May 10, 1960 E. G. DAHLMAN 2,936,083

BUILDING STRUCTURES

Filed Oct. 24, 1957 2 Sheets-Sheet 1

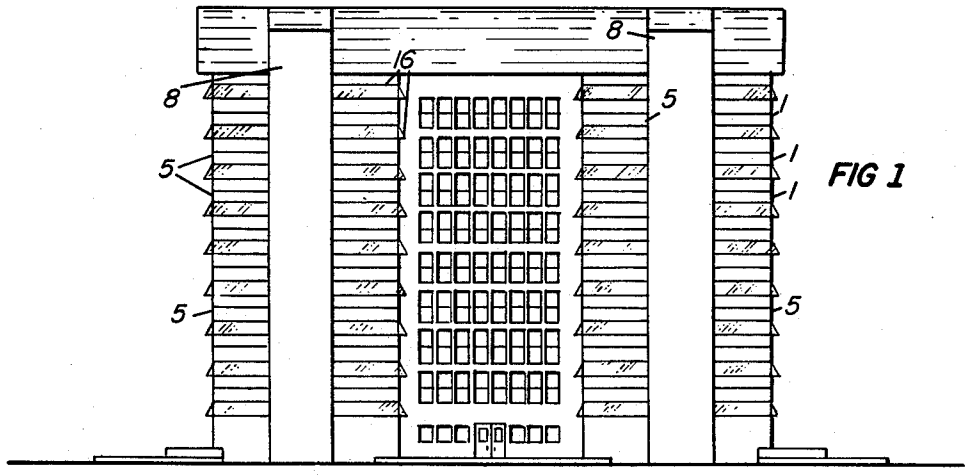


FIG 1

FIG 3

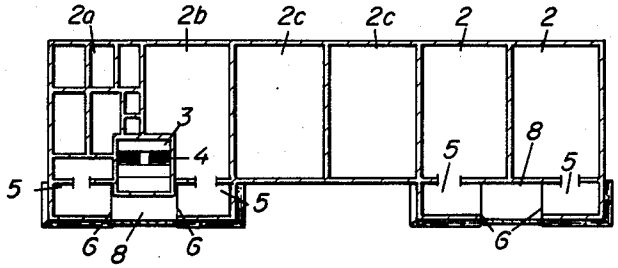
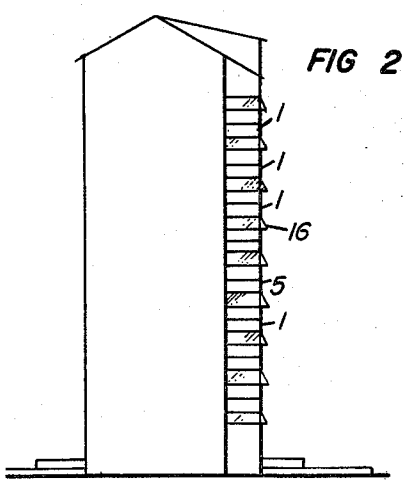


FIG 2



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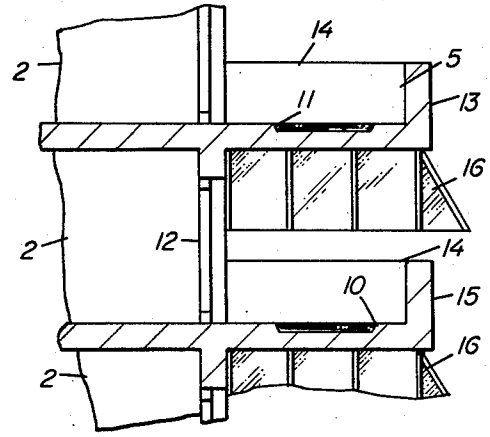
ATTORNEYS

May 10, 1960 E. G. DAHLMAN 2,936,083

BUILDING STRUCTURES

Filed Oct. 24, 1957 2 Sheets-Sheet 2

FIG 5



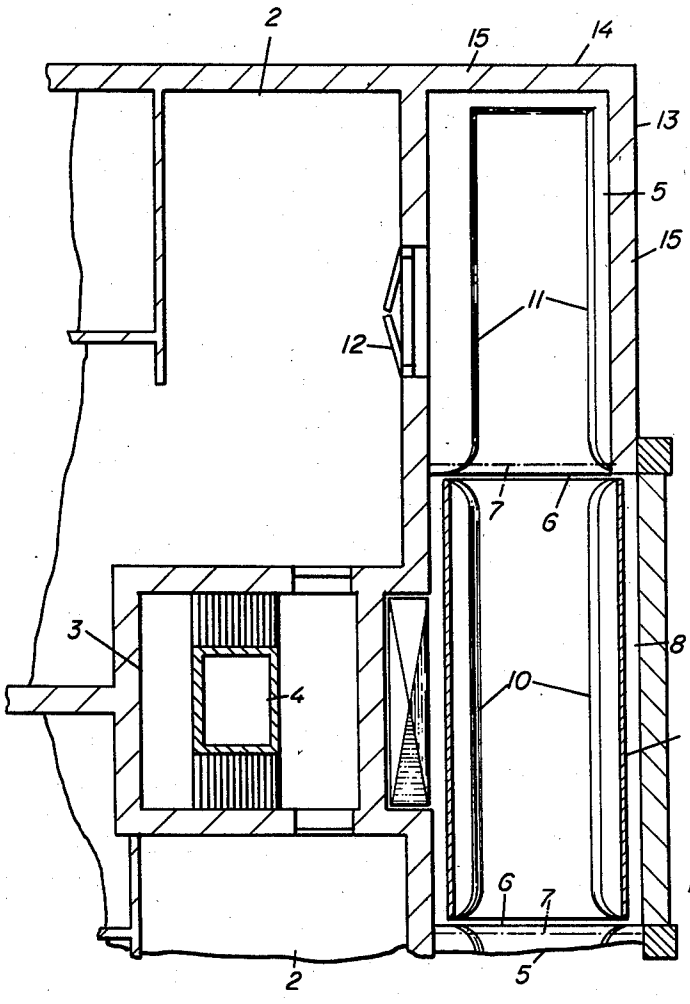


FIG 4

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BUILDING STRUCTURES

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Application October 24, 1957, Serial No. 692,218

Claims priority, application Sweden November 1, 1956

3 Claims. (Cl. 214—16.1)

This invention relates to multi-storied building structures with flats such as apartments, offices or the like in the different stories and with balconies outside the flats for the parking of motor cars thereon.

The primary object of the invention is to provide a building structure in which the balconies are arranged in vertical series and have their one sides, which face in the same direction, connected to an elevator shaft which is common to the balconies in one or more series and from which the balconies may be shut off by means of gates or the like. By this arrangement the tenants of the different apartments in the building will have their motor cars available on the balconies directly outside their apartments so that on leaving the apartment the tenant can get into his car and take the elevator down or on arriving home can take the elevator up, drive onto the balcony, step out of his car and directly enter his apartment.

By reason of the large and ever increasing number of motor cars a car owner often has to park his car at a very large distance from his apartment or his place of work. He may thus have to walk a considerable distance from the parking area to his final goal, and moreover it often takes a long time a find a suitable parking space. The present invention not only makes for an increased convenience of the car owner but also eliminates the risk of the car or its equipment being stolen or damaged. By garaging the motor cars in a building structure according to the invention a very large area is made free in the ground plane so that the buildings can be grouped considerably closer together than when large areas must be reserved for the parking of motor cars outside the buildings in the usual manner. The additional costs required in a tall building for the necessary car elevator and the somewhat larger balconies according to the invention are so insignificant that it will be cheaper for the tenants to keep their cars in a building structure according to the invention than to garage them in the manner hitherto usual.

Further objects of the invention and the advantages gained thereby will appear from the following description, reference being had to a suitable embodiment diagrammatically shown in the accompanying drawings in which:

Figs. 1 and 2 are two side elevations of the building strucutre, taken at right angles to each other;

Fig. 3 is a plan view of the building structure; and

Figs. 4 and 5 are a horizontal and vertical section, respectively, of part of the building structure.

In the drawings, the different stories of the building are designated 1. The flats such as apartments, offices and the like in each story 1 are designated 2. In modern apartment houses several apartments 2 are symmetrically arranged around a stair well 3 containing a passenger elevator 4. In the embodiment of the invention shown in the drawings, two apartments 2*a* and 2*b* symmetrically arranged around the stair well 3 are provided with balconies 5 which are spaced some distance

apart and whose facing sides 6 are entirely open. Said sides 6 may however be closed by means of gates 7 or the like, as is diagrammatically indicated by dash and dot lines. The sides 6 face an elevator shaft 8 which like the balconies 5 is arranged on the outside of the building and preferably opposite the stair well 3 in the building. The balconies 5 in the different stories 1 will thus form two vertical series grouped around each elevator shaft 8. All apartments 2 of the building need not have car parking balconies 5, and so there may be provided between the apartments grouped around the elevator shafts 8 apartments 2*c* without any balconies for the parking of cars thereon.

An elevator 9 diagrammatically shown in Fig. 4 is arranged in the elevator shaft 8 and preferably has its longitudinal sides provided with elevated portions 10. The balconies 5 preferably have corresponding elevated portions 11. Said elevated portions 10, 11 form guides for facilitating driving the car from the elevator 9 onto the respective balcony 5 and vice versa. Suitable stop means (not shown) may be arranged to define the position of the car in the elevator 9 and on the balcony 5, respectively, said stop means being mounted in such a way as to permit swinging them aside. A door 12 leads from the apartment 2 to the balcony 5. In the embodiment shown in the drawings the sides 13, 14 of the balcony 5 whch face away from the building are formed by a railing 15 all cast in concrete and ending at a relatively large distance from the overlying balcony. Mounted at the underside of the last-mentioned balcony and depending therefrom is a preferably transparent shield or protection 16 which either ends some distance above the upper edge of the railing 15 or is formed by doors or windows that can be opened and closed. Said shield protects the car parked on the balcony 5 from falling rain and snow, ensures exchange of air and prevents exhaust gases from the car from penetrating into the apartment.

It is readily understood that the invention can be modified to a very large extent. Thus it is possible to provide existent buildings with balconies and elevators according to the invention. The balconies 5 as well as the elevator shafts 8 around which the balconies 5 are grouped may lie within the contours of the building. In that case, however, the balconies 5 must be formed in such a way as to be open towards the facade of the building to permit ventilation of the exhaust gases from the cars parked on the balconies.

Further modifications are possible within the scope of the invention such as it is defined in the appended claims.

What I claim and desire to secure by Letters Patent is:

1. A multi-story building structure having a plurality of spaces on each floor, a plurality of balconies on said building structure, said building structure having openings therein between balconies and the spaces on each floor, said balconies being in a plurality of vertical series with each balcony in each series being on a level with a floor of said building structure, said series of balconies being in pairs spaced from each other and the balconies in each series having openings on the sides facing the other series of balconies of the pair, a wall between the outer edges of the balconies in each pair of the series defining an elevator shaft between said wall, said balconies and said building structure, an elevator in said shaft having only one platform, and gate means on each of said balconies for closing the openings therein, said balconies and said elevator platform having guide means thereon for guiding the wheels of an automobile.

2. A multi-story building structure having a plurality of spaces on each floor, a plurality of balconies on said building structure, said building structure having open-

ings therein between balconies and the spaces on each floor, said balconies being in a plurality of vertical series with each balcony in each series being on a level with a floor of said building structure, said series of balconies being in pairs spaced from each other and the balconies in each series having openings on the sides facing the other series of balconies of the pairs, a wall between the outer edges of the balconies in each pair of the series defining an elevator shaft between said wall, said balconies and said building structure, an elevator in said shaft having only one platform, and gate means on each of said balconies for closing the openings therein, said balconies and said elevator platform each having a depression therein in which the wheels of an automobile can roll, the depressions in said balconies being aligned with the depression in said elevator platform when said platform is on a level with a balcony.

3. In a multi-story apartment building having a plurality of apartments on each floor, a plurality of external automobile storage balconies on said building structure, each on a level with a floor and adjacent an apartment, said building structure having doorway openings therein between the automobile storage balconies and the adjacent apartments on each floor, each apartment and external automobile storage balcony joined by said doorway opening constituting a unit separate from the remaining units constituted by the remaining apartments and external automobile storage balconies, said automobile storage balconies being in a plurality of vertical series, said series of automobile storage balconies being in pairs spaced from each other and the automobile storage balconies in each series having openings on the sides facing the other series of balconies of the pair, said apartment house and a pair of series of automobile storage balconies defining an elevator shaft between them, an automobile elevator in said shaft having only one platform, and gate means on each of said automobile storage balconies for closing the openings therein.

References Cited in the file of this patent

UNITED STATES PATENTS

461,499	Ernst	Oct. 20, 1891
1,905,229	James et al.	Apr. 25, 1933
2,712,875	Leopold	Aug. 15, 1952

FOREIGN PATENTS

120,169	Great Britain	Oct. 31, 1918