Dec. 25, 1951 H. A. TOULMIN, JR 2,580,204

BUILDING AND PARKING ARRANGEMENT

Filed Jan. 11, 1950 2 SHEETS—SHEET 1

Fig 2

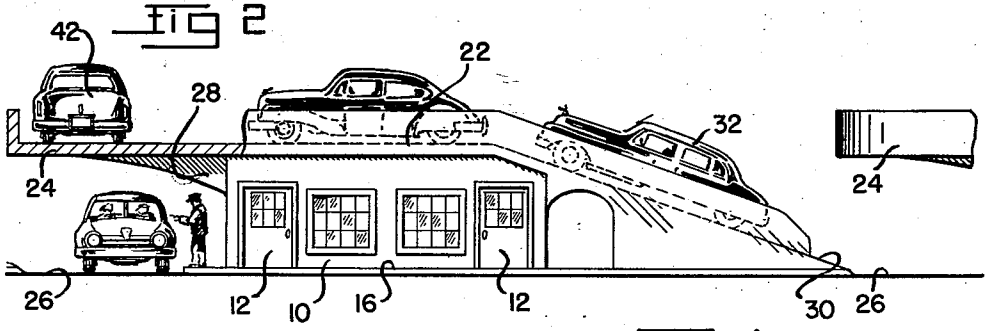


Fig. 4

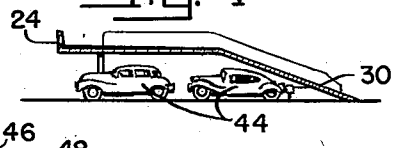
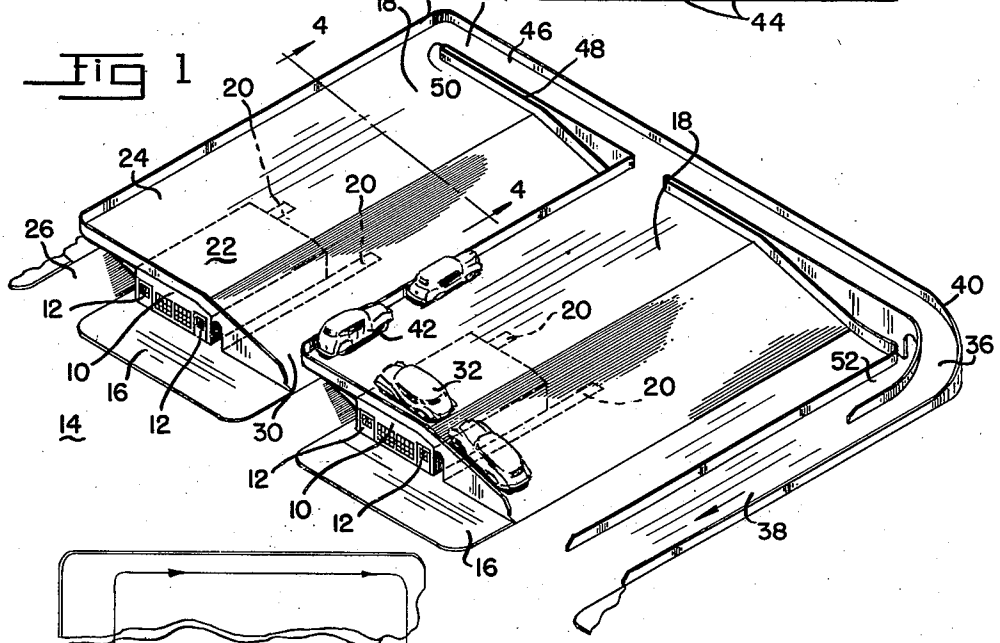


Fig 1



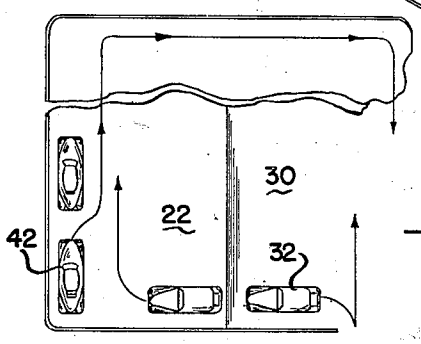


Fig. 3

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BUILDING AND PARKING ARRANGEMENT

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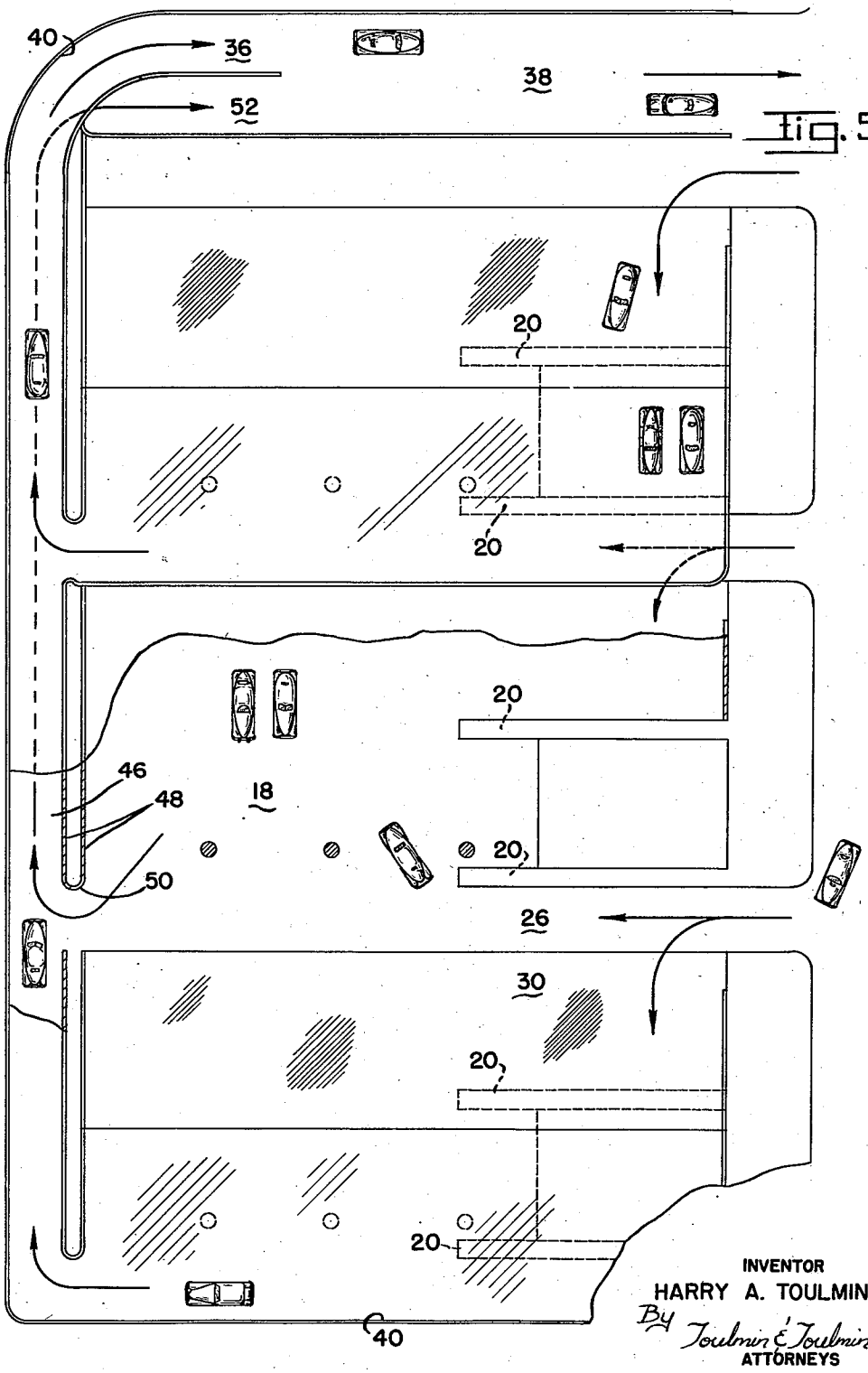


Fig. 5

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BUILDING AND PARKING ARRANGEMENT

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Application January 11, 1950, Serial No. 137,933

5 Claims. (Cl. 20—1.13)

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This invention relates to building and parking arrangements, and particularly to an arrangement of this nature wherein the space available for parking about a building is augmented by the provision of an elevated deck or platform.

In recent years the problem of parking vehicles in business areas has become exceeding acute, and in most metropolitan areas there is so little parking space available, even when off the street parking garages and lots are utilized, that there has been a substantial move toward decentralization and the establishment of shopping centers on the outskirts of cities, conveniently located relative to residential areas.

Even in these cases it has been found that setting aside sufficient ground area for accommodating vehicles during rush shopping hours is quite expensive and uneconomical because the very nature of a development such as a shopping center causes the ground in the immediate vicinity to be quite valuable.

Having the foregoing in mind, the principal object of the present invention is the provision of a building and parking area arrangement especially devised to provide a maximum parking area in a minimum of ground space.

Another object of this invention is to provide an arangerment for parking cars at shopping centers and the like whereby a great number of cars can be parked in a relatively small space and in which the movement of any one of the cars to and from a parking space is substantially unrestricted.

These and other objects and advantages will become more apparent upon reference to the following description taken in connection with the accompanying drawings, in which:

Figure 1 is a perspective view showing a building and parking area arrangement according to my invention;

Figure 2 is a front elevational view of one of the building and parking area arrangements according to my invention;

Figure 3 is a plan view looking down on top of the unit of Figure 2, showing the movement of cars to and from the parking areas;

Figure 4 is a vertical section indicated substantially by line 4—4 on Figure 1 and showing how cars are parked in the ground level parking space; and

Figure 5 is a plan view showing how an arrangement of this invention would appear utilizing three building units each having a parking space arrangement according to the present invention.

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Referring to the drawings somewhat more in detail, it will be noted in Figure 1 that there are two spaced building or store arrangements, as at 10, and each of which may comprise a pair of individual shops 12. These buildings face on a street 14 having a sidewalk area 16.

Arranged rearwardly of each building is a parking area 18, and there may be walkways 20 extending down each side of the buildings 10 for the pedestrian traffic between the stores and the parking areas 18. Preferably, the walkways 20 extend beyond the rear ends of the buildings 10, thereby to embrace an area which may advantageously be utilized as a loading and unloading station for the delivery of supplies to the buildings and the removing of supplies therefrom.

According to the present invention, each building has positioned thereover a platform 22 which extends over the entire upper part of the building and then rearwardly therefrom over the parking area 18. This platform is utilized for providing additional parking space, and preferably includes a portion 24 extending substantially beyond the building at one side so as to overhang the roadway 26 on that side of the building.

This overhanging portion 24 is best seen in Figure 2, and it will be evident that modern engineering practices can provide for this platform to be cantilevered out from main platform 22 by some sort of suitable supporting truss work, as at 28.

On the other side of building 10 is a ramp 30 communicating with platform 22, and this ramp preferably extends the length of the platform and is useful not only as an access ramp for getting cars onto the platform, but is pitched at such an angle and is of such a length that it can advantageously be utilized as a space for parking cars, as will be seen by the car at 32 in Figure 2.

At the rear end of the platforms 22, 24, the platform 24 communicates with an exit roadway 34 that leads to an exit ramp 36 communicating with an exit roadway 38 leading back to the street 14. It will be evident that all movements of cars off the platform will take place in such a manner as not to interfere with the movements of cars onto the platform.

The periphery of the ramp and platform and roadways 34 and 38 and exit ramp 36 are provided with protective rails or stub walls, or the like, as represented by the reference numerals 40.

When two or more of the building or parking area units are arranged in multiple, as shown in Figures 1 and 5, the exit roadway 34 is common to all of the platforms 22 and 24, and this,

of course, gives an even greater economy of space than when only a single unit is employed.

It will be noted that when multiple units are employed, each of the overhanging platforms **24** is positioned over an entrance roadway **26**, and this effects a desirable economy of space, as will be evident in Figure 2 where the car at **42** is parked on platform **24** directly over the space occupied by roadway **26** at the ground level.

The cars which are parked at ground level in the parking areas **18** at the rear of the buildings may be arranged as indicated by the cars at **44** in Figure 4, wherein it will be seen there is space for at least two cars beneath the overhead platform and the access ramp therefor. These cars are parked in such a manner that roadways **26** are not obstructed so that free movement of cars into the parking areas at all times may be had.

The lower parking areas **18** also have an exit roadway **46** which may be directly beneath the exit roadway **34** for the upper parking areas. The roadway **46** is spaced from the parking areas **18** as by the wall arrangement **48** in Figure 5, which also provides support for the platform. Openings **50** in substantial alignment with entrance roadways **26** provide means for driving cars in the said roadways from parking areas **18** into the exit roadway **46**. Exit roadway **46** extends along the back of the units, as will be seen in Figure 5, and then communicates with a branch **52** of exit roadway **38**.

Branch **52** is positioned adjacent the aforementioned ramp **36**, and it will be seen that the exit roadway **38** is common to both the upper and lower level parking areas.

From the foregoing, it will be appreciated that this invention provides for an arrangement whereby a great number of cars can be parked in a relatively small space, a portion of this same space being set aside for a store building.

The arrangement is ideally adapted for shopping centers where a plurality of stores are to be provided, but in connection with which it is desirable to limit the amount of land set aside for parking.

As many or as few of the units desired can be employed, and multiplication of the units in no way creates any problems, inasmuch as the arrangements of the units are such that they can be placed in multiple with no difficulty whatsoever.

It will be understood that this invention is susceptible to modification in order to adapt it to different usages and conditions, and, accordingly, it is desired to comprehend such modifications within this invention as may fall within the scope of the appended claims.

I claim:

1. In a building and parking area arrangement; a building, a parking area behind the building, a platform on top of the building extending over the building and the said area and out beyond the building on one side, a drive along the other side of the building, a ramp extending the length of the platform and having its lower end lying along the edge of the said drive, said ramp being inclined at an angle to permit its use as a parking space, and an exit drive from said platform leading from the rear end thereof.

2. In a building and parking area arrangement; a building, a parking area behind the building, a platform on top of the building extending over the building and the said area and out beyond the building on one side, a drive along the other side of the building, a ramp extending the length of the platform and having its lower end lying along the edge of the said drive, said ramp being inclined at an angle to permit its use as a parking space, and superposed exit drives for said area and platform on the respective levels thereof leading from the rear ends thereof.

3. In a building and parking area arrangement; spaced buildings fronting in the same direction, a parking area behind each building, drives extending between said buildings leading to said areas, a platform on top of each building extending over the associated parking area and outwardly on one side over one of the adjacent drives, a ramp extending the length of each platform on the opposite side and inclined downwardly therefrom to the other of the adjacent drives, a pair of superposed exit drives on the respective levels of said areas and platforms leading from the rear ends thereof, and a common exit roadway leading from said exit drives.

4. In a building and parking area arrangement; a plurality of single story buildings in aligned spaced relation, all fronting in the same direction, a parking area behind each building, a platform extending over each building and the parking area therebehind, a drive closely adjacent one side of each building for gaining access to the parking area associated with the said building, each platform extending over the drive adjacent the associated building, a ramp leading from each said drive to the platform of the next adjacent building and extending substantially the length of the platform, walkways extending down each side of the building leading to the parking areas therebehind, a pair of superposed exit drives leading from and respectively interconnecting the rear ends of said platforms and said parking areas, and a common exit roadway leading from said exit drives.

5. In a building and parking area arrangement; a plurality of units, each unit comprising a building, a parking area behind the building, a drive along one side of the building leading to the parking area, a platform extending over the top of the building and the parking area and the said drive, an inclined ramp on the other side of the building leading to the platform and extending substantially the length of the platform, said ramp being inclined at an angle that permits its use as a parking space, said units being arranged so that each said drive connects along one edge with the ramp leading to the platform of the next adjacent unit, a common exit drive extending along the backs of said parking areas, a common exit drive for said platforms extending along the back thereof at the same level as said platforms, a common exit roadway into which the exit drive for said parking areas leads, and an exit ramp connecting the said exit drive for said platforms with said roadway.

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REFERENCES CITED

The following references are of record in the file of this patent:

Architectural Record, August 1949, pages 118, 119, 130, and 131.