

Domestic Science, — Its Influence
In The Home.

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In all achievements we have our ideals. We try to bend every effort toward making that ideal complete. While broad culture is a beautiful thing, it is those who put their whole life into one subject, one intense purpose, that become the running gears in the cycle of life.

Though designated by the homely name, Domestic Science, this subject stands for the highest calling of woman. It is as broad as the world and as deep as life itself. Scarcely a generation ago, Domestic Science first started in America, in the city of Boston. It took its start from the public school work, and this was first conducted under the auspices of the Young Women's Christian Association. Its success led to its acknowledgment as an important factor in education.

Domestic Science found its first departments in the agricultural colleges, and Kansas is distinguished as the first state to place it among her sciences.

In the sequence of the social and physical life, we find that the national life depends on the conditions of the states, and the states upon the homes of its people, and the home upon the home-maker, so, primarily the home is the foundation of it all.

Life is subject to environment, and since it is the home where the character of our lives is moulded, it is not exaggerating to say that the home should be the truest, purest, noblest, place on earth and when it becomes so our nation will become lifted to a higher standard, and strive for higher ideals.

It is the duty of every woman to know how to be a home-maker. But how is she to know all this unless she be taught it. Shall she learn by experience.

This brings us to the question of her education. In primitive times she did not have the advantages of higher training, but lived true to nature,

fulfilling the demands made upon her, but gradually as intellectual development came, as civilization advanced in the course of time and evolution she had to develop to meet her demands. In this rapid age, it is out of reason for her to fulfil her mission without a higher training, which means a development of body mind and soul.

Since the home implies all that is sacred to men and women in life, why then is it considered ignoble, or shrunk from? It is because it has been so neglected and poorly managed. Domestic Science teaches us how to lift and elevate it from drudgery, and make it a science and an art; and when once it reaches this plane, it will maintain its dignity. The woman who knows how to practice and make the application of science in home work will know how to accomplish her own work well and will know the happiness, dignity and value of her sphere.

The outlook for this department in our college is prosperous and progressive. Only those who are continually in the work can realize how much is creeping into this training. College doors have opened, making it possible for women to broaden and deepen intellectually and take their rightful place in the world.

Many of our institutions are designed to train the whole person which is very important; but there is no separate part for women as there is for men. Women are constitutionally different from men, having peculiar gifts and different proportions of intellectual powers. Hence they need special training.

This training goes hand in hand with other sciences, language and art. It is the connecting link between home and school. When the young woman goes from college to her home, her interest and activity is at once aroused to make her home better, and thus she uses her training as a

stepping-stone for her future.

Domestic Science builds up the mind, gives technical skill, cultivates memory, develops new instincts, broadens life and helps to bring out a response for the beautiful. It keeps women out of competition with men, and makes her love home and its work. Her interests keep her from becoming weary of it. Should she marry, she must be able to plan, furnish and manage the home and then her domestic science education will serve its crowning purpose. When so much depends upon her, it is unreasonable that she should not have this special training.

Women are making an appeal for broader education, and for this reason practical home training has found its place in many institutions. It is becoming more prominent in public schools, and reaches many children who never have a higher training. It trains daughters whose mothers do not have time to devote to them, and gives them a love and sentiment for the work.

Educative stands for an all-round development of body, mind and soul. Strong and attractive bodies are gifts. These can be kept only by observing the laws of health, - and if Domestic Science teaches young women to be broader and more healthful, for that alone, it needs a place among the sciences.

Since woman is to plan the home, she must know how to build it to utilize the forces of nature, such as pure air, sunlight, pure water &c, or else she cannot expect health and happiness. To have sunlight there must be a proper construction of doors - and windows, and to have fresh air we must understand using them.

The store-room where eatables are kept must be so arranged that it is well ventilated, yet it is unnecessary to have a large amount of light in it.

The kitchen, if possible should be so arranged that there will be no other room over it and have a ventilating shaft at the top.

The height of the walls is another important factor. They should be 10 or 12 feet high. If too high, they are hard to keep clean.

If the house is heated with a furnace, it must be large enough to heat the whole house thoroughly. Great care must be taken that the pipes do not come in contact with the woodwork for at least $2\frac{1}{2}$ -3 inches and they should be covered with asbestos near these places. These are all important points you consider in home comfort.

The home is an organism in itself. It requires care, and becomes degraded if it does not get it. The woman is the soul of the home, and she must supply this care by the interests she takes in it. Every inch of plumbing in the house should be made accessible and made from good solid material. Cheap plumbing should never be used. How many women know this? When the

When the home is built, it must be suitably furnished. The standard of home furnishing is not one of beauty alone, but of simplicity and beauty. Furnishings that destroy comfort and injure the health are not beautiful. We must know how to secure the maximum of utility for the money expected. Everything should conform to good sanitary conditions. Houses should be furnished so that they can be easily kept free from dust, and on the foundation of cleanliness. The woodwork should be of such a nature that it can be easily cleaned. The germ theory of disease is accepted by all, and it is important that the house-keeper should know how to guard against these germs. The question of cleaning house, fumigating after disease, cleaning carpets, cleaning stoves, properly dusting, papering of rooms &c., should all be considered from the sanitary point of view. Whether the woman is in her own home, or

others, or whether she be a teacher, no matter whether she does it herself or not, it is a knowledge she must have to fulfil her mission.

Sanitation enters this field of knowledge. This subject in its broadest sense, is an axiom incapable of demonstration. Health cannot be maintained without a knowledge of sanitation. This knowledge may, however, be intuitive or acquired.

The ignorance of hygienic laws, of dressing, bathing and ventilation may be traced as the cause of many diseases. Enough could be said to compose volumes but in this composition only a few of the topics which bear on the sanitation of the home will be treated such as dust and ventilation.

People too often consider this subject, not as one that concerns health but as a question scientifically, and only those who are concerned in it are expected to carry out such a plan. Dirt is obscured by the name of

fever-germ bacteria &c., until people are led to believe it useless to try to escape from its omnipresence.

Perhaps we can say that the most perfect system of sanitation depends on these three factors:—

1. Bodily cleanliness
2. Household ..
3. Municipal ..

Bodily cleanliness is one of most vital importance and when it is carried out, the others will also be; because no clean family will live in a dirty house.

Dirt is one of the fiercest enemies we have to contend with. It is the source of putrefaction. It is composed of finely divided material both organic and inorganic.

Uncleanliness about the waste products of disease becomes pulverized and is carried about the air in the form of dust. This comes in contact with our food and water and is in the air we breathe, and thus disease is

produced. Waste matter from the lungs especially contains numerous disease germs. Bacteria is entrapped in the mud; this is carried into the house, becomes pulverized, and in this way disease is spread. In sweeping, great care should be taken to protect one's self, and to use some material such as saw-dust or salt sprinkled on the floor to keep the dust from floating in the air while sweeping. The object is to remove the dust, and not scatter it. The housekeeper who does not understand the nature of this fiend will not observe these simple rules.

Poor ventilation can also be traced as the cause of many diseases. The usual defect is in the want of proper inlet of air. Ventilation is just as essential to the sleeping room as to any part of the house. Draughts should be avoided by the use of screens or substitutes for them. An abundance of it should be all over the house.

An escape for bad air and odors must be provided for. Bad air causes many diseases, — more than the public realize. Ventilating flues and shafts must be built to aid in this. Nothing can answer this purpose better than an open grate in a common old-fashioned house as it gives no perceptible draught.

When sickness is in the home, nothing is more important than to have the proper knowledge of how to ventilate according to the disease at hand.

In a sitting room heated by a stove, ventilation should be provided for by opening opposite windows, one at the top and the other at the bottom keeping the room at $70-75^{\circ}\text{F}$.

Rooms not in use should be aired daily. The cardinal point in ventilation is free circulation.

Equally as important as any is the ventilation of the bath-room which should be opened immediately after bathing.

Sleeping rooms should be kept cooler than the living room. Should cold and hot air pipes be used they must be kept cool and dry and not be brought in contact with sewerage pipes.

If the housekeeper understands these conveniences and the sanitary laws that govern them, she can see that they are inspected and repaired. Sanitation is one of the reform measures; hence it becomes a problem of Domestic Science. Sanitary knowledge should be regarded as it was in the Mosaic times, — a religious duty.

The question of food and its preparation occupies the most prominent place in the consideration of this subject. Food is that matter which can be made soluble and furnish to the body the elements that it requires. Cookery is the preparation of food by the aid of heat so that in its consumption, it may give to the body the greatest nutrition. In con-

sidering food we need to know the nature and composition of the different kinds, and the way to combine them; the action of heat; the physical and chemical action, the process of fermentation; the preparation of them.

Cooking has become a fine art; it requires as much skill as the harmonious blending of colors. It requires a knowledge of the foods and food principles; that the nitrogeous contain the life supporting and life-giving principles, while the carbonaceous furnishes the force and energy producing principles; and that the body requires these in proportional parts. Then comes the question, under what class do foods fall? One question leads to another, and there becomes a vast field of knowledge for the housekeeper to master.

This brings us to the point of economy. How much luxury must we use, and of what quality is it made? Here we

find ourselves dealing with the puzzling question of pure food. The house-keeper must know how to detect adulterations in all the manufactured products she uses. For illustration, take that of baking-powder; it is adulterated with alum, phosphates, ammonia and other materials which are very harmful to the digestive organs. There are but three brands determined by the reliable chemists to be nearly pure: namely;—

1. Cleverlands.

2. Dr. Prices

3. Royal.

Cleverlands is considered the purest made. As a rule adulterated foods are plentiful and cheap, prizes are offered with them. We pay a high price for an inferior article, and a low price for an injurious one.

In the preparation of food three factors are important to observe—

1. Proper selection

2. " preparation

3. " combination

We must select pure food, prepare it according to the laws of chemistry of cookery and combine it so that it will be palatable and digestible.

Growing children require different food from older ones, and those indoors, from those in an out-of-door life.

The plain simple desserts are far better than the highly seasoned foods such as pastries and cakes.

It is a fact that what we eat virtually moulds our characters. Thus we can see how important it is that we know how to prepare our food, and in what proportion to take it in our bodies.

Even though servants are employed, it behooves the home-maker to know what is the best nourishment for the bodies and minds of her family. When she knows this she will be able to produce happy hearts and bright faces around her fireside.

Life is our most precious possession, and its mechanism is indeed delicate. It cannot be supported

rightly or crude, ill-adapted food carelessly cooked. The sustaining power of life comes from the humble processes of the kitchen, then how necessary it is that the one who prepares this food should study the art of wholesome cooking, know the kind of food required and the changes necessary for different seasons. Her thoughtful care will save her family from sickness and over her home will rest the benediction of love and joy. Those who enter it will catch these strains of heart love which will re-echo in their lives.

The relation of the home-maker to the kitchen determines the family life, and it is simply a question whether one cares to work out her own or another's salvation in this matter. For this reason, we need to idealize the lowly tasks and study and plan an ideal kitchen.

It has been said, "what is good for the body is good for the soul." What is given to the body is taken up by the

blood, carried through the veins and
 flows again into the thoughts, feelings
 and purposes of the soul; hence, this
 humble work becomes a soul work.

The kitchen is a laboratory where God
 permits woman to help fashion human
 souls. How shall we do it? First,
 have the very best room for this oper-
 ation of soul-chemistry; have it as
 convenient as possible. Many obstacles
 may hinder, but when it is a question
 of moral progress, work for it, and
 do not consent that "anything" thing will
 do for the kitchen."

Another requisite is a broader ed-
 ucation of the cook, that she may have
 ingenuity and skill. She must know
 the composition and adaptation of foods
 and the need of the human system.
 Then will kitchen life have a cheering
 and redeeming nature. Life is too precious
 to be trusted to those who are not virtuous.
 We do not fully understand how matter
 can be transmitted into soul, but we
 do know that the study of diet is the

study of character building. Many a sin of the soul is the revenge of an ill-nourished frame. "When the gospel of good cooking comes, it will hasten the gospel of redeeming love."

We only have to look about us to observe a whole army of people where wholesome cooking is unknown, and this fact reveals itself in these persons.

It is not that food cannot be obtained, but that it is improperly cooked.

Can we not say then that a girl's education is incomplete without a thorough knowledge of Domestic Science, which includes a general knowledge of household affairs, keeping and care of the home and filling it with cheer.

Let us praise this work in the words of the poet who said. —

"From lowly tasks abundant honors rise,
And the kitchen becomes the workshop of
the skies."

Descriptions of Drawings.

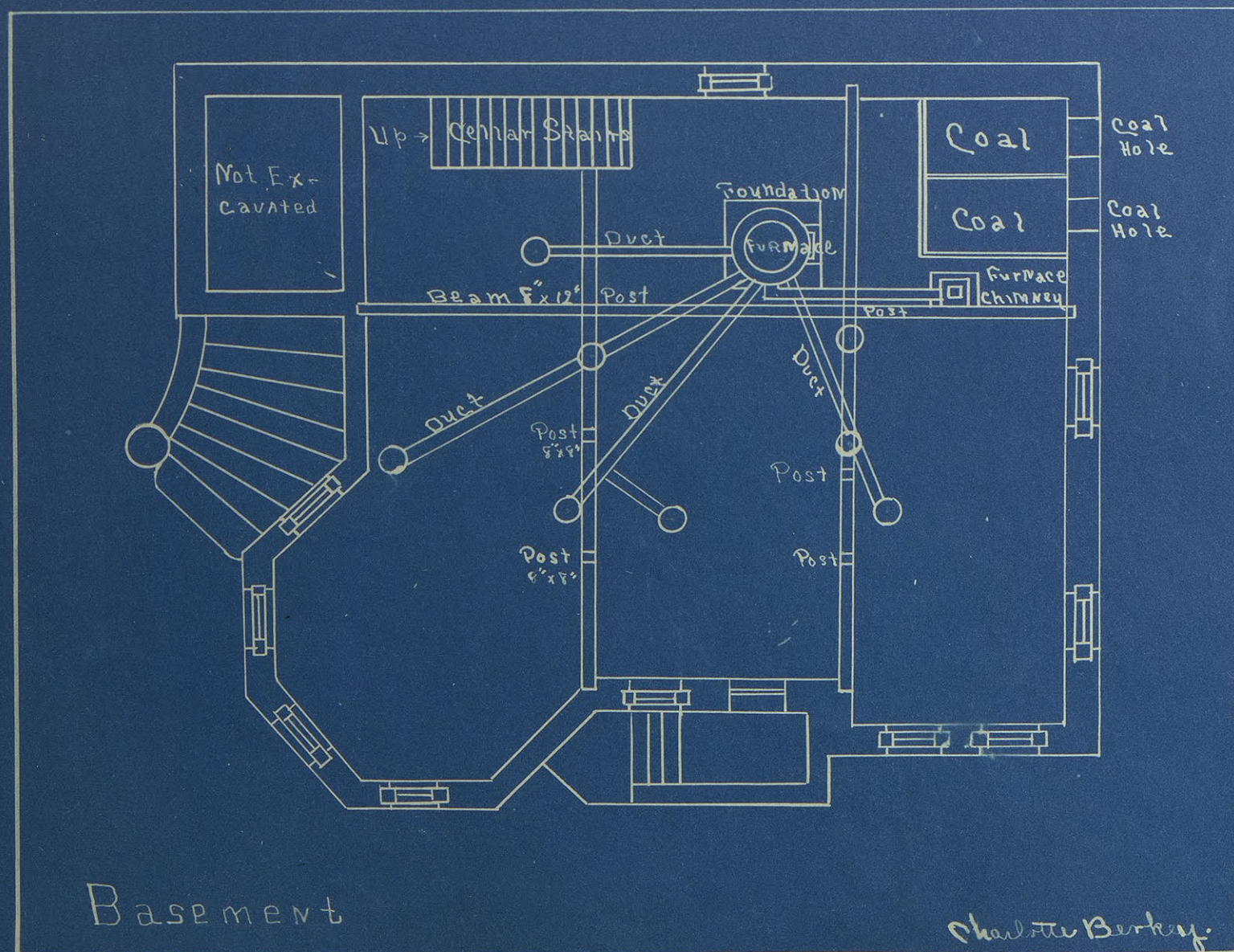
The accompanying drawings show the floor plans of an original modern residence. The building is one story high, with a full basement and a roomy attic. This is supposed to stand on the corner of a suburban lot, the southwest corner would be the most favorable. The best points of its interior arrangement of rooms are —

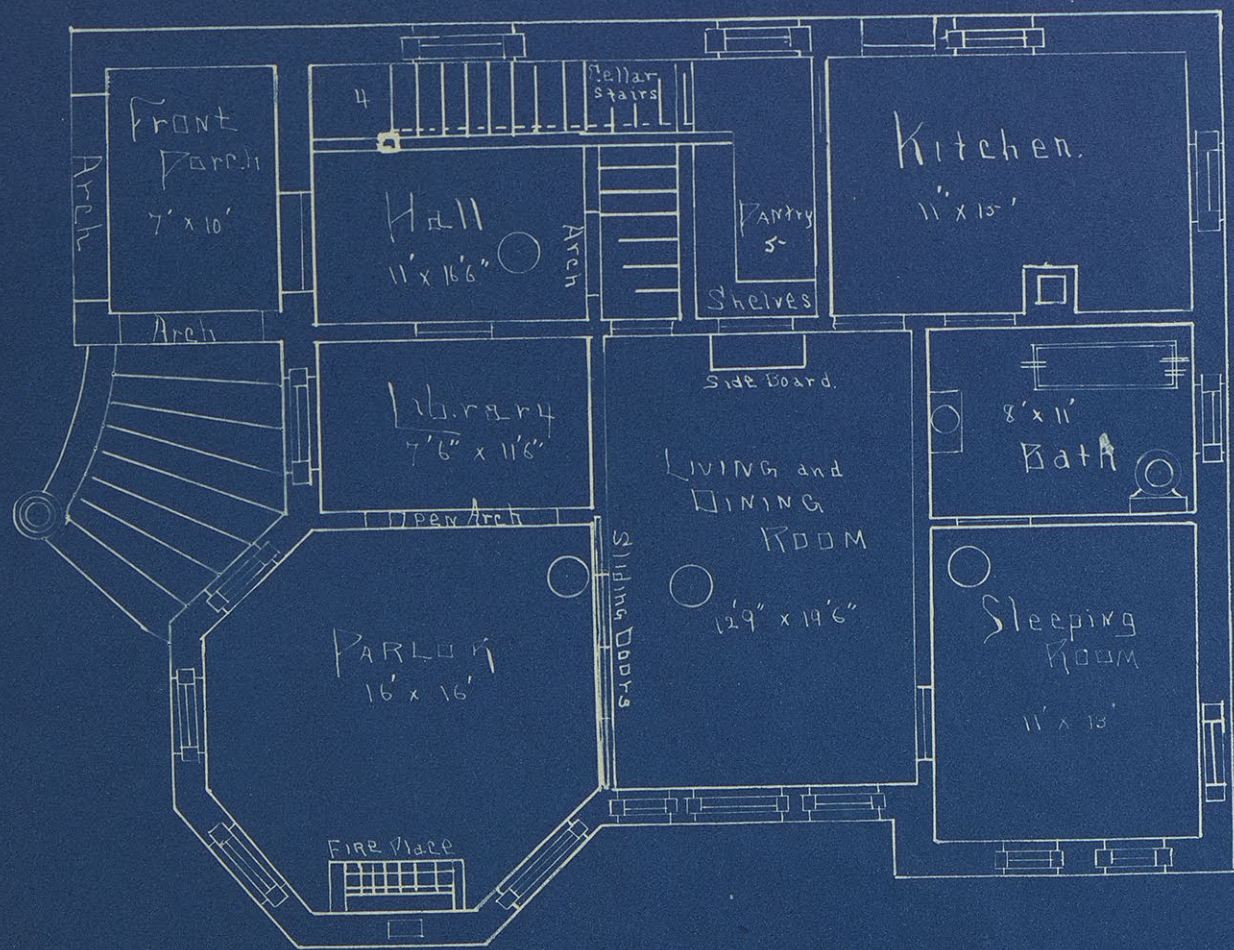
- (1) Large hall with easy stairs.
- (2) Large parlor with reading room, well lighted, ventilated and provided with a fireplace.
- (3) Large dining room with sliding doors to parlor, door to hall, door to Kitchen and a side-board connection with the Pantry.
- (4) The kitchen is in the northeast corner of the building provided with outside doors, two windows for light, and ventilation, a large pantry room, cellarway and a large chimney flue.
- (5). A very favorably located sleeping —

room on the main floor with morning and noon light; a Bath room, and doors to the dining room and kitchen (6). Four fairly large Bed-rooms in the Attic, all provided with heat from the furnace.

(7) Large Basement rooms, with outside stairs, stairs to the kitchen, Hot-air furnace, plenty of light &c.

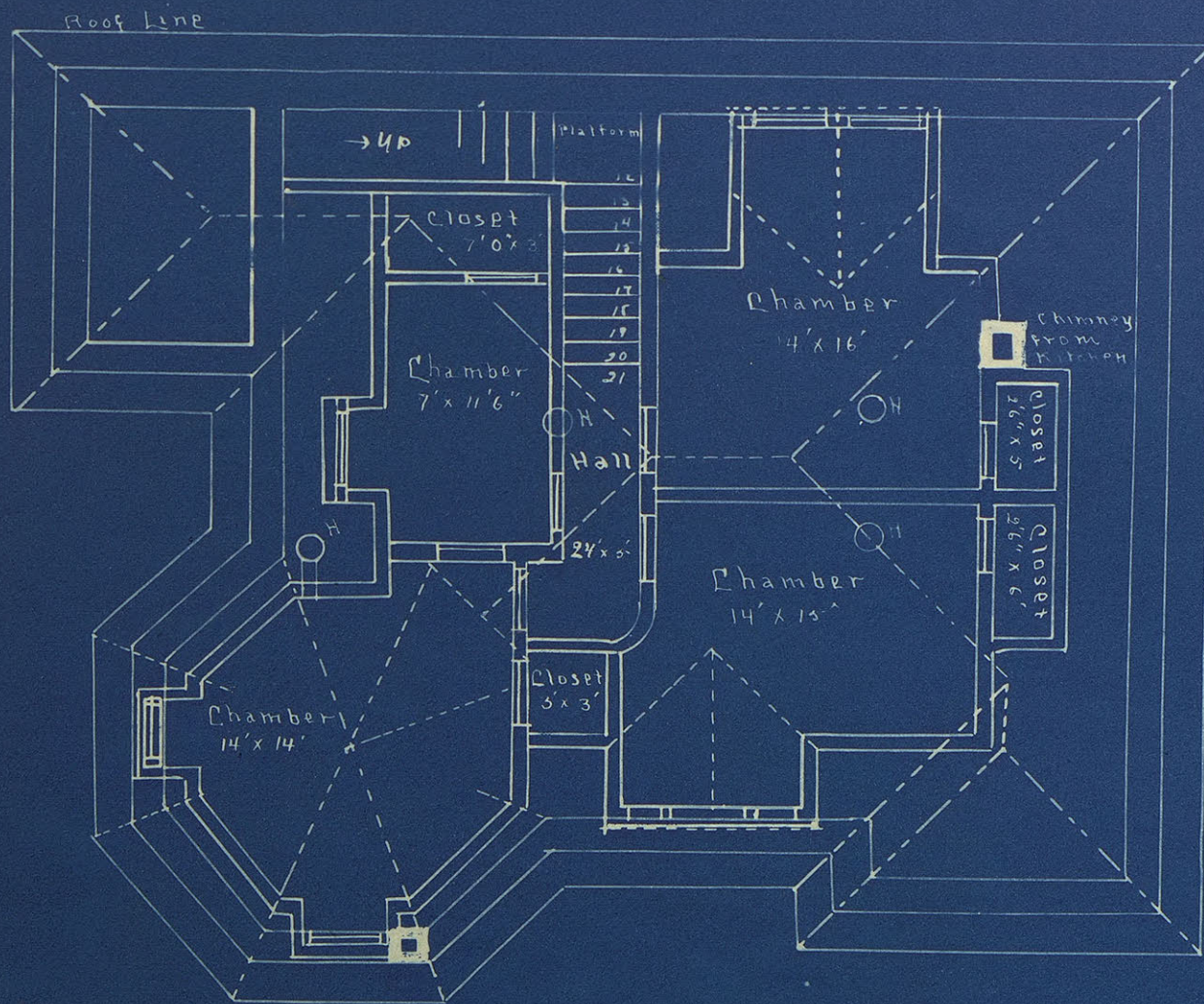
The total cost of the building, completed and provided with furnace would be from \$1850 to \$2000 if built in Manhattan where superior sand and limestone can be procured cheaply.





Main Floor.

Charlotte Berkeley.



Second Floor

Charles W. Barker