightly buildings, in consequence

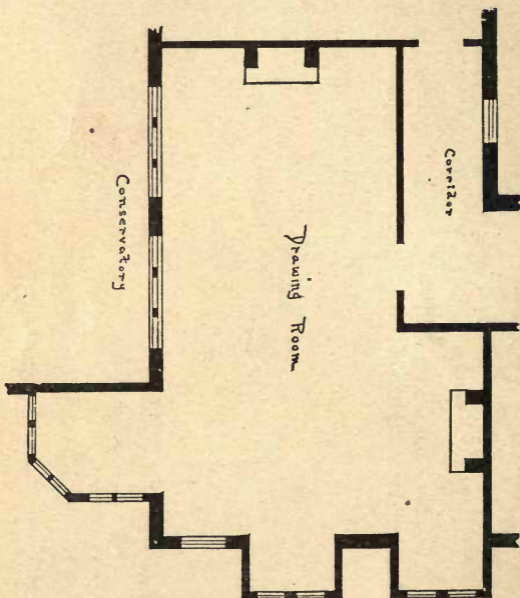


FIG. 52;

of which there are no windows looking in that direction; and as the views in the other directions are all that could be desired, and as the light is well dispersed, the absence of windows in the side wall is

not noticed. Fig. 49 shows a plan of a small room very cosily arranged, and which with judicious decorative treatment, might be made very effective.

Fig. 50 is the plan of the drawing room in the house of an eminent English architect, now deceased, which is a very effective rendering of a large room. It should be borne in mind, however, in examining most English plans, that the window space is largely

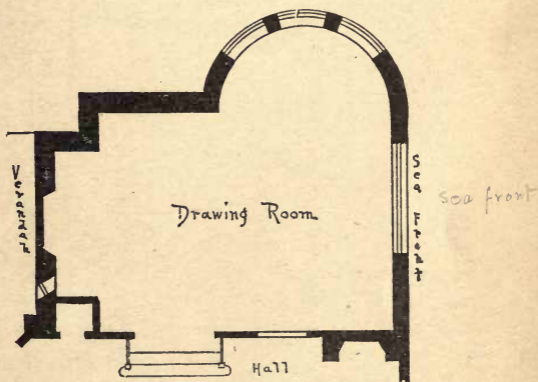


FIG. 53.

in excess of the demands of our own climate, and would be suited only to the dark and comparatively sunless climate of England.

Fig. 51 is from a semi-detached London house and shows an effective plan for the demands of large town receptions. It is defective, as are most of the plans here shown, in having only one door.

Fig. 52 is altogether one of the most charming examples of the irregularly planned drawing rooms with which we are likely to meet, and it requires but a slight imagination to picture the charm such a room would assume as part of an old country house. This also is an English example, which accounts for the excessive amount of window space.

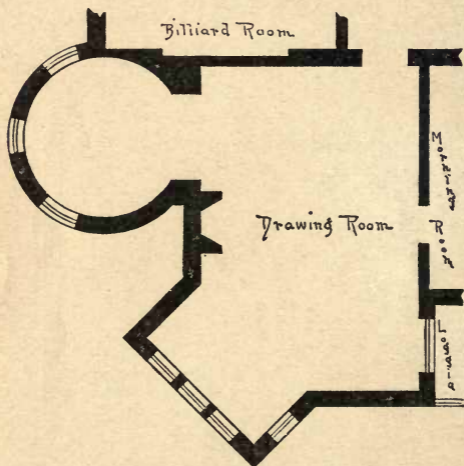


FIG. 54.

Generally speaking, then, the drawing room will be more or less successfully planned in proportion to its departure from a formal or strictly rectangular shape, unless, in the largest class of rooms, it is intended for strictly formal receptions. In Fig. 53 is shown the plan of a drawing room in a summer

house on the Massachusetts coast, which has a delightfully suggestive appearance of completely comfortable informality. Raised some three steps above the level of the entrance hall, a latticed window looks down upon the entrance, while the floor plan is well broken up and ample seaward views obtained from the bow window and also from the large window directly toward the sea front, the sill of which is some four feet above the floor. The oblique window on the other side of the room commands a raking view of the principal approach to the house.

In Fig. 54 is shown the plan of a drawing room in a house at Cannes, on the Mediterranean coast of France, designed by a well-known English architect. The disintegration of the floor plan is here carried to an extreme not often ventured upon, though this affords an excellent illustration of the principle referred to. The circular extension would afford a pleasant retreat on occasion, for a whist or other *partie carrée*.

Fig. 55 shows the plan of a drawing room designed by the author, in connection with a plan for a seaside residence chiefly intended for summer use, in which it was especially desired that the house should "open up well." As the thoroughfare plan of this house will be given later on, reference need only now be made to the drawing room itself. This room occupied the southeast corner of the house, with the east wall parallel to the shore, with a charming view, to the southward, of the main ship channel lying between two islands some seven or eight miles seaward. The general color treatment of the room was in pale fawn color and gold, and the alcoves on the side wall were

formed of open lattice and long spindle work, the idea being to give depth to the side wall aspect, with a separate picture from each window. Carefully studied vistas were also obtained from the

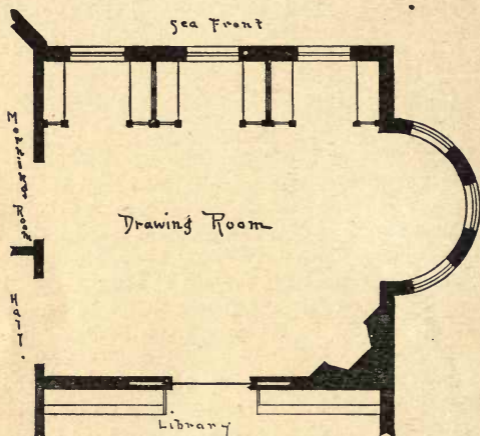


FIG. 55.

several centres of interest in the room out into the hall and through the morning room and library.

Illustrations of drawing rooms might be multiplied indefinitely, but those already given will doubtless prove quite sufficient in number to illustrate the chief principles to be borne in mind in planning this class of rooms.

A recapitulation of these principles will be convenient for future reference.

THE PARLOR.

1. *To be conveniently near to the principal entrance, but not too far from the principal stairs. Its principal entrance-door to be on the public thoroughfare and at right angles to the axis of it.*

2. *To be rather square than oblong, but with some marked departure from a strictly formal outline in the arrangement of bay windows, etc., and to have, if possible, more than one door of exit.*

THE DRAWING ROOM.

1. *To be rather withdrawn from the principal entrance, but opening directly upon the public thoroughfare, and also, if desired, into the morning room.*

2. *To command, other things being equal, the best view the situation affords, and to have, if possible, at least one outlook toward the sunset.*

3. *To be oblong rather than square, but with a marked departure from formal outline, with the irregular introduction of bay windows, fire-places, and other features which will further the separation of guests into informal groups.*

CHAPTER VIII.

THE LIBRARY.

In every house, other than the merest cottage, there will, or should be, found a room devoted more or less exclusively to books, and the users of books; but the shape, size and position of such a room can only be fitly determined when it is known just what and how many books are to be provided for, and exactly what use is to be made of them after they are on the shelves.

We shall find, for instance, from a consideration of house plans in general, that the library, so-called, may be nothing more than a general family reading and writing room, where the latest magazines may be skimmed over or the last new novel devoured within the friendly shelter of the projecting bay and its deeply recessed window seat, where the heavy curtain scarcely serves to break the sound of incessant conversation of the other occupiers—we will not say users—of the room, whose performances at the *secrétaire* will seldom descend to anything more serious than the composition of those many-paged epistles so dear to the feminine heart; or, at the other extreme, we shall find the room to be devoted to the exclusive use of one member of the family, a professed *littérateur* it may be, to whom perfect quiet and a certain freedom from interrup-

tion during working hours are essential conditions of success, and across the threshold of whose work-room, therefore, no unbidden footsteps may inconsiderately pass.

Now, each of these rooms will evidently require a distinctly different treatment from the other, both as regards position upon the thoroughfare plan, and isolation from or communication with other apartments of the suite. One thing, however, they

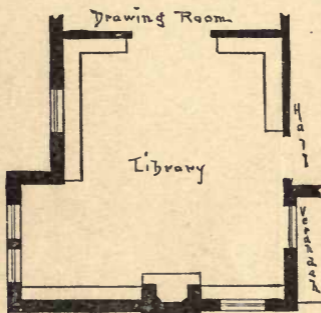


FIG. 56.

will have in common—they must each provide sufficient and convenient shelf-room for books, and this point we will first consider a little in detail.

No hard and fast statement can be made as to the exact amount of shelving which will be required per hundred volumes. A rule, which has the sanction of authority,* allows for large libraries ten volumes

* See the letter of Mr. Poole, librarian of the Newberry Library, in the *Library Journal*, Vol. VI., p. 69.

to each square foot of front area of book-cases. This, however, is hardly a safe guide for smaller private libraries, and it will be more convenient and perhaps exact to allow from seven to eight volumes

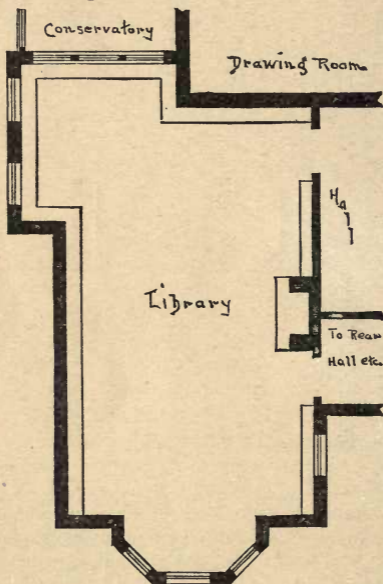


FIG. 57.

per foot run of shelving. This latter rule, however, is merely tentative—a great deal depending upon the character of the library and the special class of books (if any) which predominates.

In small libraries it would be a comparatively easy matter to make an accurate count of the books to be provided for and to arrange the cases accordingly. In any event, the shelves should be movable, so that they may be raised or lowered as occasion may require. As to the best height for the cases themselves—whether they should be low or extend up to the ceiling—that is a matter which can best be decided in each particular case. In ordinary household libraries it is usually much more effective from a decorative point of view—to have the shelving extend no higher than four and a half or five feet above the floor. But in libraries where the books are the first consideration, and especially where any large number of them must be provided for, it will be generally necessary to have high wall cases extending nearly or quite up to the ceiling. It is best, indeed, that if they are to be more than six feet high that they should be carried all the way up, as the top of shelving which stops a foot or two short of the ceiling forms a most unpleasant sort of dust trap. The judicious treatment of the door and window openings as an integral part of the design in such a case makes a very effective room, as many old and some new examples bear eloquent witness. The importance of so placing the shelves that they may at all times of the day receive ample light, should never be overlooked, as nothing is more annoying in a book-room than to be unable to see distinctly the title of each individual volume.

The position of the library upon the thoroughfare plan depends, as has been already noted, upon whether it is to be a general family room or a special workroom. In the former case, it would evi-

dently, with advantage, be placed directly upon the principal thoroughfare and in direct communication with the drawing room, morning room, or dining room, as may be desired or circumstances permit, privacy only to a degree being necessary for a room of this kind. But where the room is to be above all else a workroom, it must be kept well isolated from the general family living rooms with an entrance from the principal thoroughfare and also one from a secondary branch of the same, or even from the service thoroughfare.

Separation is sometimes so urgently asked for that it may be necessary to place the library upon the second or third floor, or even in a partially or, in extreme cases, wholly detached structure. The latter is even quite desirable in the case of large and valuable collections, for which a fire-proof apartment is demanded. A minor point not to be overlooked is to provide convenient and independent communication with the lavatory, if there be one. It is also advisable, where possible, that a veranda be provided, approached only from the library and not extending beyond it in either direction. This will give an open air retreat in warm weather, which, from the nature of its location, will not be liable to intrusion from other parts of the house.

In shape, a library is better oblong than square, for the reason that it so affords better separation when two or more persons are using the room at the same time; for the same reason a large bay window has a practical value, and should always be included if possible.

It may sometimes happen that both a general family reading room and a special literary work-

shop as well are required in the same plan. This want may, in most cases, be sufficiently well met by arranging a smaller room in immediate communication with the general library, but in a more retired position.

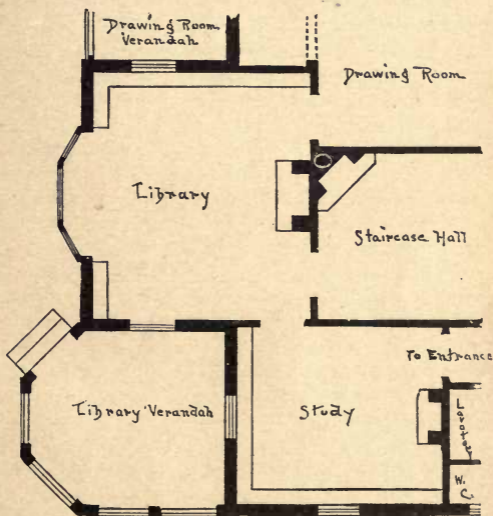


FIG. 58.

Examples of these classes of rooms are shown in the accompanying figures. In Fig. 56 we have a room which is intended to be a general family room, and which is accordingly placed in a prominent position upon the principal thoroughfare and in

direct communication with the parlor. Fig. 57 shows a room intended to be used strictly as a workroom and for the shelving of a large collection of books. Its position upon the thoroughfare plan gives great privacy as well as convenient communication with those parts of the house above noted as desirable.

In Fig. 58 we have an example of the dual arrangement already suggested, in which there is both a general family reading room and a study as well, the latter being private, although arranged *en suite* with the other family living rooms.

All of which may be reduced to the following rules, for convenience of reference :

1. *If used as a general family reading and writing room only, to form a part of the principal suite, opening into the drawing room, reception room, morning room, or otherwise as may be most convenient in each particular case.*

2. *If used chiefly as a literary workroom by some one member of the family, to be on a retired branch of the private family thoroughfare, near the staircase hall. The branch of the thoroughfare serving the room in this case should be exclusively used for that purpose: that is it should not, for instance, be a branch of the private thoroughfare which forms a continuation of the service thoroughfare, so that servants in going and returning between the service rooms and the principal entrance, would not be obliged to pass the library door; should have convenient communication with the lavatory, if there be one on this floor, with a door on a special branch of the service thoroughfare, or two doors on the*

private family thoroughfare, at different parts of it.

3. *If there be a private work room in connection with a larger family library, the former should communicate with the latter by a single door only, and have its own separate door either on the public or private family thoroughfare, as the owner may prefer.*

CHAPTER IX.

THE KITCHEN.

A well-arranged, well-lighted and conveniently-placed kitchen is such an important factor in the successful administration of the "department of the

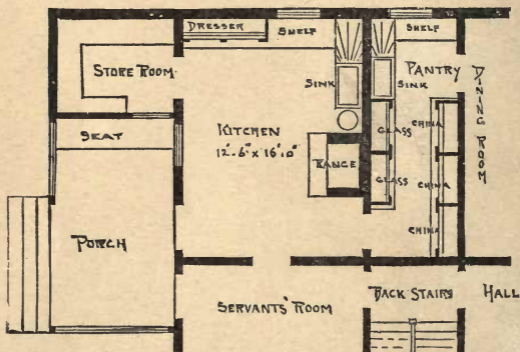


FIG. 59.

interior," that a study of this particular division of the house plan, both in detail and as a whole, is by no means to be neglected by the careful student.

We may take as a type of the complete kitchen the one suggested in Fig. 59. Here we have, as fixtures, the range (which will include all modern adjuncts,

such as a cold oven for heating plates, etc.), the sink with draining shelf, the working table and the dresser. A kitchen which provides all these, well arranged, differs only in detail from the most complete affair of the kind.

The things to be tried for are these : the range well placed in a good light and with ample working space around it ; the sink, table and dresser near by and convenient to each other, and all of them to one

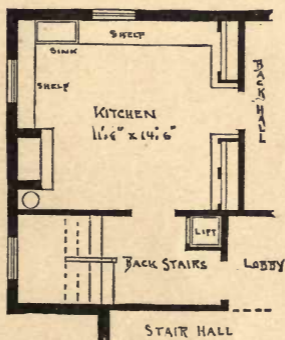


FIG. 60.

side or the other of the thoroughfare through the room from the pantry door (or its equivalent) to the kitchen entrance and back stairs, or in whichever direction the main traffic through the room is likely to take place. In the particular example chosen, all of the conditions are fulfilled, and the ordinary operations of cooking would suffer no interruption from the passing to and fro in connection with other branches of the service. The room should be light-

ed, if possible, by two windows, and these in opposite, or at least different walls, so as to provide ample ventilation in warm weather. It is desirable, also, that the store room should have a window of its own, however small, but placed where it cannot receive the direct rays of the sun, in order that it may not be unduly heated in warm weather.

The conditions of service with us are such as to render it desirable, especially in the smaller class of houses, that the kitchen may be as near the dining room as a due regard to the exclusion of sound and odors of cooking will permit. The location of the dinner route has already been considered in treating of the dining room, and it is only necessary here to call attention to the arrangement shown in this particular example. The position of the pantry doors is especially good, so far at least as that point is concerned, since even if both were open at the same time, little or no annoyance could be caused thereby. This is gained here, however, at the sacrifice of some convenience in the pantry itself, the space in front of the cupboard being little better than a thoroughfare. A pass-window might have been opened over the sinks, but this would have brought the kitchen and dining room into rather too close relationship, and so was wisely avoided.

The servants' room, shown next to the kitchen, is used as a servants' dining and sitting room, and is always a judicious addition to the general scheme of accommodation where more than two servants are kept. It is intended to be a room which the servants may call their own, and where they may be free from unnecessary intrusion, and the use of which will relieve the kitchen of interference and

overcrowding. It should be near the kitchen, if not immediately adjoining it, with a separate entrance from the servants' porch, and it should also have a door communicating with the back stair hall. Its windows should not overlook those parts of the premises where members of the family are likely to congregate, as the tennis courts, summer house and like places, nor is it best that it should command a view of the principal approach to the house. If it should be necessary to place it in such positions, the windows may be high up, so as to give no outlook over the grounds.

As to the aspect of the kitchen, if there be any choice in the matter, it should have a cool corner, such as northeast or north. Usually, however, the kitchen is assigned to any place upon the plan which has not already been appropriated to other rooms whose aspect or prospect is of more consequence. It is often, therefore, found in the northwest corner of the house, the only objection to this particular outlook being that it is likely to make the kitchen unbearably hot on summer afternoons. Some mitigation may be effected in this case by porch roofs, etc., but all sunlight should not be excluded, for sanitary reasons at least.

Of course, if no special room is set apart for a laundry, tubs must be included in the kitchen fixtures, and the size of the room correspondingly increased, but it is always highly desirable that all such washing operations should be kept entirely away from the kitchen and the latter devoted exclusively to its legitimate purposes. In the case under consideration, the laundry is in the cellar immediately below the kitchen, and, as the bath

room is over the pantry, all the plumbing in the house is kept well together, and its efficient working correspondingly ensured. The location of plumbing fixtures in the basement should, however, be avoided, unless, as in this particular case, the house is located on a side hill whose slope affords ample fall for drainage.

Fig. 60 shows a kitchen somewhat differently but still effectively arranged, with different adjustments of the surrounding parts. Here the pantry (not shown) is on the other side of the back hall, adjoining the dining-room.

In Fig. 61 is shown a typical English arrangement of the kitchen and "servants' offices." Such a scheme implies, of course, a corresponding elaboration of the house service and enlargement of the staff of house servants. The divisions of the thoroughfares are carefully differentiated, and the rooms are grouped so as to easily accommodate themselves to the work to be done, due regard being had to the effective separation of the different kinds and classes of work from each other. The motive of the arrangement is the thorough separation of the kitchen and all its operations from the family rooms and thoroughfares, and, though it implies of course increased labor to perform the work, in the hands of a well trained staff of servants would doubtless prove very effective.

The purpose of the "scullery" Mr. Stevenson † tells us "is to remove from the kitchen work which would cause dirt and mess, such as washing pots and plates and cleaning fish and vegetables." The

† House Architecture, Vol. II., p. 89.

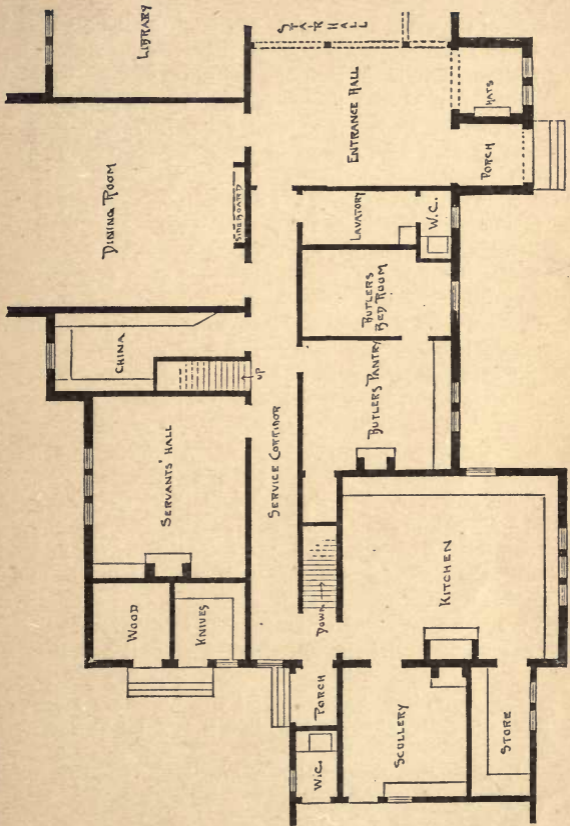


FIG. 61.

use of the other rooms is self explained. The location of the butler's bedroom, though doubtless effective as regards the purpose of its position—the protection of the plate—is scarcely to be commended from other points of view. A comparison of this plan with the one shown in Fig. 38 will be of interest.

This multiplication of the number of service rooms is a marked feature in the design of the larger English houses; and in the plan of a house, now lying before the writer, erected in the year 1884, there are no fewer than twenty rooms upon the ground floor devoted exclusively to the work of the servants, and chiefly in connection with the kitchen service.

The discontent produced among the class from which house servants are usually drawn, by the extension of facilities for obtaining a higher education, together with the attractions offered in the larger towns by commerce and manufactures, must, however, as time goes on, diminish the supply of trained and experienced servants necessary to the maintaining of such elaborate establishments; and until the relations between mistress and maid have satisfactorily readjusted themselves in consonance with the new order of things, we shall have to be content with a less minute subdivision of the service rooms.

We may, therefore, suggest the following rules for the arrangement of the kitchen and its appendages:

1. *To be thoroughly, but conveniently separated from the family rooms and thoroughfares.*
2. *To be well lighted, with a cross draft attainable, if*

possible, by windows in opposite sides of the rooms, but not overlooking the principal entrance or lawn.

3. To be compactly arranged, with reference to the doing of the required work by the smallest number of servants usually engaged in the work of the class of house under consideration.

CHAPTER X.

THE BILLIARD ROOM.

As a billiard room is a not infrequent adjunct to private houses, we will close our consideration of the lower floors of the house with a brief review of the principal points to be attended to in designing this room.

The key to the solution of the problem here presented lies in the statement that the room is simply to be built about the billiard table, including, of course, the apparatus of the game, the players, and such spectators as it may be desired to accommodate.

The size of the room will be chiefly governed by the size of the table or tables to be used. That in most common use is five feet wide and ten feet long, though a smaller size of four and one-half feet wide by nine feet long is adopted where space is limited, as in narrow city houses. We will only consider the first-mentioned size.

The narrowest space outside the edge of the table in which play can be made with the cue in "follow" and similar shots, where it is held horizontally, is five feet. This is the very least that should ever be allowed at sides or ends, while seven feet at the sides and six feet at the ends is more desirable. It follows, therefore, naturally, that the shape of the room will

tend to be oblong, and the least dimensions admissible will be fifteen feet wide and twenty feet long. This makes no allowance whatever for the accommodation of spectators, who should not be permitted to encroach upon the five-foot limit mentioned above, and the seats that it is always desirable to provide for them should be placed on a platform raised above the floor and set back, either in a bay projecting from the side or end of the room, or the platform may ex-

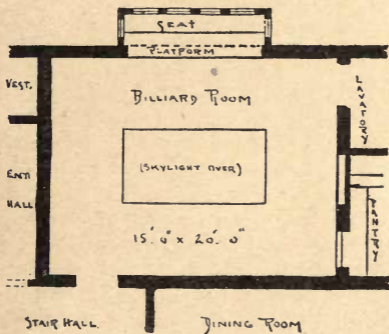


FIG. 62.

tend across one end of the room, which should be lengthened to not less than twenty-three feet to admit it. The general effect of the room will be much better, however, if there be at least one bay window with an outlook toward the principal view.

The next important consideration is the lighting of the room. If the room were only to be used at night, and artificial light depended on, it could, of course,

be controlled as we please ; but, if provision must be made for lighting by windows, we must take care that the room is so placed, as part of the general plan, that ample and properly directed light can always be depended upon. The conditions of play demand that the light shall be as uniformly distributed as possible, in order that the eye, in judging positions and distances, may not be perplexed by confusing shadows. For this reason a top light is much the best, and a room chiefly lighted by a skylight over the table is, of all others, best suited to the requirements of the game. This, of course, implies a room more or less detached from the main building and only one story high. Since this cannot always be managed, particularly in restricted sites, we are usually obliged to adopt the next best arrangement, which is to have a high light—that is, with the windows well up from the floor—on not less than two sides, or, better, three, or part of three, at least. This is in order that the shadows which the balls will cast, even when lighted from two sides, may be modified as far as possible. If the light is well distributed, in this latter case there will be no difficulty of the kind experienced ; the shape of the room and the method of lighting it having been duly settled, it next remains to determine its position upon the thoroughfare plan.

Here, no exact rule can be given which will be sure to include all cases which may arise, but taking the room with respect to its use, as we generally find it in private houses, the case stands about as follows :

The room is essentially a noisy room, as it is also one in which a certain amount of personal freedom

of action will be allowed. Here, too, smoking is admissible as a matter of course. These considerations naturally suggest a position not directly upon the main public thoroughfare, but rather withdrawn upon a more or less retired branch of it. At the same time, being a family room, it must not be so

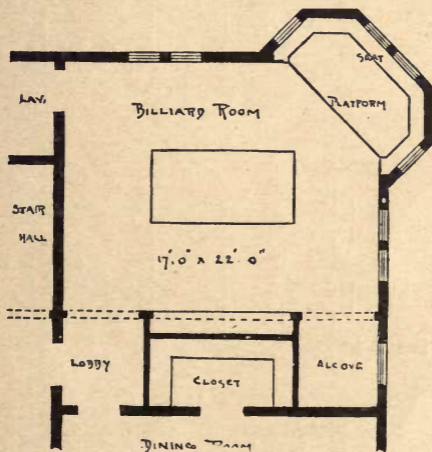


FIG. 63.

far retired as to be wholly upon the service thoroughfare, especially as the ladies are at all times expected and welcomed. Hence we often find it at the front of the house opposite the reception room, but with a door not on the entrance hall, but on a lobby off the main hall, or we will sometimes, and this more especially in suburban and city houses,

find it either in the basement, or not infrequently, in country houses, in the attic. Hence it is best always to ascertain the wishes of the owner when the question of position is to be decided, having first

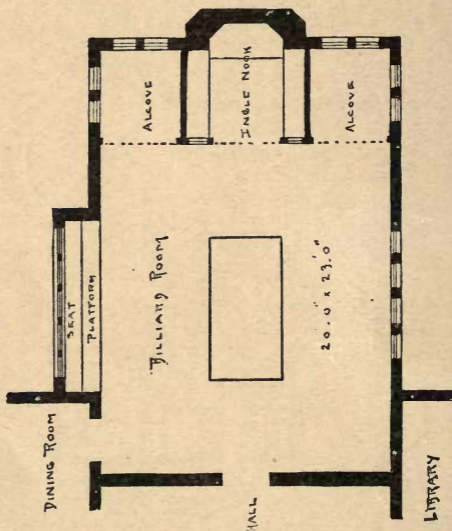


FIG. 64.

made sure, of course, that he appreciates the conditions of the problem.

It is often advantageous that it should have direct communication with the service thoroughfare for the sake of convenient service from the pantry, and it is always desirable that it should be in the imme-

diate neighborhood of the lavatory, though without direct communication between them.

In extreme cases we find the billiard room in an outbuilding, as in connection with the summer-house, or a dancing pavilion, or something of the sort; but this is always more or less of a nuisance in wet weather, when the room is most likely to be used, even when communication is had by means of a covered way, and this arrangement, therefore, cannot be commended.

The only special point which it is necessary to attend to in the construction of this room is to see that the floor is sufficiently stout to prevent vibration, and reasonably level, so that as little blocking up of the table as possible may be necessary.

Fig. 62 shows the billiard room reduced to its lowest terms as to size, but with a top light.

Figs. 63 and 64 show more convenient and larger rooms, the latter from a house at Newport.

CHAPTER XI.

THE BED ROOM FLOOR.

Of the private rooms, the bed room may be taken as a typical example.

This room, and such other similar ones as will usually be found upon those floors, which are above the first, must, of necessity, be largely determined, as to shape, size and position, by the arrangement of the rooms on the principal floor below. Yet there are certain necessities of the internal accommodation of these secondary rooms themselves which must always be met, even to the extent of influencing the disposition of other rooms not otherwise immediately connected in the general economy of the house, and without which they must be rendered uncomfortable, or even comparatively useless.

To say, for instance, that in every bed room there should always be provided a well-considered place for the bed, is to say what, it might be supposed, is too self-evident to need mention. Yet it is quite within bounds to assert that in the majority of plans there is no such careful provision made, and in many of them nothing of the kind has been thought of. Look, for example, at the plan shown in Fig. 65, taken from a book on country houses published not many years since, and which enjoyed not a little popularity at the time. This is the type of room so frequently met with in which the selection of a

possible position for the bed is simply a choice of evils. The author of this plan gives us no hint as to his own views in the matter, and the position which I have indicated is the one which seems to me to present the least difficulties, although it is directly opposite the entrance door and immediately in the way of the traffic between the two bed rooms.

Fig. 66 is hopelessly bad, and is shown because it

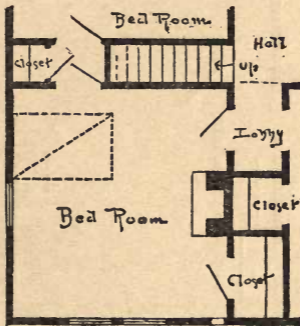


FIG. 65.

presents the example of a bed room plan which combines almost all possible faults, its whole wall space being so cut up by doors and windows that one is at a loss even to suggest a possible place for the bed, much less for the other furniture. The privacy of the room, too, is entirely destroyed by the ground glass windows, on the inside wall, which are supposed to light the staircase hall.

Lest it should be supposed that such warnings are now unnecessary, attention is invited to the plan

shown in Fig. 67 from a more recent work on house planning, the author of which has laid down some sound rules for the practice of this art. But he gives us this plan as an illustration of the application of them, having previously warned us, in particular, that in every bed room, space must always be provided beforehand for a bed lest we be obliged to place it, at the last, across a window or against

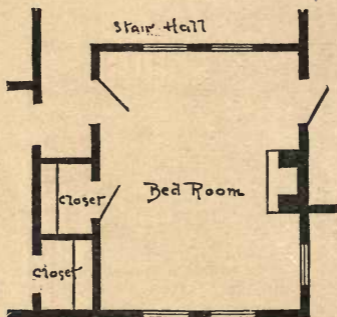


FIG. 66.

the door of a closet, which latter convenience he impresses upon us is an indispensable adjunct to all bed rooms whatever.

We will be quite justified in saying that no other convenience of internal arrangement nor pleasantness of decoration can in any degree compensate for the lack of consideration of that one essential point, and that the first thing to be thought of is, always, the providing of a special and particularly arranged floor space for the bed, well out of the way of all

possible draughts, and away from the light, and not exposed to view from the external hall every time the door to that hall is opened. Other points to be considered are the following: The principal door to be in such a position and so hung that it may be left partly open at any time without at all exposing the interior of the room to outside view; that the bureau should be so placed as to be well lighted during the day from the right side, at least, if not from both sides, and that there may be some place

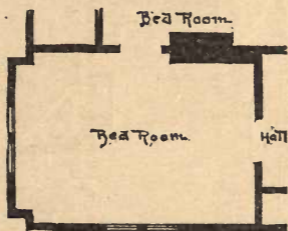


FIG. 67.

for the washstand where it may be in an inconspicuous position and out of the way when not wanted.

Fig. 68 is a suggestion for a good arrangement, on the above lines, of a bed room of moderate size, rectangular in plan, and lighted from two sides. It will be observed that the position of the bed is such that it is not at all exposed when the door is opened and is well out of the way of draughts. It might be turned with the foot toward the wash-stand, when it would be less in the way during the day, but, at the same time, rather nearer than is desirable to the

end window. It need not necessarily, in either case, stand close to the wall, and it is desirable, on some accounts, that it should not. The bureau is conveniently placed and well lighted, and the washstand in an ample but inconspicuous space (which may be still further hidden by means of a folding screen, as suggested), and the door is so arranged as to disturb, in the least degree, the privacy of the

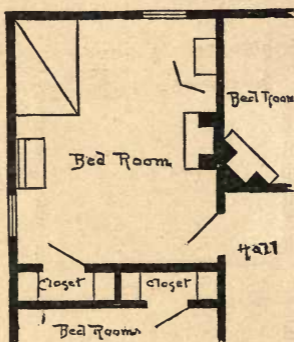


FIG. 68.

room, while the closet door, when open, will admit ample light from the neighboring window, shielding, at the same time, the interior of the closet from view. More than all this could scarcely be accomplished in a room of this kind.

In Fig. 69 is shown a room lit only from one end, but otherwise treated as in the last example.

Although all bed rooms cannot, of necessity, be provided with fire-places, such an adjunct should

always be regarded as a factor of the highest importance in ensuring the healthfulness of the room, not only as giving out at all times a healthful warmth in case of illness, but chiefly because it provides one of the most efficient means of constant ventilation, without some permanent provision for which no sleeping room should be considered habitable.

In most houses, there will generally be at least

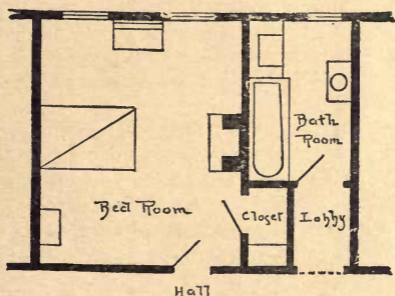


FIG. 69.

one suite of rooms on the second floor, consisting of two adjoining bed rooms, or one bed room with a communicating dressing room; or in some larger houses, a separate dressing room to each bed room.

This principal suite of bed rooms should have the place of honor, with regard to aspect and prospect, should begin near the head of the principal stairs, and end near the bath room. If there be a nursery it, also, should be near one of the bed rooms of the

suite, near the bath room, and, if possible, in direct communication with the service thoroughfare.

The guest room should be, preferably, also near the head of the family staircase, or as near to the bath room as may be. Other bed rooms will be disposed where space occurs, or special conditions warrant.

There are two influences which go to decide the location of the bath room on the bed room floor, which are sometimes not easy to reconcile.

The first, and paramount, conditions, that it shall be so placed as to give the most direct and simple outfall to wastes and freedom of supply pipes from exposure to cold weather. The second is convenience of access.

Considering the latter, first, we may say, that while a prominent position for the bath room, such as at the head of the main stairs, or at the end of the principal thoroughfare on the bed room floor is to be avoided, it may by a little exercise of forethought be brought forward into convenient relation with the principal bed room.

It should always, however, be so arranged that the pipes in the house, especially the waste pipes, should be as directly over each other as possible.

Water pipes of all kinds should be kept from over principal rooms on the ground floor, as great annoyance may be caused by leakages and necessary repairs. With regard to the latter it may be said, that no modern house should be built in which it is not possible to get immediate access to every pipe without cutting of any kind. The screw driver should be the only tool required.

The bath room should, if possible, have a sunny exposure, and should above all be well lighted, as the health of the house will depend in a large measure on the careful attention to the disposal of the wastes, as light is without exception the most important factor in a sound sanitary administration of the plumbing.

It should be a rule, never to be departed from under any pressure of so-called "convenience" whatever, that every fixture in the house shall receive direct daylight from an outside window.

It is always highly desirable that the bath room and water-closet should be separated, so that it may be always possible to use one without the other. They may preferably be placed next each other and served by the same soil pipe.

A lavatory on the ground floor in an inconspicuous branch of the private family thoroughfare, for the use of the gentlemen of the family, will add immensely to the comfort of every house, however small.

This is not the place to write a disquisition on plumbing and sewerage, nor is it necessary. It has been well done by experts who are fully qualified.*

The writer would only, therefore, record his conviction that simple plumbing, automatic so far as possible, well lighted, and given as much attention in the way of dusting and general cleaning as the bric-a-brac usually receives in well regulated households, may be used with the utmost confidence that it will in no way endanger the good health of the family.

*See, especially, *Hints on the Drainage and Sewerage of Dwellings*, by Wm. Paul Gerhard, C. E.

CHAPTER XII.

CONCLUSION.

These pages are brought to a close not because the subjects first suggested for discussion have been exhausted, or that even all of them have been treated of, but rather that this book of "Notes" may not become unduly large.

Such important topics, therefore, as stairs and staircase balls, the development of thoroughfare, prospect, and others which must needs be taken account of were this intended as a complete introduction to the art of house planning, are left for the opening pages of another volume.

The synthesis of plan; the proper co-ordination of its component elements, with reference to mutual accommodation, as well as to other principles not here discussed—symmetry, expression, relation to façade, and more—must follow the study of the elemental principles outlined in the preceding chapters.

All, then, that has been here attempted, is a demonstration of the fact that the right plan, in any given case—the basis of the finished structure in all its completeness, and the true origin of its expression—can never result from a haphazard arrangement of parts, but the orderly outcome of careful, systematic and prolonged study on the part of the

designer. Hence diffuseness of plan, marked irregularity (unless for the production of special and well considered effects) and multiplicity of parts, are not evidences of skilful planning, but rather the reverse. The plan of simple parts and orderly arrangement, which fulfills its functions directly and easily, is almost invariably the result of many trials and much thought.

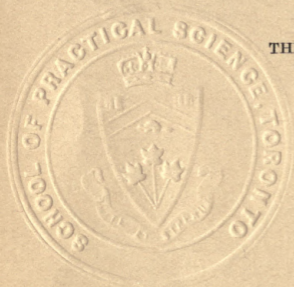
The beginning of a plan, then, should obviously be the setting down, in an approximately right order of the various parts required by all the demands of the problem. After this, the work of cutting down and readjusting, of eliminating unnecessary elements, and suppressing subordinate demands which directly conflict with more important requirements, must be vigorously prosecuted; keeping always in view the desired external effects, (though never subordinating positive internal requirements to those) until we have a result which is natural, effective, and without waste. And, further, let it be remembered that it is the plan which determines the comfortableness of the house. If this be ill and crudely planned, it will be forever a discomfort to the users of it, and a reproach to the designer; but if it be well considered, one of the most important factors of a smoothly working household will have been obtained; and finally, that nothing about a house is so difficult of correction as a defective plan.

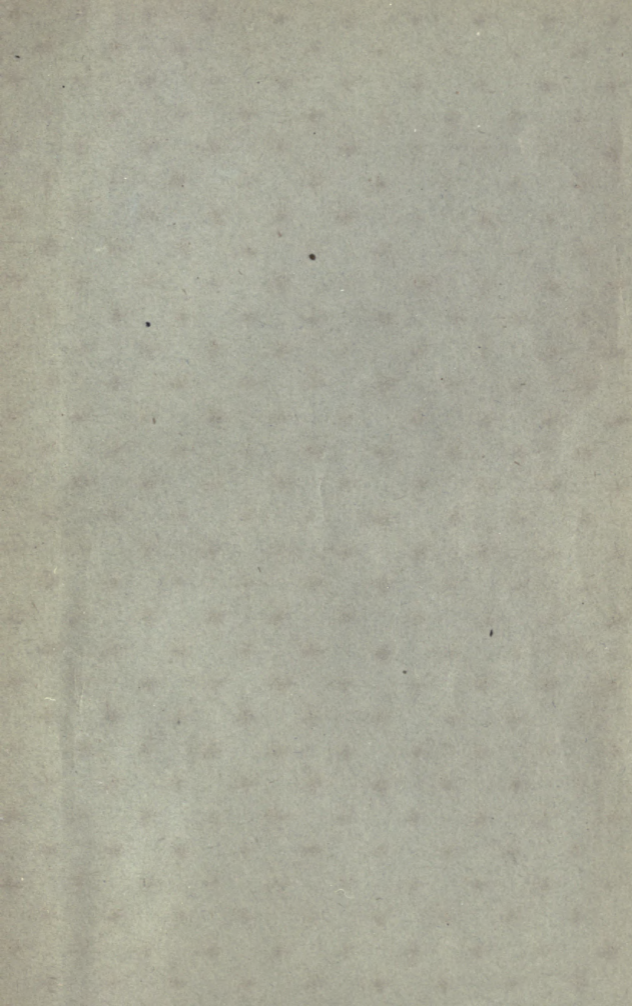
The façade may be altered, or even entirely remodelled in many cases, without unreasonable expense, and the whole external effect entirely changed; but for a radically defective plan, nothing short of tearing down and rebuilding will ever prove thoroughly effective.

It is at the beginning then, and not at the end of a design that we take those important steps which go to determine its character and usefulness.

“Ce n'est que le premier pas qui coûte.”

THE END.







**PLEASE DO NOT REMOVE
CARDS OR SLIPS FROM THIS POCKET**

UNIVERSITY OF TORONTO LIBRARY

NA
7115
082
1888
C.1
ROBA

