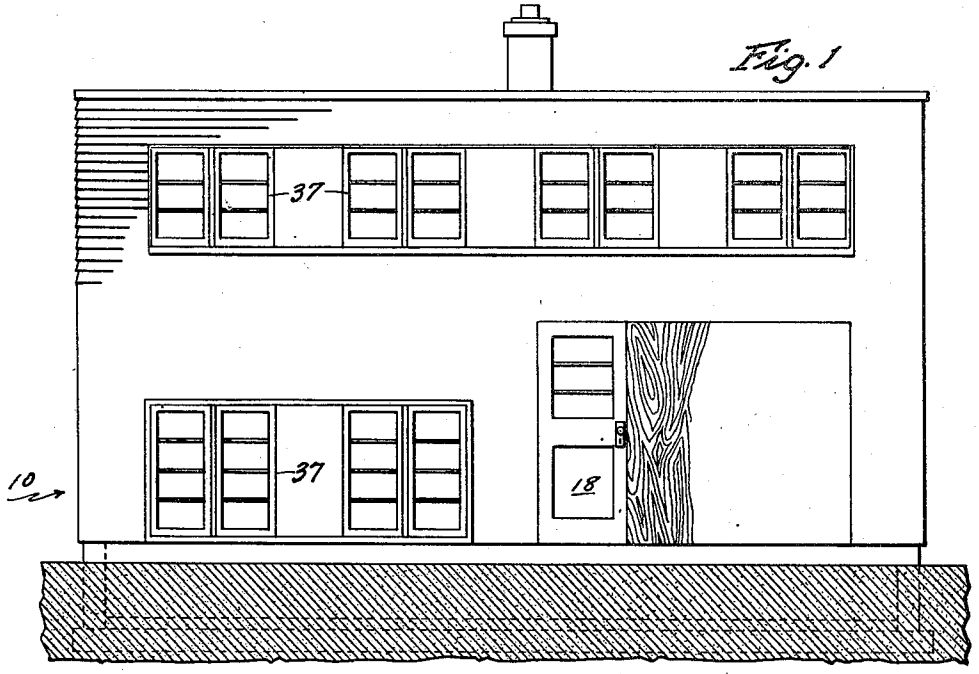
May 31, 1955 E. D. DAHM 2,709,283

DWELLING HOUSE

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Fig. 1



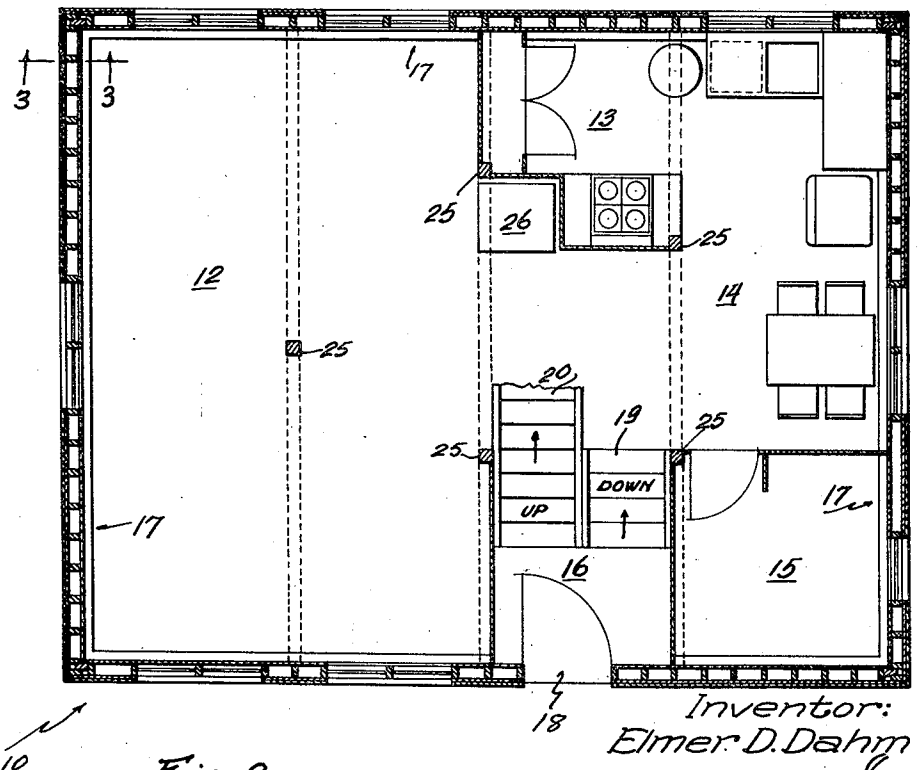


Fig. 2

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DWELLING HOUSE

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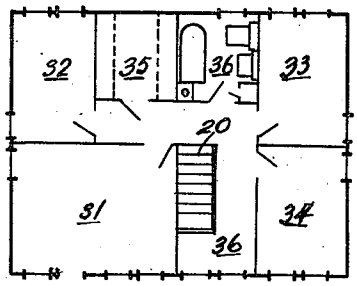


Fig. 5

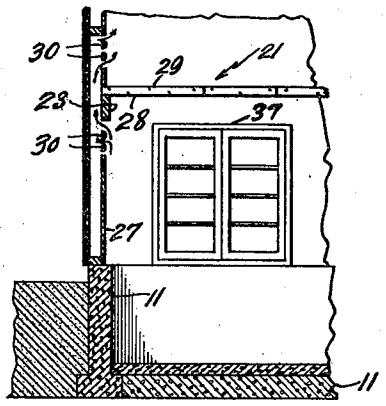


Fig. 3

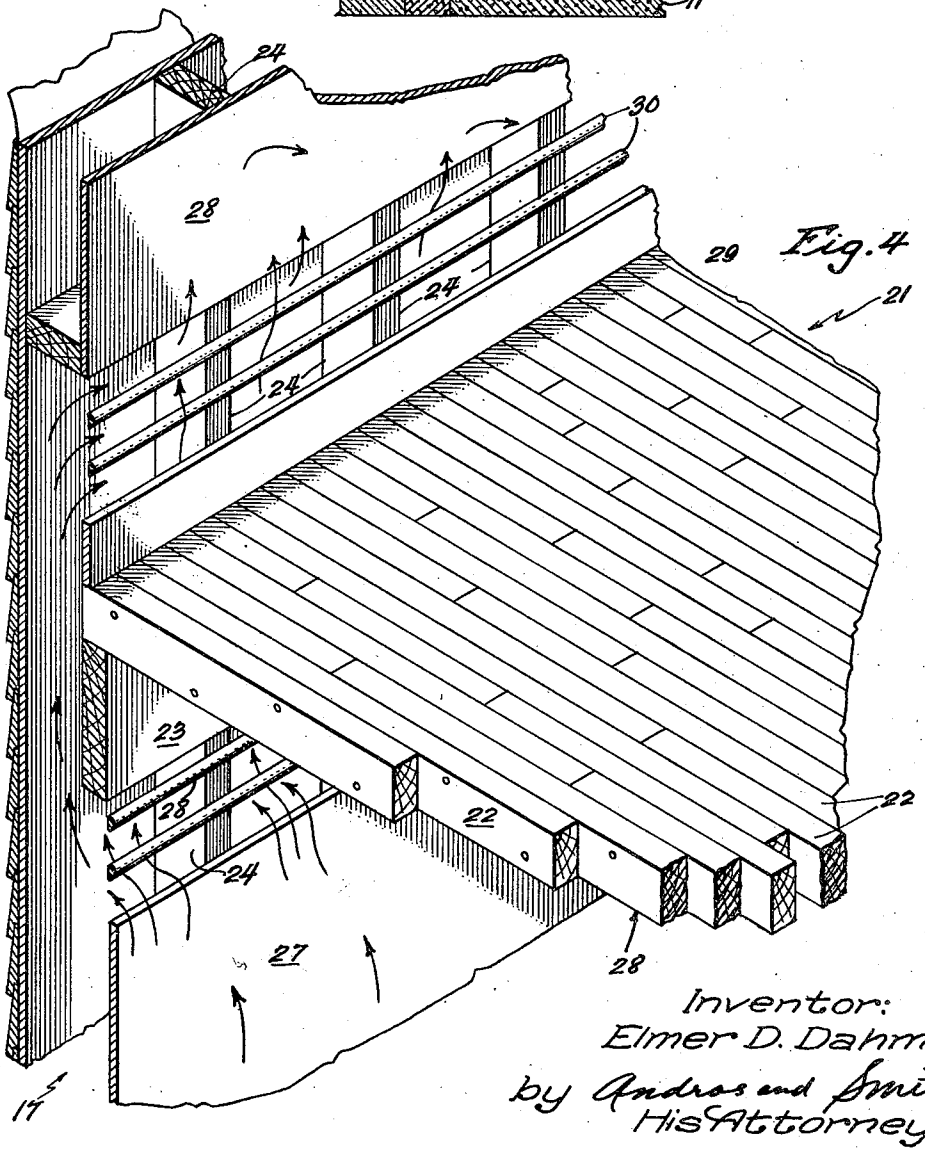


Fig. 4

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2,709,283

DWELLING HOUSE

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Application August 22, 1951, Serial No. 243,050

2 Claims. (Cl. 20—1)

This invention relates to improvements in dwelling house constructions and, more particularly, to novel, single-unit, independent family dwelling house constructions having a sunken first floor, and an upper floor, with novel bed room, bath and closet arrangements, and the provision of such a dwelling house construction is a general object of the invention.

Building construction, and especially dwelling house construction cost of recent years constantly has been suffering a rising trend, apparently without any encouraging indication that a reasonable plateau will be reached in the near future. Certainly, any promises involving hopes for a downward trend as to such costs, it would seem, are rapidly being relegated to the realm of myths. For the average family, with average income, the average dwelling houses provided at the present time are prohibitive and out of reach due to such high costs. Because of scarcity of materials, cheap and inadequate substitutes, and for various other reasons, true dollar value is lacking. Members of the public are not benefited, and true wealth, in the sense of promotion of public welfare, is being dissipated.

The foregoing difficulties and disadvantages have long been recognized in the building and dwelling house construction industry. Indeed, the situation in the last several years has become more progressively acute. It long has been recognized by the industry that it would be a distinct and important improvement to overcome such difficulties and disadvantages, and this now has been accomplished by means of the present invention.

Generally, it is a further object of the invention to provide such a dwelling house that is simple yet sturdy and durable of construction, economic of manufacture, financially well within the reach of the great mass of the purchasing public, and otherwise well suited to all the purposes for which it is intended.

More specifically, it is an object of the invention to provide such a dwelling house of substantially rectangularly shaped floor plan construction having a sunken first floor on which the foundation is a substantial distance below grade so that the side walls, in part, will provide a minimum of heat exchange, an entrance platform substantially flush with the street level, a short staircase connecting the platform and first floor, an upper second floor connected by a long staircase, a centrally located heating unit between the first and second floors, and air circulating means adjacent the ceiling constituting the lower surface of the upper floor, and adjacent the upper floor walking surface of the second floor, to provide a complete air circulatory system between floors.

Other specific objects of the invention are to provide a sunken first floor which is at least 30 inches below grade and in which the entrance platform is common to the short and long staircases, which latter preferably are disposed adjacent each other; in which the upper floor, which constitutes the floor walking surface and the lower floor ceiling surface, comprises planks, or their equivalent, preferably 2 x 4 inches in cross-section, laid on edge

and secured to each other, to produce the floor walking and ceiling surfaces; in which the floor-ceiling unit comprises edge-laid timbers of random lengths, side-nailed to each other; in which the air circulating means includes inner walls which terminate short of the ceiling in the first floor space and short of the walking floor surface of the upper floor space, the exposed portions between walls preferably being covered by suitable grille-work; in which the second floor space constitutes a hallway connected by the long staircase and a plurality of bedrooms having a common closet, all of which are in direct communication with each other; in which the centrally located hallway of the second floor space is connected by the long staircase, a plurality of corner bedrooms, a bath, a common closet and a balcony; in which the sunken first floor comprises a living room, kitchen, dining alcove and storage space or garage; and in which the studding members are set on 12 inch centers, portions of which are eliminated to receive conventional 24 inch standard size windows, the remaining studding, in part, around the eliminated portions providing the casings for said windows.

Other objects of the invention will in part be obvious and will in part appear hereinafter.

The invention accordingly comprises the features of construction, combination of elements, and arrangement of parts, which will be exemplified in the dwelling house construction hereinafter set forth and the scope of the application of which is indicated in the claims.

For a fuller understanding of the nature and objects of the invention reference should be had to the following detailed description taken in connection with the accompanying drawings, in which:

Fig. 1 is a front elevational view illustrating a preferred embodiment of the invention;

Fig. 2 is a horizontal transverse sectional view of Fig. 1;

Fig. 3 is a fragmentary transverse sectional view, taken along the line 3—3 of Fig. 2 and looking in the direction of the arrows;

Fig. 4 is a perspective view, considerably enlarged, of a fragmentary portion of Fig. 3 illustrating a preferred embodiment of the floor-ceiling construction and the air circulatory arrangement; and

Fig. 5 is a diagrammatic illustration depicting a preferred form of the second, or upper floor arrangement of rooms, hallway, bath and the like.

Referring now more particularly to the drawings, there is indicated generally at **10** a dwelling house of substantially rectangularly shaped floor plan construction. It will be observed that there is no conventional cellar utilized but that the foundation **11** is preferably at least about 30 inches below grade. The foundation constitutes, in part, the side walls of the sunken first floor which is made up of a sunken living room **12**, a kitchenette **13**, a dining alcove **14** and a storage space **15**. This latter space may be utilized as a garage. The sunken arrangement of the first floor will provide a minimum of heat exchange so that there is little heat loss, and consequent warmth during the winter season, and little heat penetration during the summer season.

A platform **16**, preferably within the confines of the side walls **17**, provides ready access to the dwelling from the street level through the door indicated generally at **18**. Leading down to the first floor is a short staircase **19** composed of about 5 steps or treads. Adjacent this staircase is a long staircase **20** composed of about 12 steps or treads leading to the upper floor.

The floor walking surface of the upper floor is generally indicated in detail at **21** in Fig. 4 and preferably comprises suitable planks laid on edge, such as, for example, conventional random lengths or even waste, that

is, otherwise unusable short pieces of 2 x 4" in cross-section. As indicated at 22, these are side-nailed to each other and are supported on, for example, the short edges of 2 x 8" planks 23 properly secured in position to the studding 24 at a suitable height around the side walls. It is possible, with proper construction, to provide this floor-ceiling as a unit so that it will be unsupported except for the planks 23 although, it will be understood, that where the span is sufficiently great shoring timbers indicated, for example, at 25 (Fig. 2) may be used as a matter of safety and also to provide members defining inner walls for upper and lower room arrangements. The floor walking and ceiling surfaces thus provided may be suitably scraped or otherwise finished so that no other supplementary construction is necessary.

Any suitable type of heating unit indicated at 26, preferably the so-called space type heater, may be utilized and, as illustrated, is located on the first floor. This well-known type of heater draws in cold air, heats the same and circulates it readily without difficulty. However, in order to provide heat for the upper floor, I prefer to terminate the inner walls 27 a short distance from the ceiling surface 28 so that the studding 24 as well as the inner surface of the sheathing or its wall construction are exposed. On the upper floor, I prefer to terminate the inner wall 28 a short distance from the walking floor surface 29 so that the studding 24 and inner wall surface or sheathing of the outer wall are similarly exposed, thereby providing ready communication for circulating air between upper and lower floors. The termination of the inner walls as just described may be continuous around the ceiling or floor, or only portions thereof may be so terminated. In order to give a neat appearance, I prefer, as a matter of simplicity, to secure to the studding 24 spaced-apart lengths of half-round material as indicated at 30 although it will be understood that any similar, suitable type of grille-work may be used, whether of metal or wood, or other suitable construction material. It is to be understood that shutter arrangements may be provided although this is not illustrated in the drawings.

The arrangement of rooms on the upper floor is very compact yet provides readily accessible quarters for bedrooms, bath, wardrobe space and the like. For example, as schematically depicted in Fig. 5, there is shown, because of this preferred rectangularly shaped construction, four-corner bedrooms. One of these, 31, may be regarded as a large or master bedroom and three others of approximately the same size, that is, bedrooms 32, 33 and 34, are readily provided if unnecessary individual closet or wardrobe space is eliminated from each bedroom itself. However, in order to provide adequate space for wardrobe purposes, a section of the upper floor space, approximately the size of one of the smaller bedrooms, is set aside as shown at 35 in such a manner that access thereto from all of the bedrooms, as well as the bath room 36 and long stair case 20, is readily available. Even an inside balcony 36 may also be provided as an extension of the upper hallway between the rooms 31 and 34 unless it is desired to use this space to enlarge the size of bedroom 34.

The studding 24 preferably is not set at conventional 16" centers but, on the contrary, on 12" centers so that alternate portions thereof when removed provide, in part, casings for conventional type windows 37. That is to say, if a 24" section, for example, of one alternate section of studding is removed, such a conventional size window can readily be secured in position in the remaining space provided therefor.

It will thus be seen that the objects hereinbefore set forth may readily and efficiently be attained and since certain changes may be made in the above described dwelling house construction and different embodiments of the invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention herein described, and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. A dwelling house having spaced, inner and outer walls and comprising a lower story and an upper story; the inner walls of said lower story terminating short of the ceiling a substantial distance, in spaced relation thereto and extending peripherally thereof, and the inner walls of said upper story terminating short of the floor a substantial distance, in spaced relation thereto and extending peripherally thereof to provide for the free flow of air upwardly between said stories; whereby said house may be heated throughout by a space heater located in said first story.

2. A dwelling house, substantially rectangular in plan, having spaced, inner and outer side walls, and comprising a lower story and an upper story; the floor of said lower story being below and the ceiling thereof above the street level to provide space therebetween for windows; an entrance platform within said house intermediate the ends thereof; flights of steps leading from said platform to the floor of said lower story and the floor of said upper story, respectively; the inner walls of said lower story terminating short of the ceiling a substantial distance, providing a space approximately equivalent to the distance said outer and inner walls are spaced apart, and extending continuously around said ceiling adjacent said inner wall and around said dwelling, and the inner walls of said upper story terminating short of the floor a substantial distance, providing a space approximately equivalent to the distance said outer and inner walls are spaced apart, and extending continuously around said floor adjacent said inner wall and around said dwelling in parallel relation to the space around said ceiling to provide for the free upward flow of air between said stories; whereby both stories may be heated by a heater of the space-heating type located in said lower story.

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