THE JOINT EXAMINATION BOARD

PAPER P6

INFRINGEMENT AND VALIDITY OF UNITED KINGDOM PATENTS

Tuesday 3rd November 2009

10.00 a.m. - 2.00 p.m.

Please read the following instructions carefully. ***Time Allowed – 4 HOURS***

1. You should respond to the instructions given at the end of the Client's letter.

2. Please note the following:

   a. Enter the Paper Number (P6) and your Examination number in the appropriate boxes at the top of each sheet of paper;
   b. The scripts are photocopied for marking purposes. Please write with a **dark inked pen** on one side of the paper only and within the printed margins, and do not use highlighters in your answer;
   c. Do not state your name anywhere in the answers;
   d. Write clearly, as examiners cannot award marks to scripts that cannot be read;
   e. **Marks are awarded for the reasoning displayed and the points selected for discussion rather than the conclusions reached**.

3. Under the Examination Regulations **you may be disqualified from the examination and have other disciplinary measures taken against you if**:

   a. you are found with unauthorised printed matter or other unauthorised material in the examination room;
   b. your mobile phone is found to be switched on;
   c. you copy the work of another candidate, use an electronic aid, or communicate with another candidate or with anyone outside the examination;
   d. you continue to write after being told to stop writing by the invigilator(s). **NO WRITING OF ANY KIND IS PERMITTED AFTER THE TIME ALLOTTED TO THIS PAPER HAS EXPIRED.**

4. **At the end of the examination assemble your answer sheets in page number order and put them in the WHITE envelope provided**. Ensure that the answer sheets placed in the envelope are not stapled or joined together in any way. Any answer script taken out of the examination room will not be marked.

Document checklist:

Client's letter	(1 page)
Document A: Client's press release	(3 pages)
Document B: UK Patent No. 2347942	(5 pages)
Document C: UK Patent No. 2269610	(2 pages)
Document D: UK Patent No. 921404	(3 pages)

This paper consists of 15 pages in total, including this page.

You receive a letter from a new client as follows:

"Dear Sirs,
I require your advice in a potential patent dispute. I am the senior partner in a small architectural practice. Last year we won a competition to design a car park for the new BMM shopping centre. A press release explaining our design is enclosed [Document A]. As the winners we were awarded the project management contract and have been paid a contribution towards our usual fees for designing a building of this type. The groundworks are now well under way.

Last week I received a cryptic letter from one of our rivals in the competition, a Mr Albert Hall, simply saying "I draw your attention to my UK patent no. GB2347942." [Document B] I have heard that such statements can be the prelude to expensive litigation.

Please could you provide me with a detailed explanation of the risks we face from Mr Hall, the reasons for those risks, and possible mitigations.

Incidentally, although I think our winning design is elegant both aesthetically and technically, it is not entirely unique. It is inspired by a cargo ramp arrangement that my uncle told me about from his time in the Merchant Navy, many years ago.

Yours faithfully,
Archibald Techt

Archibald Techt
Techt Associates"

You have performed a comprehensive online patents search, which only found two other potentially relevant prior patents [Document C, published on 16th February 1994 and document D, published on 20th March 1963]. No relevant prior art was cited during the prosecution of Document B, which has no equivalents. The searches confirm that Document B was filed on 18th March 1999 without claiming priority. It was granted on 23rd December 2000 and is in force. Document C has lapsed through non-renewal. Document D has expired.

Your task is to provide detailed notes for a memorandum of advice to Mr Techt. This should include your reasoning as to whether the proposals described in the client's letter and Document A infringe or potentially infringe Document B; whether Document B is valid; an indication of further information (if any) that might be needed and a brief indication of any other practice points that might be raised by the situation.

DOCUMENT A

Client's Press Release

1st September 2009

TECHT ASSOCIATES' NEW CAR PARK DESIGN IS A WINNER

In our multi-storey car park design for the new BMM shopping development, we use deliberately warped floors on which cars can be parked and which provide gently sloping ramps for traffic. The shallow gradients avoid the need for narrow ramps connecting the floors and make driving and manoeuvring easy. This is important because a large number of drivers damage their cars on narrow ramps in car parks.

Figs. 1-4 show the car park layout in more detail.

Each floor has an outer marginal level section along one side of the building 15 and at each end 15a, 15b. A continuous inclined floor area 17 runs along almost the whole of the other side of the building to interconnect adjacent floors. One part 17a of a given inclined area 17 belongs to an upper floor and another part 17b of the same inclined area 17 belongs to the next lower floor.

Each floor is provided with a pair of deliberately warped sections 20A and 20B. These adjoin the sections 15, 15a and 15b along the margins designated by broken lines 21 and 22. Section 20A declines downwardly toward corner 25. Section 20B inclines upwardly toward corner 26.

Section 20A slopes straight upwardly from corner 25 along the broken line 28, which is the margin where it joins the inclined section 17a. Also, its inner edge 29 slopes upwardly in a straight line from the corner 25 to section 15.

Section 20B has a similar arrangement as described for section 20A, but is warped upwardly rather than downwardly, so that it slopes upwardly along its margin 42 towards corner 26. The two sections 20A, 20B are separated along their inner edges 29 and 44.

As shown schematically in Figure 1 these edges lie substantially in a common vertical plane. Alternatively, as shown in a little more detail in Figure 2, the inner edges 29, 44 may be spaced apart any desired distance to provide room for lifts, escalators, or conventional stairs.

Our new car park construction provides horizontal floor areas along the three marginal sections 15a, 15 and 15b. The inclined or warped sections 20A and 20B, in conjunction with the inclined floor area 17, provide unique ramp structures adjacent to the centre of the building.

Line 48 shows a general path cars follow from floor to floor; the arrows designating the upward direction of travel. By travelling in a reverse direction cars also can descend. Other traffic paths are also provided on each floor, allowing access to all parking spaces.

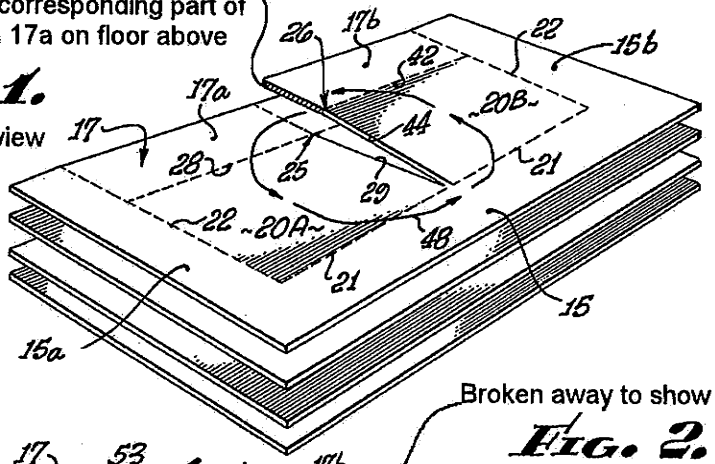
On larger sites, a mirror image structure can be joined to the one shown in Figure 1, against the sloping floor sections 17a, 17b and adjacent ends of the edge portions 15a, 15b. This allows one set of ramps to be used for cars going up and the other set of ramps to be used exclusively for cars going down. In this arrangement parking spaces are omitted in the areas 60 to provide interconnected traffic paths on each floor.

This type of floor construction enables the parking of cars around the entire margin or peripheral area of the structure, as in the spaces designated 53, as well as more central parking areas 55 and 56 upon the inclined sections of the floor. Because the areas 15, 15a and 15b are level and continuous on each floor, these or extensions of them could also be used as retail or office space.

Crosshatched edge part can join to corresponding part of section 17a on floor above

FIG. 1.

Perspective view of car park



Broken away to show floor below

FIG. 2. (Plan view)

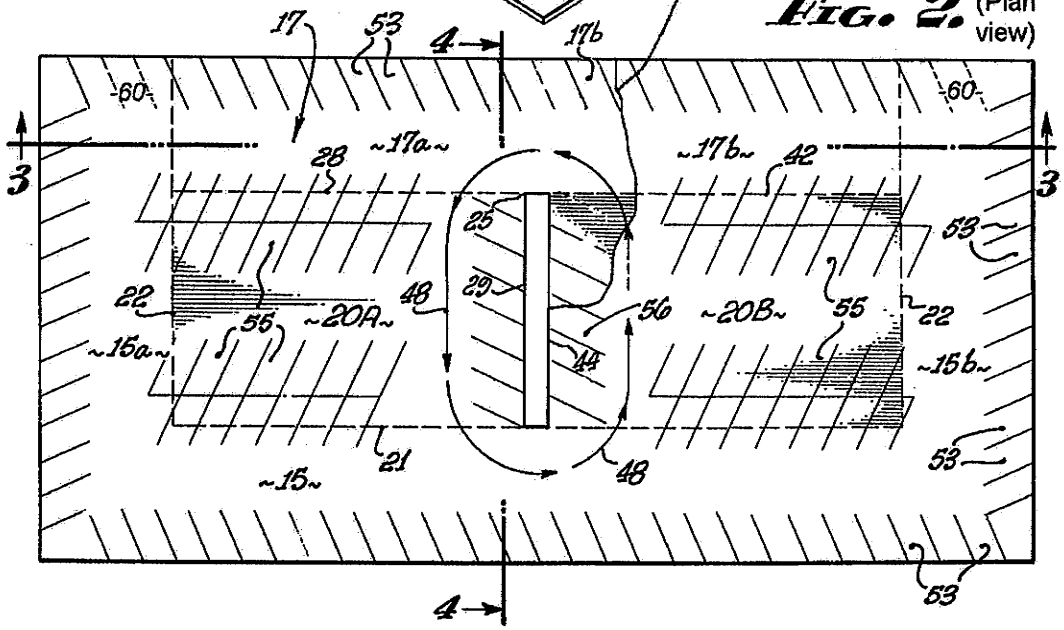
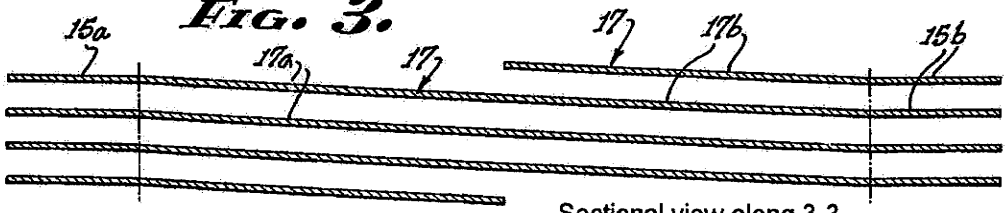
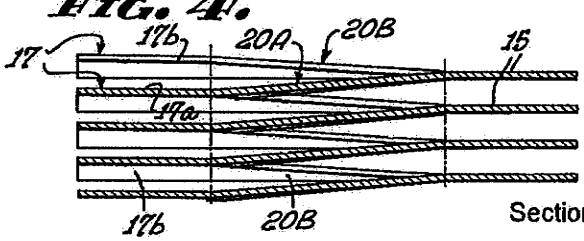


FIG. 3.



Sectional view along 3-3

FIG. 4.



Sectional view along 4-4

DOCUMENT B

GB 2347942 filed 18th March 1999; granted 23rd December 2000.

Proprietor: Albert K. Hall

MULTI STOREY PARKING GARAGE

The parking garage of this invention minimises the distance travelled by vehicles within the garage building in order to reach or leave each parking space.

Part of a building embodying the invention is shown in the drawings, in which:
Figure 1 is a plan view of a typical floor of the building, in which interconnections with neighbouring floors are shown broken away, and
Figure 2 shows the floor of Figure 1 from the side, looking in the direction of arrow A in Figure 1.

The building structure includes several floors 10 connected together one above another by inclined roadways, to provide separate, roughly helical, routes for traffic respectively entering or leaving the building. Each floor is also configured to allow traffic to pass from the entry route to the exit route so as to minimise the distance necessarily travelled by vehicles using the garage.

Each floor includes a pair of parallel, substantially level galleries 12, 14 extending across the entire width of the building on two opposite sides, and a substantially level crossover link 20 interconnecting the two galleries on a third side of the building. The galleries 12 and 14 and the connecting crossover link 20 thus form three sides of a quadrilateral, bounding a space for the roadways 16, 18, 22, 24, which interconnect with adjacent floors.

The galleries, roadways and crossover links are all provided with a one way lane for traffic movement, with parking spaces 26 leading off from it on one or both sides. Gallery 12 is connected (nearest side A) to a sloping roadway 16 (only part of which is shown in the drawings) extending towards it for "up" traffic coming from the floor below, and a sloping roadway 18 (again only partly shown) extending towards it for "down" traffic coming from the floor above.

The opposite gallery 14 is similarly connected to an outgoing sloping roadway 22 for "down" traffic going to the floor below and an outgoing sloping roadway 24 for "up" traffic

going to the floor above (each again only shown in part). The outgoing "down" roadway of one gallery is connected to (or becomes) the incoming "down" roadway of the opposite gallery on the floor below.

Similarly, the outgoing "up" roadway of one gallery is connected to/becomes the incoming "up" roadway of the opposite gallery on the floor above. One roadway 16 or 24 associated with each floor 10 is located at the fourth side of the quadrilateral parallel with side A. Another roadway 18 or 22 is located parallel to roadway 16 or 24 within the quadrilateral.

In Figure 1, roadway connections lying below the level of their associated galleries are marked with a minus sign in a circle, and roadway connections lying above the level their associated roadways are marked with a plus sign in a circle.

In Figure 2, the arrowheads show the traffic movement directions corresponding to those of Figure 1.

An ascending vehicle therefore passes along roadway 16, along gallery 12, along crossover link 20, along gallery 14, and then along roadway 24 taking it towards the next floor up, which will have the same layout as Figure 1, and so on until the vehicle reaches the desired floor/parking space.

A vehicle which has been parked in any parking space 26 can descend and reach an exit, by entering the traffic lane of gallery 12, crossover link 20 and gallery 14 (as appropriate depending on the exact location of the parking space) to reach "down" roadway 22. The vehicle can then follow the descending traffic lane to the garage exit. This arrangement avoids the need to ascend further in order to reach an exit route.

Similarly, a vehicle which has descended to a parking space (e.g. in the case of an underground garage) does not have to descend further on its way back to the garage exit.

Walls or safety barriers 28 are provided between those roadways and crossover links which are adjacent in plan.

Other traffic circulation arrangements are possible in the same building structure. For example all traffic flows may be reversed in the circulation arrangement previously described.

5 The galleries 12, 14 and crossover link 20 are all substantially horizontal and at the same level. They may therefore be connected to or continuous with floors of a building used as retail or office space, or as further parking areas.

WHAT WE CLAIM IS:-

1. A parking garage including at least two superimposed floors, each having traffic lanes with parking spaces distributed along them, the lanes extending along three sides of a quadrilateral, and bounding a space for roadways extending between opposite sides of the quadrilateral, allowing vehicles to ascend and descend from floor to floor.

2. A garage according to Claim 1, in which on each floor i) the traffic lanes form three sides of a rectangle, and ii) there are two such roadways, one being located on the fourth side of the rectangle and the other being parallel thereto within the rectangle.

3. A garage according to claim 1 or 2, in which each floor comprises a pair of parallel, level galleries connected by a level crossover link.

4. A garage according to claim 3, in which one of the galleries is connected to one of the roadways extending towards it for ascending traffic and to another of the roadways extending towards it for descending traffic; the other gallery being connected to an outgoing roadway for descending traffic and an outgoing roadway for ascending traffic.

Fig. 1

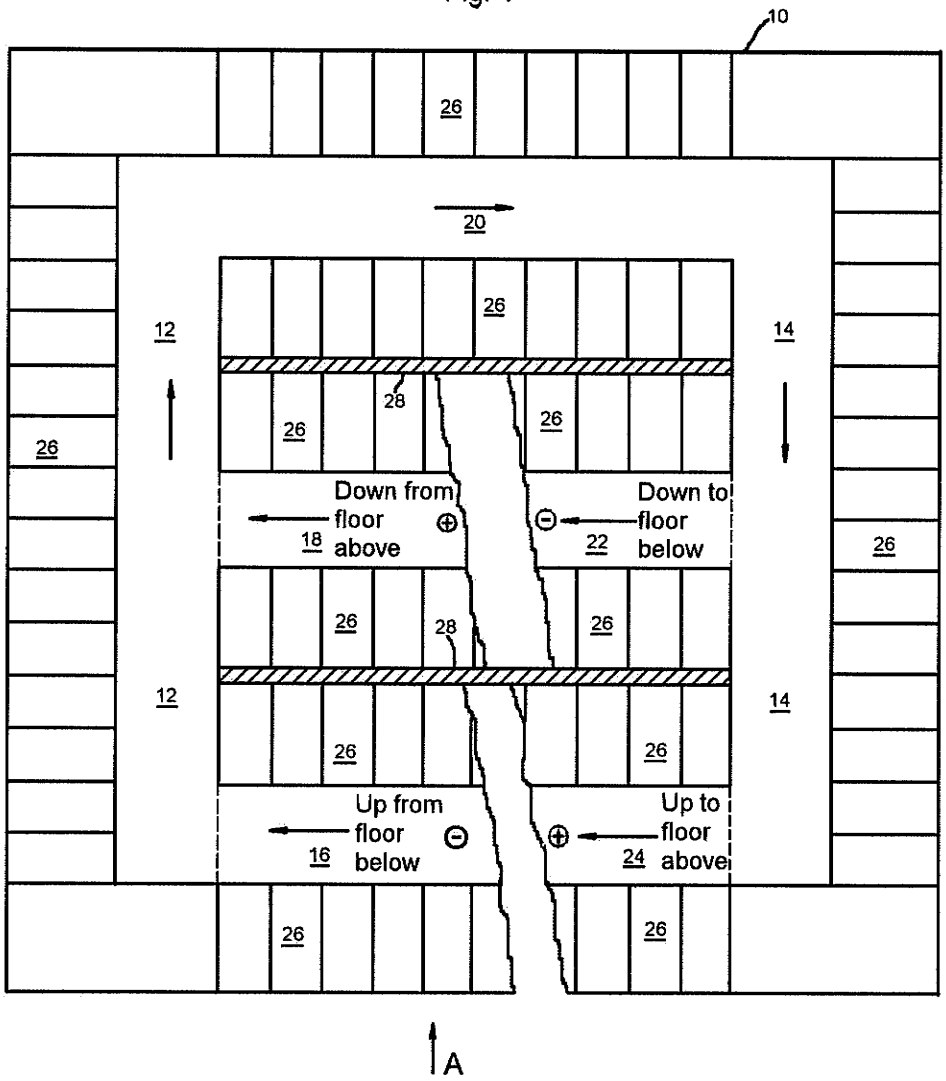
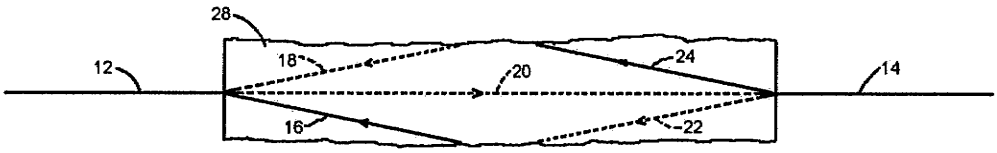


Fig. 2



DOCUMENT C

GB2269610 published 16th February 1994

CAR PARK

My invention concerns a novel structure for a multi-storey car park in which level end and centre floor portions are interconnected by sloping floor portions to define adjacent, interconnected, ascending and descending one-way helicoidal tracks. Cars may be parked on both the level and sloping floor parts, adjacent to the tracks which are marked out for traffic.

The invention is further explained below with reference to the drawings, in which:
Figure 1 is a plan view and Figure 2 is an elevational view of some floors of a car park building embodying this invention.

In the arrangement shown in the drawings, two sets of cooperating ascending 7 and descending 1 portions of floor are shown. Level floor spaces 2 and 3 are arranged at the ends of these ascending/descending portions and level floor spaces between them shown at 4. As shown in dotted lines on the plan two tracks are provided for cars, one ascending on the floor portions 7 and one descending on the floor portions 1. These tracks when running across the building from front to back or vice versa are on the level floor portions of the building. Parking spaces are provided both within the tracks and outside them. Wall 5 extends from the edges of the level floor spaces 4 to the edges of the level floor spaces 2 and divides the portions of each of the floor spaces 7 ascending from left to right as viewed in Figure 2 from those ascending from right to left as viewed in that figure. Wall 6 similarly extends between level floor spaces 3, 4 and divides the left-right descending floor portions 1 from the right-left descending floor portions 1.

As shown in the drawings, the helicoidal tracks associated with the floor portions 1 and 7 are of opposite hand respectively, so that the ascending and descending track portions on the level floor spaces 4 run in opposite directions. However the helicoidal tracks may instead be of the same hand, whereby traffic crosses the floor spaces 4 in the same direction.

[Claims omitted]

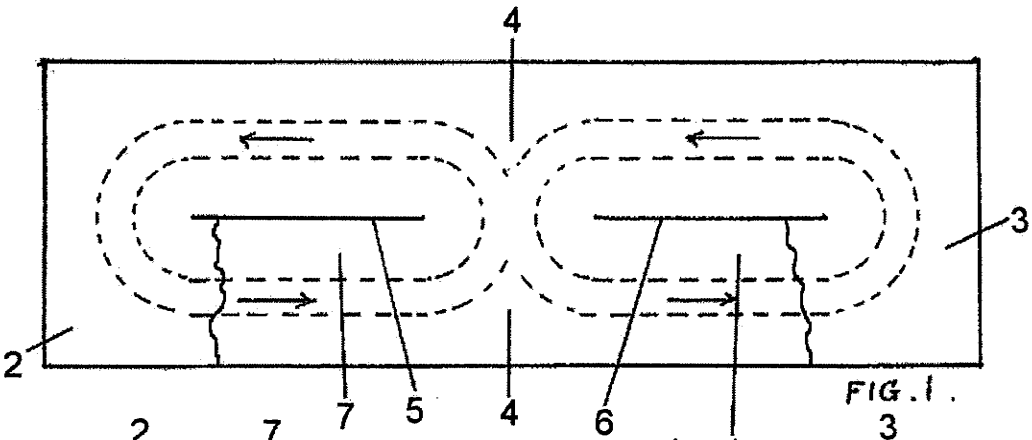


FIG. 1.

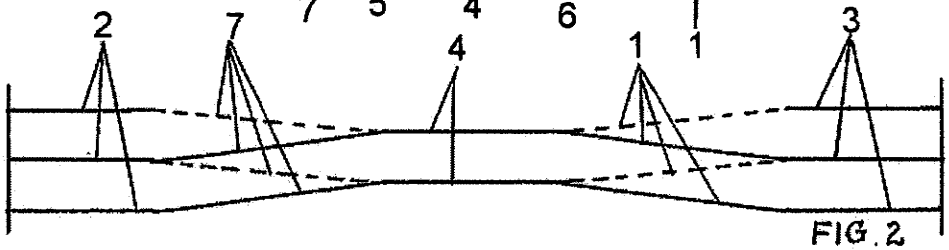


FIG. 2

DOCUMENT D

GB 921404 published on 20th March 1963

RAMP OR INCLINE FOR CONNECTING DIFFERENT LEVELS

This invention concerns inclined ramp-like structures for connecting together decks or floors at different levels in the cargo hold of a ship or in a warehouse.

Figure 1 is a perspective view showing two decks in stepped relation at different levels and connected along the line A-B by a ramp or incline according to the invention;
Figure 2 is a plan view of the arrangement illustrated in Figure 1 and,
Figure 3 is a sectional view taken on line A-B in Figure 1.

Referring now to the drawing, cargo decks 1 and 2 are arranged in stepped relation and are connected by a ramp inclined along line A-B between points a and b, the main central portion of which is indicated at 3. The lower deck 1 is bent upwardly from 4 towards the ramp central portion 3 and the upper deck 2 is bent downwardly from 4' to portion 3, in each case to join the surface of the central portion itself. The ramp may therefore be viewed as a hump in the edge of the lower deck 1 joined to a dip in the edge of the upper deck 2. Outwardly of the dip and hump, the upper and lower deck are each generally flat.

Although such is not shown in the drawings, the flat portion of the deck 2 may continue forwardly to overhang the flat portion of the deck 1.

Dashed contour lines are shown in Figures 1 and 2; on side B of Figure 2 they lie below the flat part of the upper deck 2, but are higher than the contour lines on side A of the Figure; the A side contours nevertheless lying above the flat part of the lower deck 1.

Cargo handling vehicles such as forklifts or pallet trucks may enter or exit the ramp structure in substantially any direction, as indicated by the arrows 5, 5'; as well as proceeding directly up and down the ramp central portion 3, along arrow AB. The maximum gradient anywhere on the ramp structure is preferably small enough to avoid any danger of toppling of cargo handling vehicles which are proceeding along the contour lines. Shallow slopes also allow cargo to be stacked on the ramp structure itself, making efficient use of the hold or warehouse space.

The decks or floors 1, 2 may be part of a larger series, any or all adjacent decks in the series being interconnected by ramp structures of the kind illustrated. Where the ramp structure is built against a bulkhead or wall positioned along axis AB, half of the structure on one side of that axis may be omitted.

5

[Claims omitted].

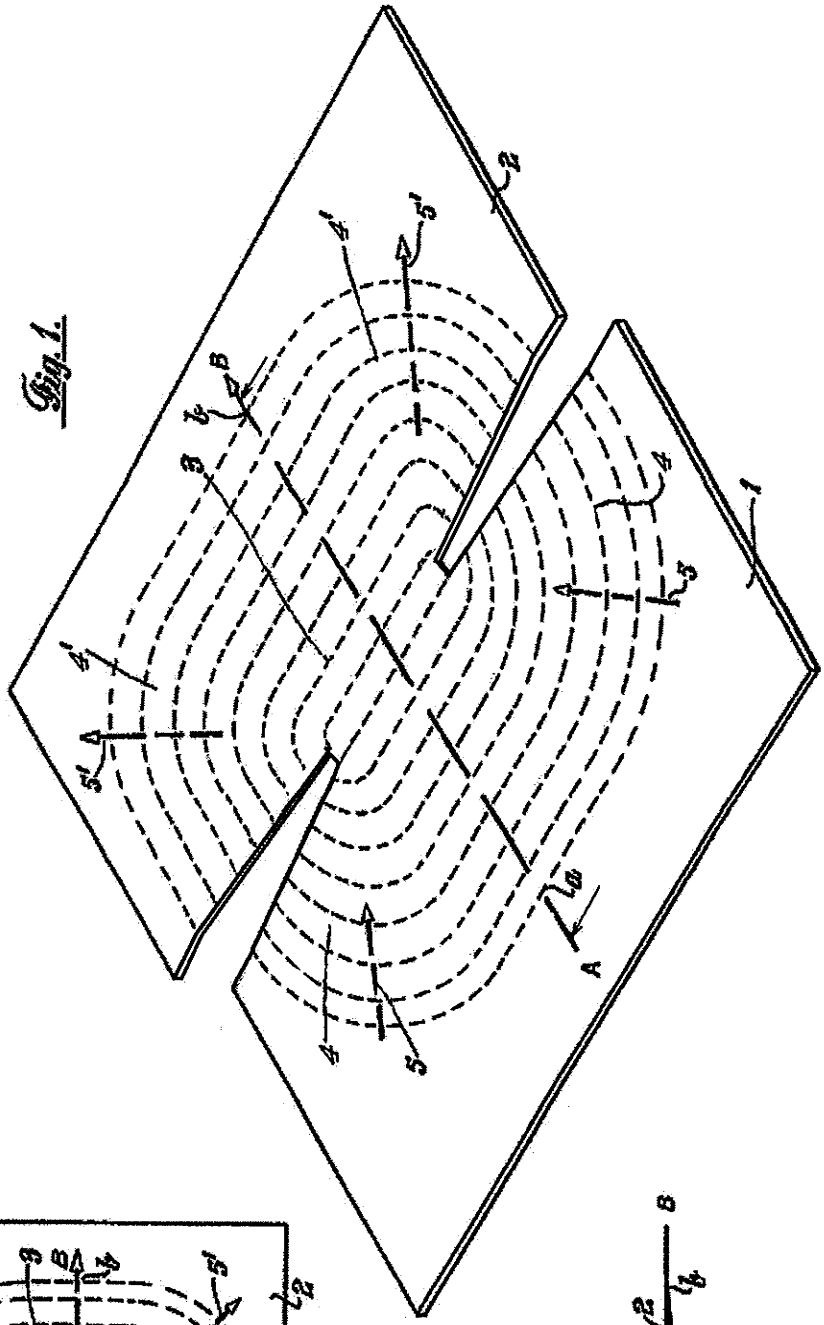


Fig. 1.

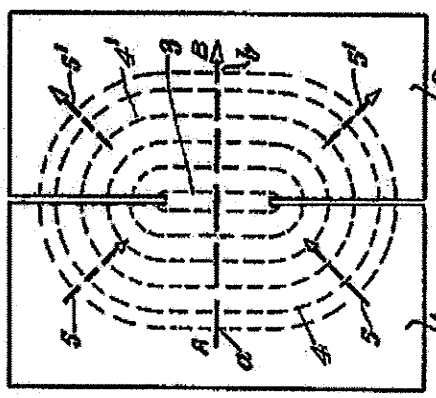


Fig. 2.

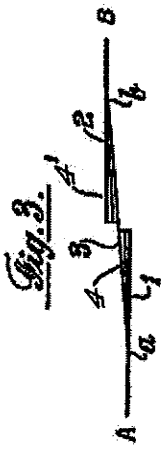


Fig. 3.