

March 17, 1964

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3,125,189

RESTAURANT WITH ROTATING FLOOR

Filed Aug. 15, 1961

3 Sheets-Sheet 1

FIG. 2

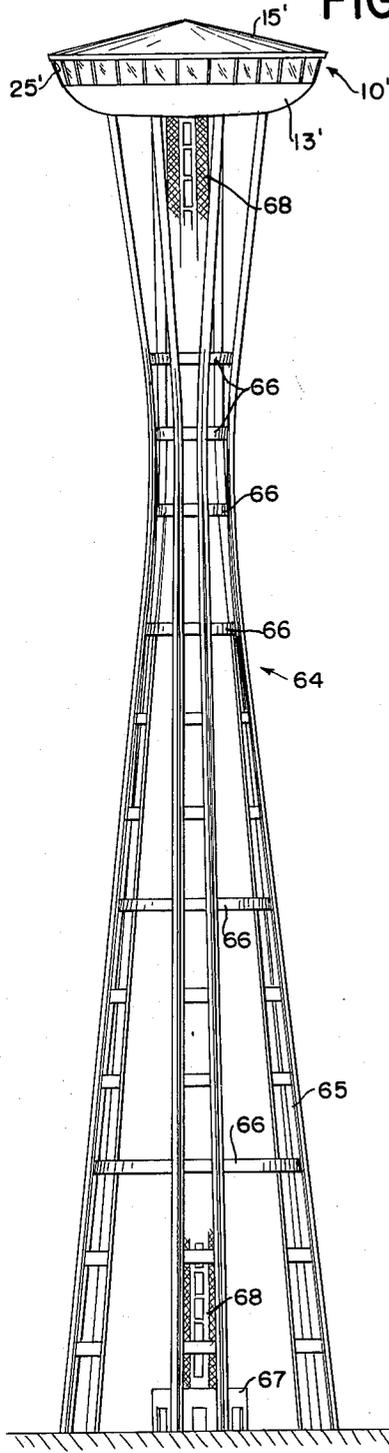
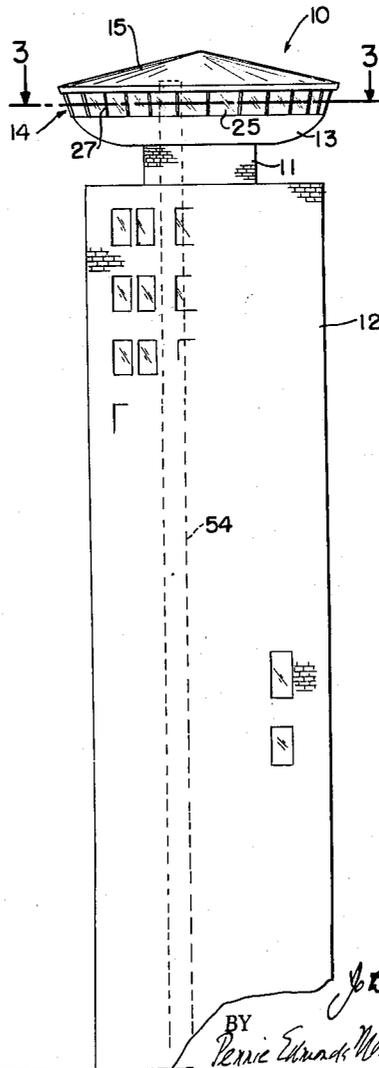


FIG. 1



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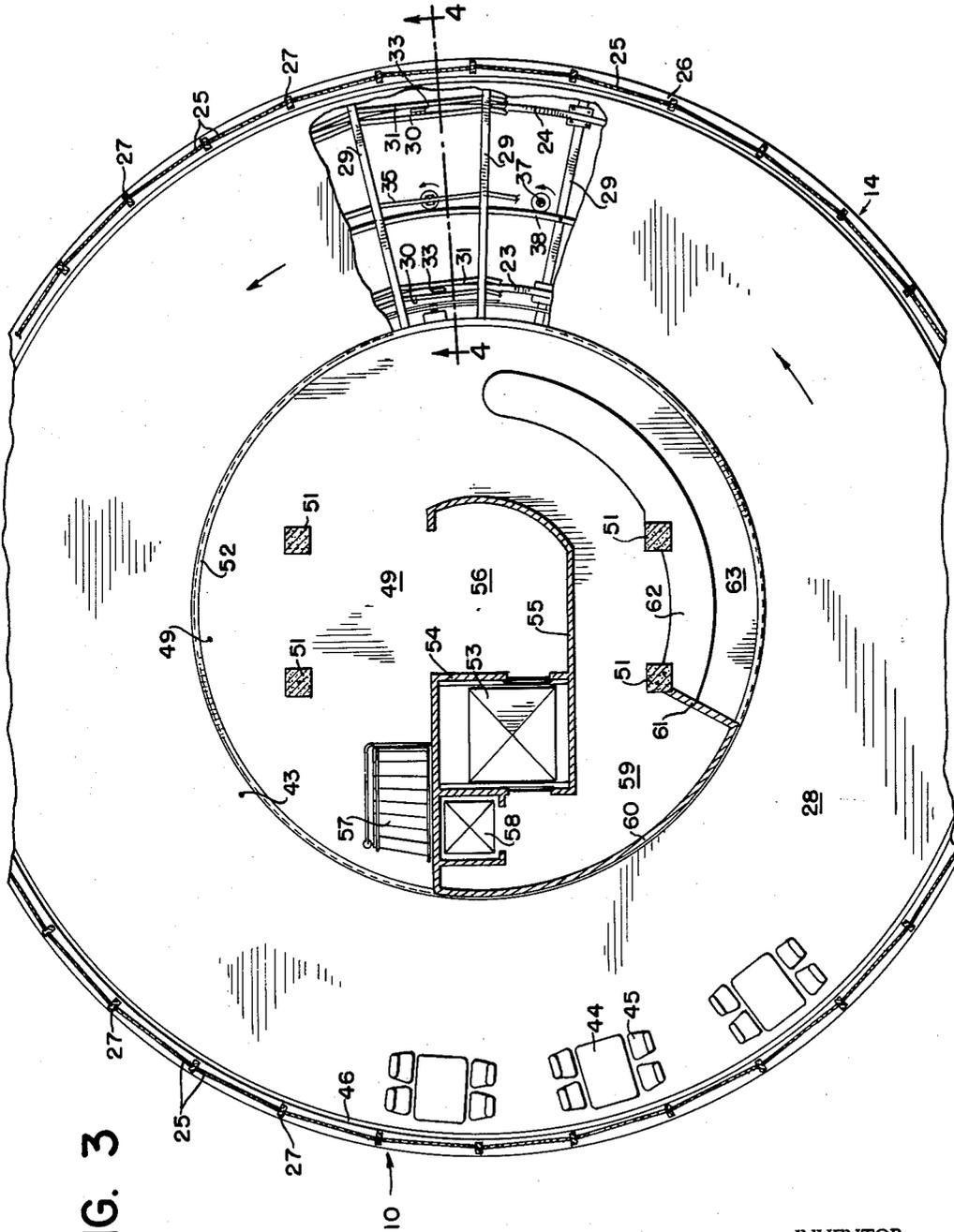


FIG. 3

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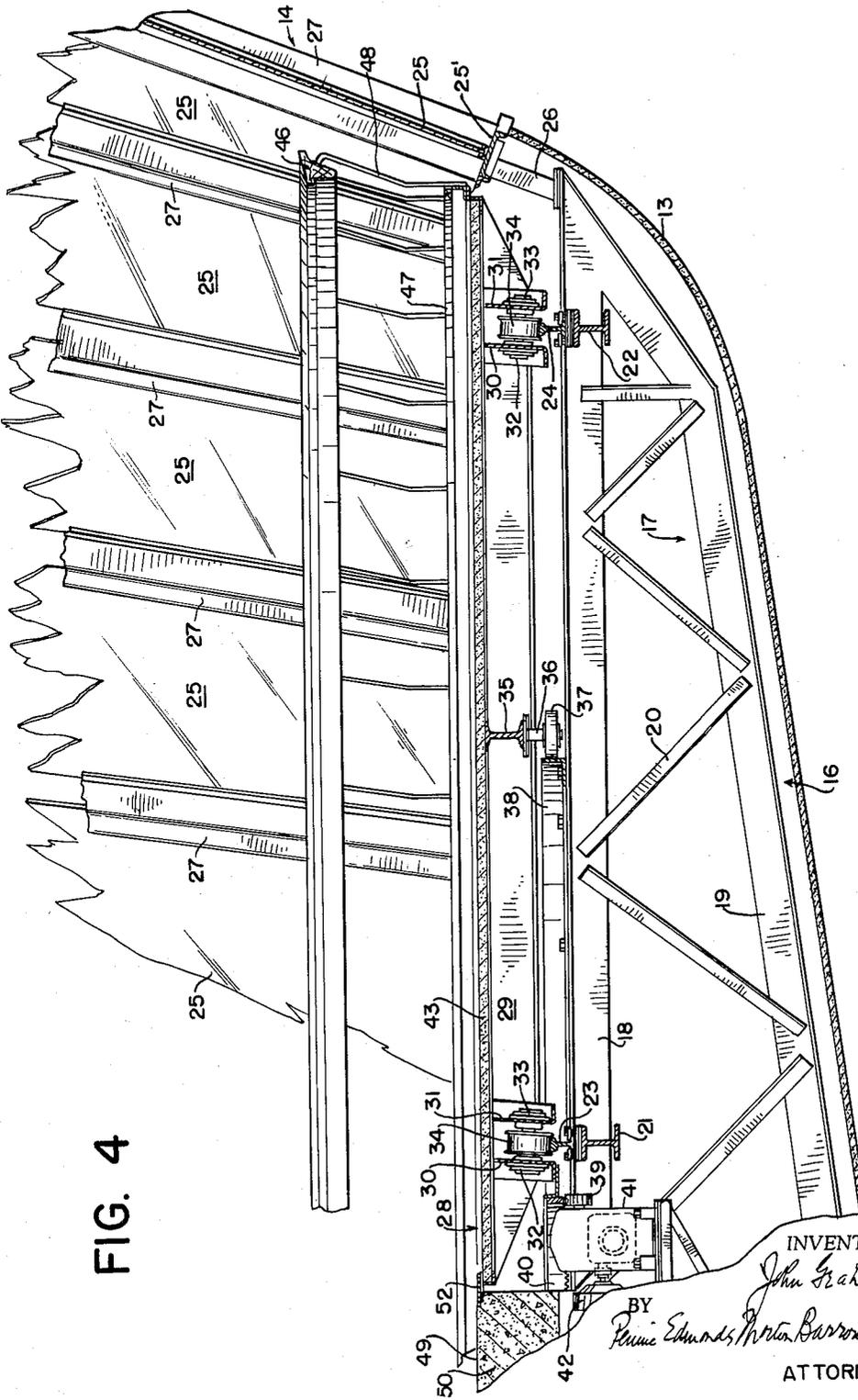


FIG. 4

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3,125,189  
**RESTAURANT WITH ROTATING FLOOR**  
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 Filed Aug. 15, 1961, Ser. No. 131,563  
 1 Claim. (Cl. 189-1)

This invention relates to building structures and is concerned more particularly with a restaurant of novel construction, which is to be erected at a considerable elevation on a supporting structure on the top of a building or on a tower built for the purpose. The new restaurant has an outer wall formed mainly of transparent panels and, in order that the patrons may enjoy the panoramic view afforded by the elevation, the dining area has a rotating annular floor equipped with tables and chairs and having its outer edge lying close to the outer wall. The central area of the annular floor is closed by a stationary floor, which has one or more openings for the means of access to the dining area. Such access means may be an elevator or stairs within the tower or supporting structure and the area on the stationary floor around the access opening may be used as the entrance lobby. The stationary floor may also provide a service area furnished with equipment for preparing and serving food and beverages, although the kitchen facilities may be on a floor above or below the restaurant.

For a better understanding of the invention, reference may be made to the accompanying drawings, in which

FIG. 1 is a view in elevation of one form of the new restaurant on a supporting structure rising from the top of a building;

FIG. 2 is a view in elevation of a form of the new restaurant on a tower;

FIG. 3 is a sectional view on the line 3-3 of FIG. 1; and

FIG. 4 is a fragmentary sectional view on the line 4-4 of FIG. 3.

The restaurant 10 in the form shown in FIG. 1 is mounted on a supporting structure 11 rising from the roof of a building 12 and it includes a bottom enclosure 13, an outer wall 14 made up of transparent panels, and a roof 15, which may be of any desired shape and is shown as conical. A base 16 of circular outline is disposed within the enclosure 13 and the base may be of any desired construction. The base shown is formed of radial frames 17 made up of upper and lower members 18, 19 connected by transverse members 20, the frames being connected by beams 21, 22 on which are mounted rails 23, 24 forming spaced concentric tracks.

Glass panels 25 are mounted in a circular series on a peripheral sill 25' carried on supports 26 rising from the base near its outer edge. The peripheral sill 25' extends outwardly from adjacent the annular floor 43 at approximately the level of the annular floor and bridges the space between the annular floor and the upper peripheral edge of the bottom enclosure 13. Adjacent panels 25 are separated by mullions 27. The panels and mullions extend upwardly and outwardly from the base to the roof 15 to protect the patrons of the restaurant against glare.

An annular floor structure 28 is mounted for rotation on the tracks 23, 24 and the structure includes radial beams 29, which are connected by spaced pairs of angle members 30, 31 provided with bearings 32, 33 for the journals of flanged wheels 34, which run on the respective tracks 23, 24. The beams 29 are also connected by beams 35 which carry vertical shafts 36, on which are mounted wheels 37 engaging a cylindrical surface provided by the vertical flange of a circular angle iron 38 secured to the tops of the frame 17 of the base. The annular floor structure is rotated on the tracks 23, 24 by a pinion 39 which meshes with a ring gear 40 mounted on the angle mem-

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bers 30. The pinion is fast on the output shaft of a speed reducer 41, the input shaft of which is driven through a variable speed drive 42 by a motor not shown.

The floor 43 of the rotary floor structure 28 is of any suitable material and provides the dining area which is equipped with tables 44 and chairs 45 in any desired arrangement. Preferably, one circular series of tables lies close to the outer peripheral edge of the floor 43 and, to keep patrons of the restaurant from stepping off the floor, a railing including an upper rail 46 and a lower rail 47 is mounted on balusters 48 attached to the structure 28 along its outer edge.

The central opening through the annular floor structure is closed by a stationary floor 49, which may be of any suitable material and construction. The stationary floor is shown as including a concrete slab 50, from which rise columns 51 supporting the roof, and it is provided with a peripheral extension 52 overhanging the edge of the rotary floor structure 8 to close the gap at the inner edge of that structure.

Access to the restaurant may be had by means of an elevator 53 in a shaft defined by partitions 54 and a part of the partitions forms a wall 55 partially enclosing an entrance lobby 56, to which the elevator is open. Access to the restaurant is also provided by a stair 57 and a dumbwaiter or service elevator 58 may also be provided.

A part of the stationary floor 49 adjacent to the service elevator 58 is used as a service area 59, which is isolated from the dining area by a curved partition 60 extending along the periphery of the stationary floor from one of the partitions 54. A radial partition 61 extending inward from the partition 60 continues the enclosure of the service area and leads to a curved serving counter 62 disposed inwardly from the edge of the stationary floor to provide a curved serving area 63, at which the waiters may obtain food and beverages from the counter.

In the operation of the restaurant, the food may be prepared in kitchen facilities within the supporting structure 11 or within the building 12 and delivered by the dumbwaiter or service elevator 58 to the service area 59 of the floor 49 and then placed upon the serving counter 62. Facilities for preparing beverages will ordinarily be provided within the service area 59, and the waiters pick up the food dishes and beverage glasses at the serving counter and carry them to the tables, while the used dishes and glasses are returned to the counter by the busboys. A check room may be provided on the stationary floor close to the entrance lobby 56 and, after checking their wraps, the guests walk to the rotating floor and are conducted to their seats. The rotating floor is rotated slowly and the diners have an opportunity to see the entire panoramic view at least once during the course of an ordinary meal.

The restaurant 10' shown in FIG. 2 is mounted on top of a tower 64, which may be of any desired construction and height and is shown as formed of columns 65 made of upright structural members connected at intervals by horizontal members 66. A small entrance building 67 is disposed within the base of the tower and is connected to the restaurant by a shaft 68 which houses one or more elevators and stairs. The restaurant is provided with an annular dining floor like the floor 28 and a central stationary floor like the floor 49, the stationary floor being provided with openings for the elevators and stairs. The restaurant enclosure includes a circular series of windows 25' and the kitchen facilities may be within the bottom part 13' of the enclosure or within the roof 15'.

The operation of the restaurant 10' is the same as that of the restaurant 10 and the diners seated on the rotating floor enjoy a panoramic view. Ordinarily, the tower

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64 will be of great height so that the field of view is correspondingly great. The rotation of the dining area adds much to the attractiveness of the restaurant and insures that all points of interest will come into the range of the diners' vision.

It is to be understood that the building structure of the invention, whether on another building as shown in FIG. 1, or on a tower as in FIG. 2, may include another floor above the dining area, such as an observation floor surrounded with a transparent wall, such as the wall 25, and that various service means may be provided for entering, leaving and serving refreshments, food, and the like.

I claim:

A building comprising a stationary base of circular outline and including a plurality of radially-disposed cantilever frames, an annular floor above and concentric with the base and of an outside diameter approximating that of the base, inner and outer concentric tracks mounted on said cantilever frames, said annular floor having wheels mounted for travel on said tracks, means beneath said annular floor for rotating said floor relative to said stationary base, a stationary floor mounted on the base and lying in the plane of and closing the central opening through the annular floor, a circularly arranged series

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of transparent panels stationarily mounted on the base near its periphery and rising therefrom outwardly near the outer edge of the annular floor, a stationary roof over the floor, means on the base for supporting the panels, a structure secured to the base and supporting it in elevated position, and means of access to the floor disposed within the supporting structure.

#### References Cited in the file of this patent

##### UNITED STATES PATENTS

2,706,538	Schumann	Apr. 19, 1955
2,764,783	Teller	Oct. 2, 1956
2,815,539	Schneider	Dec. 10, 1957
2,927,599	Stetson	Mar. 8, 1960

##### FOREIGN PATENTS

118,150	Germany	Mar. 1, 1901
1,077,858	Germany	Mar. 17, 1960
1,082,034	Germany	May 19, 1960
(Addition to Germany Patent 1,077,858 cited above)		
637,510	Canada	Mar. 6, 1962

##### OTHER REFERENCES

"Interbild," vol. 6, No. 3, page 10, March, 1959.  
 "Popular Mechanics," December 1959, page 113.