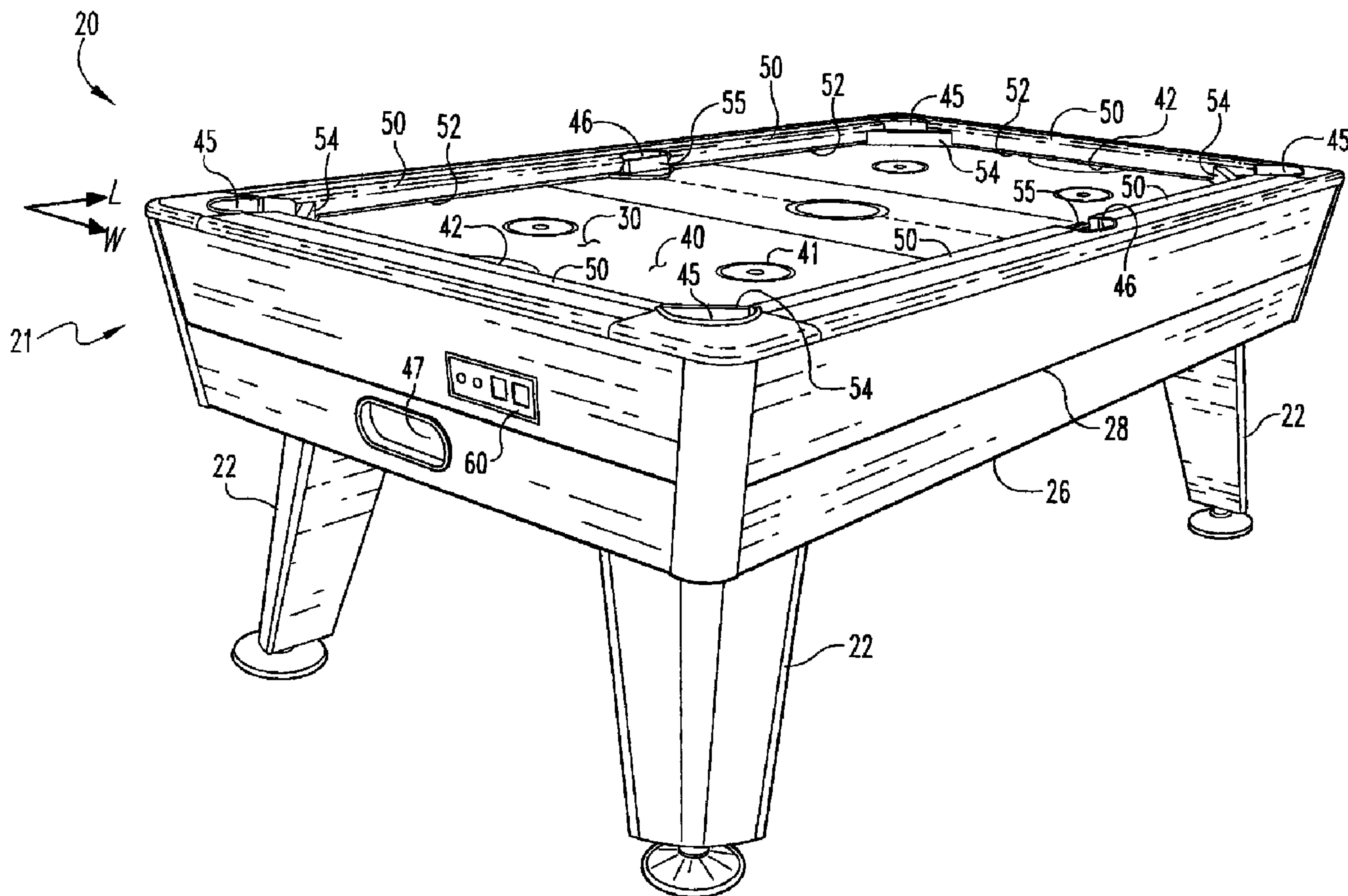




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(54) Titre : ENSEMBLE DE TABLE POUR PLUSIEURS JEUX
(54) Title: MULTI-GAME TABLE ASSEMBLY



(57) Abrégé/Abstract:
A game table assembly for playing the games of billiards and air hockey comprises a game table including an air hockey game playing surface and opposing air hockey goals. The game table defines a plurality of billiard pockets and includes a plurality of

(57) **Abrégé(suite)/Abstract(continued):**

billiard bumpers positioned between the pockets. The bumpers and the air hockey game playing surface create a peripheral gap therebetween. The game table assembly further includes a cover positionable over the air hockey game playing surface to create a billiards game playing surface. Edges of the cover are received in the gap to selectively secure the cover on the game table, the height of the cover being substantially equal to the height of the gap.

ABSTRACT

A game table assembly for playing the games of billiards and air hockey comprises a game table including an air hockey game playing surface and opposing air hockey goals. The game table defines a plurality of billiard pockets and includes a plurality of billiard bumpers positioned between the pockets. The bumpers and the air hockey game playing surface create a peripheral gap therebetween. The game table assembly further includes a cover positionable over the air hockey game playing surface to create a billiards game playing surface. Edges of the cover are received in the gap to selectively secure the cover on the
10 game table, the height of the cover being substantially equal to the height of the gap.

#508481

MULTI-GAME TABLE ASSEMBLY

FIELD OF THE INVENTION

The present invention relates to game tables, and in particular a multi-game table assembly.

BACKGROUND OF THE INVENTION

Watching and participating in sporting events and games is a popular
10 pastime for many people. However, due to time, space and the number of people
needed for most such games, it is not always practical to arrange a full-scale game
at any particular time. Moreover, due to the skill and physical conditioning
required, plus the potential injuries from many such games, individuals are not
always prepared to participate in a full-scale game. Other factors such as weather
have also been known to make arranging games difficult. Accordingly, there has
developed a need and market for indoor or smaller scale games, including
recreational game tables such as for table soccer (sometimes called foosball), air
hockey or field hockey, which can be played with less room and require fewer
people. Game tables allow the participants to simulate a full-sized game with
20 fewer people, less space and in a protected environment. Additionally, game tables
for playing other popular pastime games such as billiards are in demand. The game
tables, for example, can be set up in basements, garages, game rooms, backyards,
gyms, party facilities or otherwise and are often played with two or four people.

Additionally, it may be desirable to convert between at least two games
within one multi-game table assembly. Improved systems and assemblies for
playing and converting between games such as billiards and air hockey are desired.

SUMMARY OF THE INVENTION

In one embodiment, a game table assembly for playing the games of billiards and hockey comprises a game table including an hockey game playing surface and opposing hockey goals. The game table includes a plurality of billiard pockets and a plurality of billiard bumpers positioned between the pockets, the bumpers and the hockey game playing surface defining a gap therebetween. Additionally, the game table assembly includes a cover positionable over the hockey game playing surface to create a billiards game playing surface. The periphery of the cover is configured to be received in the gap to selectively secure
10 the cover on the game table, the height of the cover being substantially equal to the height of the gap.

In another embodiment, a game table assembly for playing at least two different games comprises a game table having a perimeter frame extending above a first game playing surface for playing a first game. The frame includes inner sidewalls adjacent edges of the first game playing surface and inwardly extending bumpers positioned above the first game playing surface. Each of the inwardly extending bumpers includes a lower face spaced above the first game playing surface defining a gap therebetween. The game table assembly further includes a cover removably positionable over the first game playing surface to substantially
20 cover the first game playing surface, wherein the cover includes a second game playing surface for playing a second game different from said first game. The cover includes a periphery configured to be received in the gap to removably secure the cover on the game table.

In yet another embodiment, a game table assembly comprises a game table having an air hockey game surface with openings for forced air, the game table having a perimeter extending around and above the air hockey game surface. The game table assembly includes an air hockey puck, having a height, for playing the game of air hockey. The perimeter of the game table defines a slot extending around the air hockey game surface, the slot having a height greater than the height
30 of the air hockey puck. The game table assembly further includes a second game surface arrangeable on the air hockey game surface, wherein the second game

surface includes a periphery extending into the slot around the air hockey game surface.

In even another embodiment, a game table assembly comprises a game table having at least a first playing surface, a plurality of billiards pockets, and a plurality of billiards bumpers arranged around the first playing surface between the pockets. The game table includes at least a vertical sidewall portion perpendicular to the first playing surface extending between the first playing surface and the bumpers, with the bumpers extending inwardly from the vertical sidewall portion.

DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a game table assembly according to an embodiment of the present invention.

FIG. 2A is a perspective view of a portion of a game table assembly according to the embodiment of FIG. 1.

FIG. 2B is a perspective view of a portion of a game table assembly according to the embodiment of FIG. 1.

FIG. 3 is a perspective view of a game table assembly according to the embodiment of FIG. 1.

10 FIG. 4 is a perspective view of a game table assembly according to the embodiment of FIG. 1.

FIG. 5 is a cross-sectional side view of a portion of a game table assembly according to the embodiment of FIG. 1.

FIG. 6 is another cross-sectional side view of a portion of a game table assembly according to the embodiment of FIG. 1.

FIG. 7 is even another cross-sectional side view of a portion of a game table assembly according to the embodiment of FIG. 1.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

For the purposes of promoting an understanding of the principles of the invention, reference will now be made to the embodiments illustrated in the drawings and specific language will be used to describe the same. It will nevertheless be understood that no limitation of the scope of the invention is thereby intended, such alterations and further modifications in the illustrated device, and such further applications of the principles of the invention as illustrated therein are contemplated as would normally occur to one skilled in the art to which the invention relates.

10 In certain embodiments of the present invention, a multi-game table assembly is provided with improved playing characteristics. The game table is preferably for use with table games such as hockey and billiards. Certain embodiments of the present invention include a multi-game table having a hockey playing surface as a base surface and a cover configured to be placed over the hockey playing surface to create a billiards playing surface. Additionally, in certain
20 embodiments, edges of the cover are configured to fit within a gap created by the hockey playing surface and billiards bumpers positioned about the game table.

 A standard game table includes a playing surface, held over a support surface, such as a floor, by a support structure such as one or more legs or
20 pedestals. The playing surface is often rectangular or round, but may be made in various geometric shapes. The playing surface is also typically substantially flat. In many instances, the playing surface is surrounded by a peripheral rail or raised portions of the game table, which typically functions to retain game pieces within the area of the playing surface. The game pieces of the present invention are usable with various types of games and/or game tables, which are considered conventional for purposes of the present invention and are not described herein in detail. Game tables may also include game status indicators, such as score displays and timer displays, mounted to the game tables.

 Fig. 1 illustrates components of one embodiment of a game table assembly
30 20 including a game table 21. Game table 21 is generally a standard style of game table including legs 22 supporting a table base 26. Table base 26, shown in Fig. 1

in a generally rectangular shape, is the primary superstructure of game table 21. It should be appreciated that table base 26 can include various shapes as would generally occur to one skilled in the art, including circular, square, or polygonal as examples. Legs 22 are standard support structures for a table, and may, for example, be four corner legs or one or more central pedestals supporting the table base 26. In certain embodiments, game table 21 includes a frame 28 mounted to the table base 26. Frame 28 surrounds and extends above a first game playing surface 40 a height sufficient to block escape of a playing piece from the table. The frame can extend up from the table base and the game playing surface a
10 sufficient height as would occur to one skilled in the art, as a design choice for a particular game. Frame 28 can be a standard frame made of metal, wood, laminate, particleboard, MDF or plastic.

First game playing surface 40 is configured to be integral with or mounted to frame 28 and be supported underneath by an appropriate support surface. First game playing surface 40 may be a hockey game playing surface configured for playing a typical hockey game. In certain embodiments, surface 40 may be an air hockey game playing surface having air forced through holes in the surface. In certain other embodiments, surface 40 may be a "manual" hockey game playing surface with no forced air. In the illustrated embodiment, game playing surface 40
20 includes a generally rectangular shape. However, it should be appreciated that the game playing surface can have various shapes, including circular, square, or polygonal as examples. Game playing surface 40 extends across the area defined within frame 28 to form a playing area. In certain embodiments, game playing surface 40 is mounted to the frame or extends to inner edges of the frame to eliminate gaps. Game playing surface 40 may rest in place or can be attached using standard methods such as adhesive, friction, screws, bolts or other permanent or removable connectors. The game playing surface may be appropriately sized and configured for the desired game of hockey. Game playing surface 40 may be an appropriately shaped piece of material configured to be mounted over a support
30 surface of frame 28. Certain materials suitable for game playing surface 40 include

a durable plastic (such as a thick polyethylene, Plexiglass®, or Formica®), wood or glass.

For playing the game of hockey, game playing surface 40 may include one or more indicia 41 thereon, such as hockey puck position circles and other appropriate markings. Additionally, game table 21 may include opposing goals 42 configured for passage of a game piece, such as a hockey puck. In such embodiments, goals 42 may be positioned midway along ends of the game table, the ends being substantially parallel to width axis W.

For playing the game of billiards, game table 21 may include a plurality of
10 billiards pockets 45 and 46 and a plurality of bumpers 50. In certain embodiments, there are four billiards pockets 45 at the corner areas of the game table and two billiards pockets 46 midway along the sides of the table parallel to longitudinal axis L. In such embodiments, pockets 45 and 46 are sized and configured for the passage of billiards balls. The billiards balls may pass through pockets 45 and/or 46 and optionally return to one or more exit openings 47 through which a user of the game table assembly may retrieve the balls. Additionally, in certain
20 embodiments, there are six bumpers 50 positioned about a perimeter of the game table, extending between the billiards pockets. From another perspective, a single bumper may be positioned about a perimeter of the game table, with the bumper
divided into six portions extending between the billiards pockets. During the game
of billiards, the balls may contact and rebound from bumpers 50. In certain
embodiments, bumpers 50 are integral portions of frame 28. In certain other
embodiments, bumpers 50 are mounted to frame 28 via standard connection and/or
attachment methods. Bumpers 50 may be composed of wood, rubber or another
such appropriate material and may be optionally covered with a felt material.

In preferred embodiments, bumpers 50 are integral with frame 28 at a
position above first game playing surface 40, creating a peripheral gap 52 between
bumpers 50 and surface 40. In certain embodiments, gap 52 is sized and
configured to allow for a game piece such as a hockey puck to freely travel in and
30 out of gap 52 by sliding under bumpers 50 and bounce off frame 28 during play of
a hockey game, as will be discussed in greater detail below. Additionally, for use

of the game table for playing hockey, a plurality of inserts 54 and 55 may be removably positioned adjacent pockets 45 and 46, respectively, to prevent a hockey puck from entering the pockets. Inserts 54, as best illustrated in Fig. 2A, and inserts 55, as best illustrated in Fig. 2B, may include raised portions 54a and 55a, respectively, to provide further protection against a hockey puck entering and passing through pockets 45 and 46, respectively. Additionally, inserts 54 and 55 may include lower portions 54b and 55b, respectively, configured to be at least partially received within gap 52 to removably retain inserts 54 and 55 on the game table.

10 Referring again to Fig. 1, in certain embodiments, game table 21 may also include an electronic display 60 associated with table base 26 and/or frame 28 for showing the status of a game being played on table 21, for example such as the timing and scoring of the particular game. Additionally, a control box (not shown) may be operably connected to game table 21 for selecting various control functions and could include buttons for turning the power on/off, a game selector button, a game reset button, a score reset and/or adjust button, and/or other appropriate buttons as would occur to one skilled in the art.

As illustrated in Figs. 3 and 4, game table assembly 20 includes a cover 70 having a second game playing surface 72 on the upper face of cover 70. Flexible
20 cover 70 is positionable on first game playing surface 40 so that a second game may be played on second game playing surface 72. Cover 70 is preferably sized and configured to substantially cover surface 40 and includes a shape which matches surface 40. In certain embodiments, second game playing surface 72 is a billiards game playing surface to allow for the play of billiards within game table assembly 20, as best illustrated in Fig. 4.

In such embodiments, inserts 54 and 55 may be removed from game playing surface 40 and cover 70 may be positioned over surface 40. Edges of cover 70 may be positioned under bumpers 50 in peripheral gap 52, as will be discussed in greater detail below, to removably secure cover 70 on the game table and allow
30 for the playing of billiards thereon. In such embodiments, cover 70 is sized and configured to cover the entire of surface 40 and be sufficiently positioned in gap

52. If desired, a user of game table assembly 20 may remove flexible cover 70 to reveal first game playing surface 40 and switch play from the game of billiards to the game of hockey, as best illustrated in Fig. 1. In certain embodiments, cover 70 comprises a rubber mat center substantially covered by a cloth material. However, it is contemplated that cover 70 can be composed of other materials and/or be assembled differently.

In certain embodiments, cover 70 is a flexible shape-retaining cover which is configured to lie substantially flat on first game playing surface 40. In such embodiments, cover 70 is configured to lie substantially flat during the play of a
10 game on second game playing surface 70 and not to wrinkle or bend or otherwise deform away from the substantially flat configuration. In the illustrated embodiment, cover 70 is sufficiently flexible to allow for the cover to be rolled up when not in use, yet returns to a substantially flat configuration when in use. In certain other embodiments, cover 70 is substantially rigid in form.

Figs. 5-7 illustrate a portion of game table assembly 20, and specifically illustrate a cross-section of a gap 52. As illustrated, frame 28 extends above playing surface 40 and includes an inner sidewall surface 52a. In such embodiments, sidewall surface 52a extends around playing surface 40 and is generally perpendicular thereto. Bumpers 50 extend inwardly from sidewall
20 surface 52a and may include angled contact surfaces 50a and horizontal lower face surfaces 50b. In certain embodiments, horizontal lower faces 50b are substantially parallel to game playing surface 40. As illustrated, in certain embodiments, lower face surfaces 50b, sidewall surface 52a and playing surface 40 together define three sides of a gap 52 having a gap height G, with height G extending from surface 40 to lower face surfaces 50b. In alternative embodiments, the angled contact surface could extend to either the sidewall surface or the playing surface, creating an angled gap with a changing height across the gap area, the horizontal lower face of the bumper being absent. In such alternative embodiments, the cover only partially occupies the angled gap area, the occupation of the cover defined by the position
30 where the cover contacts the angled contact surface.

As illustrated in Fig. 6, game table assembly 20 may include a hockey puck 80 having puck height P. In certain embodiments, gap height G is larger than puck height P, such that hockey puck 80 may freely travel in and out of gap 52 to contact and bounce off sidewall surface 52a during the play of a hockey game. During the play of an air hockey game, hockey puck 80 may be slightly elevated above surface 40 due to forced air passing through surface 40. In such embodiments, gap height G of gap 52 remains sufficiently large to allow hockey puck 80, elevated above surface 40, to freely travel in and out of gap 52. Additionally, as illustrated in Fig. 7, cover 70 having second game playing surface 72 for playing the game of
10 billiards may include a billiards height B. In certain embodiments, height B of cover 70 may be substantially equal to height G of gap 52 such that cover 70 is selectively and removably received in gap 52. To that end, it should be appreciated that in certain embodiments height B of cover 70 may be slightly larger than height G of gap 52, creating a compression fit of cover 70 in gap 52. Additionally, it should be appreciated that in certain other embodiments, height B of cover 70 may be slightly smaller than height G of gap 52, leaving a smaller gap between cover 70 and lower faces 50b of billiards bumpers 50.

Referring generally to Figs. 1-7, the use and operation of game table assembly 20 is as follows. In certain embodiments, the games of hockey and
20 billiards may both be played on game table assembly 20. When playing the game of hockey on game playing surface 40, opposing players stand adjacent the ends of the table parallel to width axis W. Players strike a game piece (not shown) such as a hockey puck in attempting to place the game piece into a goal 42. During the play of a hockey game, inserts 54 and 55 may be positioned adjacent pockets 45 and 46 to prevent the hockey puck from entering and passing into the pockets, as illustrated in Fig. 1. In certain embodiments, the game of air hockey may be played on surface 40 of game table 21. In certain other embodiments, a manual hockey game may be played thereon.

As desired, game table assembly 20 may be converted so that the game of
30 billiards may be played thereon. Accordingly, flexible cover 70 may be positioned onto game playing surface 40 such that game playing surface 72 is exposed and

extends within frame 28 for playing billiards. Prior to positioning of cover 70 onto surface 40, inserts 54 and 55 may be removed from surface 40, exposing billiards pockets 45 and 46. In certain embodiments, edges of cover 70 about the periphery thereof may be inserted and tucked into gap 52 to removably secure cover 70 onto the game table, as best illustrated in Figs. 4 and 7. When playing the game of billiards, players travel about the perimeter of game table assembly 20 striking billiards balls (not shown) attempting to urge the balls into one of the pockets 45 and/or 46. To convert to a hockey game, cover 70 may be removed from the game table, exposing game playing surface 40, and inserts 54 and 55 may be positioned adjacent billiards pockets 45 and 46 to prevent passage of the hockey puck therein.

Game table assembly 20 can be manufactured and assembled from standard materials. For example, the components may be wood, plastic or metal such as aluminum or steel. The game pieces used in connection with game table assembly 20 may be standard or reduced sized. In certain embodiments, game table assembly 20 may be portable and/or disassemblable. Additionally, in certain embodiments, game table assembly 20 may be manufactured to include modular, lightweight components to enhance the ease of transport, assembly and disassembly. In some embodiments, game table assembly 20 requires slight assembly. In certain other embodiments, game table assembly 20 arrives assembled.

While the invention has been illustrated and described in detail in the drawings and foregoing description, the same is to be considered as illustrative and not restrictive in character, it being understood that only the preferred embodiments have been shown and described and that all changes and modifications that come within the spirit of the invention are desired to be protected.

What is claimed is:

1. A game table assembly for playing the games of billiards and hockey, comprising:

a game table including a hockey game playing surface and opposing hockey goals;

wherein said game table includes a plurality of billiard pockets and a plurality of billiard bumpers positioned between said pockets, wherein said bumpers and said hockey game playing surface define a peripheral gap therebetween, said gap having a height;

10 a cover removably positionable over said hockey game playing surface to substantially cover said hockey game playing surface and create a billiards game playing surface, wherein said cover includes a periphery and said periphery is configured to be received in said gap, wherein the height of said cover is substantially equal to the height of said gap.

2. The game table assembly of claim 1, wherein said cover comprises a rubber mat covered by a cloth material forming a billiards surface.

20 3. The game table assembly of claim 1, comprising a plurality of inserts positionable on said hockey game playing surface adjacent each of said pockets to prevent a hockey puck from entering said pockets.

4. The game table assembly of claim 3, wherein each of said inserts includes a thin portion configured to be placed in said gap to temporarily secure said insert on said game table and a raised portion extending across said corresponding billiard pocket to prevent a hockey puck from entering said pocket.

30 5. The game table assembly of claim 1, comprising a hockey puck, wherein a height of said hockey puck is smaller than the height of said gap such that said hockey puck is allowed to freely travel in and out of said gap during play of a hockey game.

6. The game table assembly of claim 1, wherein said game table is air powered to force air through openings in said hockey game playing surface for playing the game of air hockey.

7. A game table assembly for playing at least two different games, comprising:

a game table having a perimeter frame and a first game playing surface for playing a first game, said frame extending above said first game playing surface;

10 wherein said frame includes inner sidewalls adjacent edges of said first game playing surface and inwardly extending bumpers positioned above said first game playing surface, wherein each of said inwardly extending bumpers includes a lower face spaced above said first game playing surface defining a peripheral gap therebetween, said gap having a height; and

a cover removably positionable over said first game playing surface to substantially cover said first game playing surface, wherein said cover includes a second game playing surface for playing a second game different from said first game, wherein said cover includes a periphery and said periphery is configured to be received in said peripheral gap to removably secure said cover on said game table.

20

8. The game table assembly of claim 7, wherein said cover comprises a rubber mat covered by a cloth material.

9. The game table assembly of claim 7, wherein a height of said cover is substantially equal to the height of said gap.

10. The game table assembly of claim 7, wherein said first game playing surface is a hockey game playing surface and said second game playing surface is a billiards game playing surface.

30

11. The game table assembly of claim 10, wherein said game table includes a plurality of billiards pockets and the assembly includes a plurality of inserts positionable on said hockey game playing surface adjacent said pockets when said cover is removed to substantially prevent a hockey puck from entering said pockets.

12 The game table assembly of claim 10, comprising a hockey puck having a height, wherein the height of said hockey puck is smaller than height of said gap such that said hockey puck is allowed to freely travel in and out of said gap and bounce off said sidewalls.

13. A game table assembly, comprising:
a game table having an air hockey game surface with openings for forced air, said game table having a perimeter extending around and above said air hockey game surface;
an air hockey puck having a height;
wherein said perimeter defines a slot extending around said air hockey game surface, said slot having a height greater than the height of said air hockey puck; and
a second game surface arrangeable on said air hockey game surface, wherein said second game surface includes a periphery extending into said slot extending around said air hockey game surface.

14. The game table assembly of claim 13, wherein said second game surface is a billiards game surface.

15. The game table assembly of claim 14, wherein said game table includes a plurality of billiards pockets and the assembly includes a plurality of inserts positionable adjacent said pockets when said second game surface is removed to prevent said air hockey puck from entering said pockets.

16. The game table assembly of claim 13, wherein said perimeter includes inwardly extending billiards bumpers positioned above said air hockey game surface and vertical sidewalls adjacent edges of said air hockey game surface, each bumper having a lower face positioned above said air hockey game surface, wherein said lower faces, said vertical sidewalls and said air hockey game surface define said slot.

17. The game table assembly of claim 13, wherein said second game surface comprises a rubber mat covered by a cloth material.

10

18. A game table, comprising:
a game table having at least a first playing surface;
a plurality of billiards pockets defined in said game table;
a plurality of billiards bumpers arranged around said first playing surface between said pockets;
wherein said game table includes at least a vertical sidewall portion perpendicular to said first playing surface, extending between said first playing surface and said bumpers, wherein said bumpers extend inwardly from said vertical sidewall portion.

20

19. The game table of claim 18, wherein said vertical sidewall portion includes a height and said bumpers each include a lower horizontal face spaced above said first playing surface by the height of said vertical sidewall portion.

20. The game table of claim 18, wherein said bumpers and said first playing surface create a gap therebetween adjacent said vertical sidewall portion.

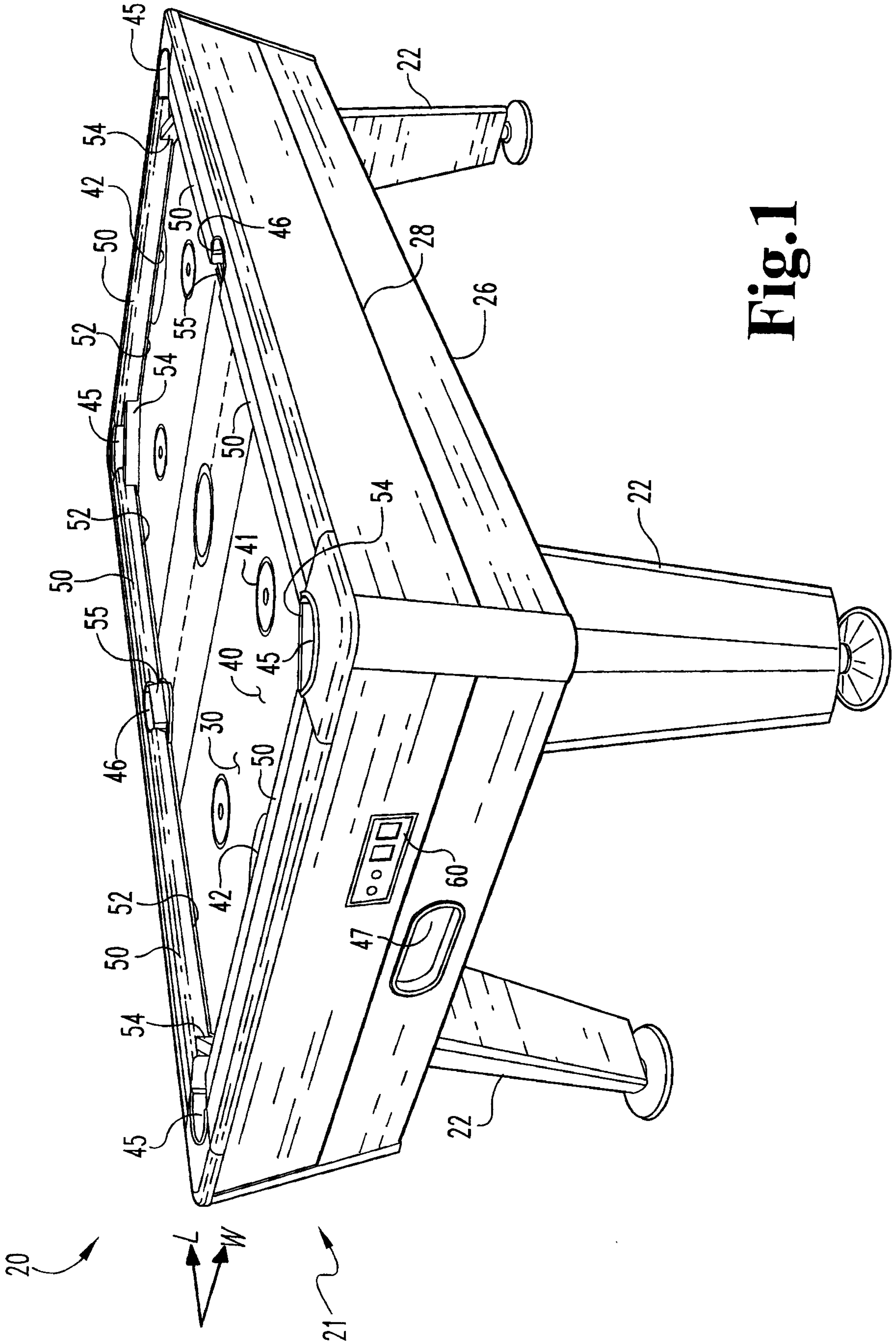


Fig.1

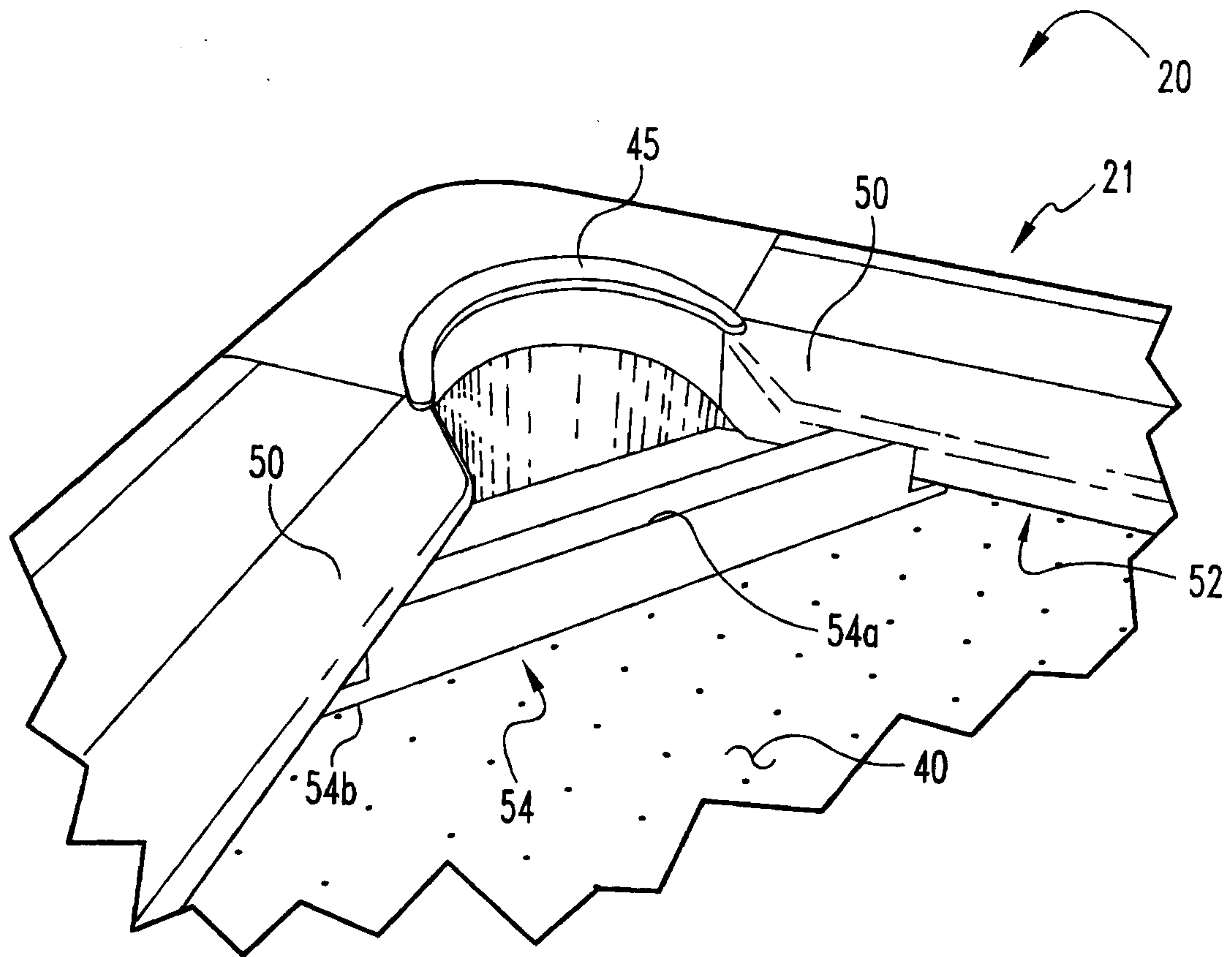


Fig.2A

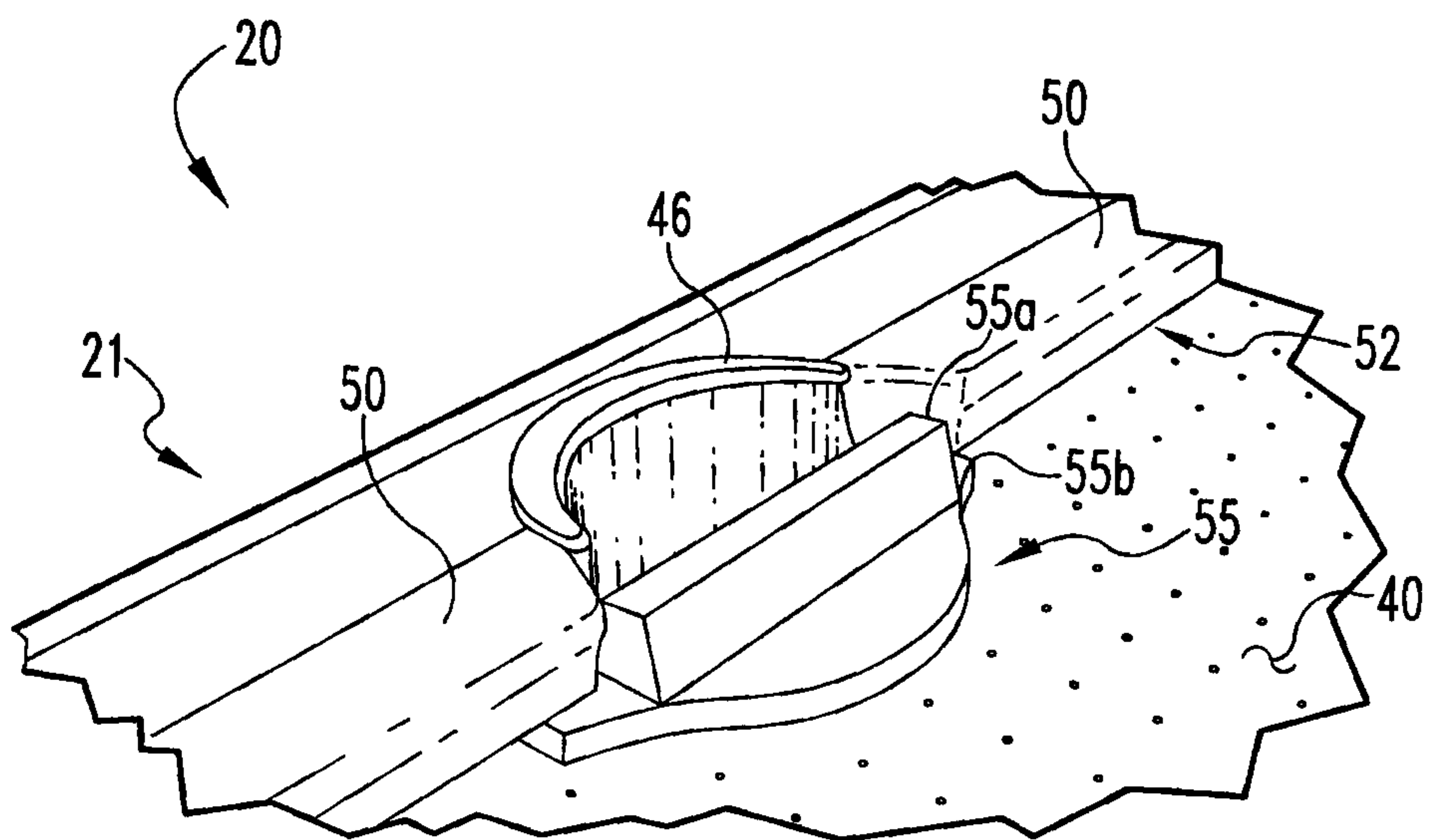


Fig.2B

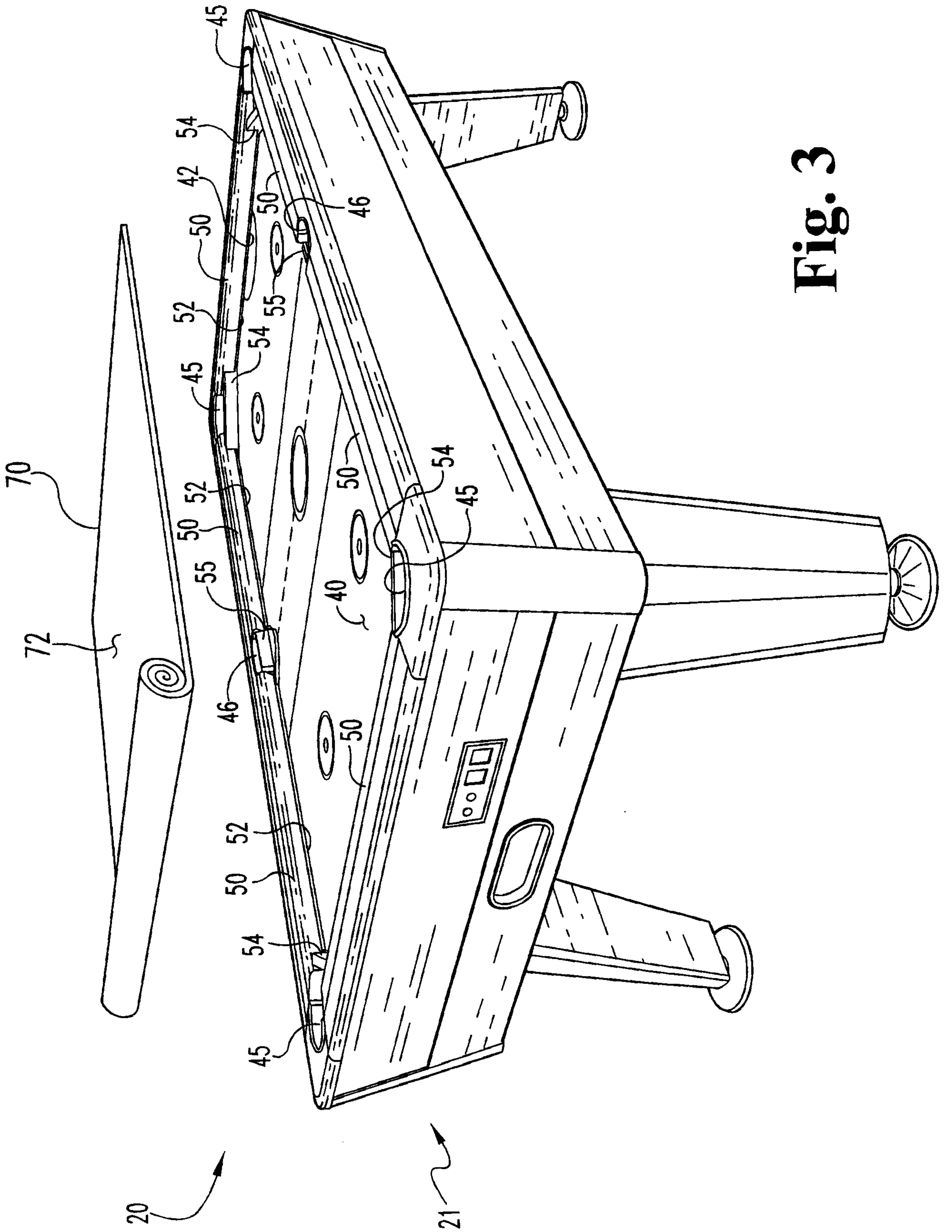


Fig. 3

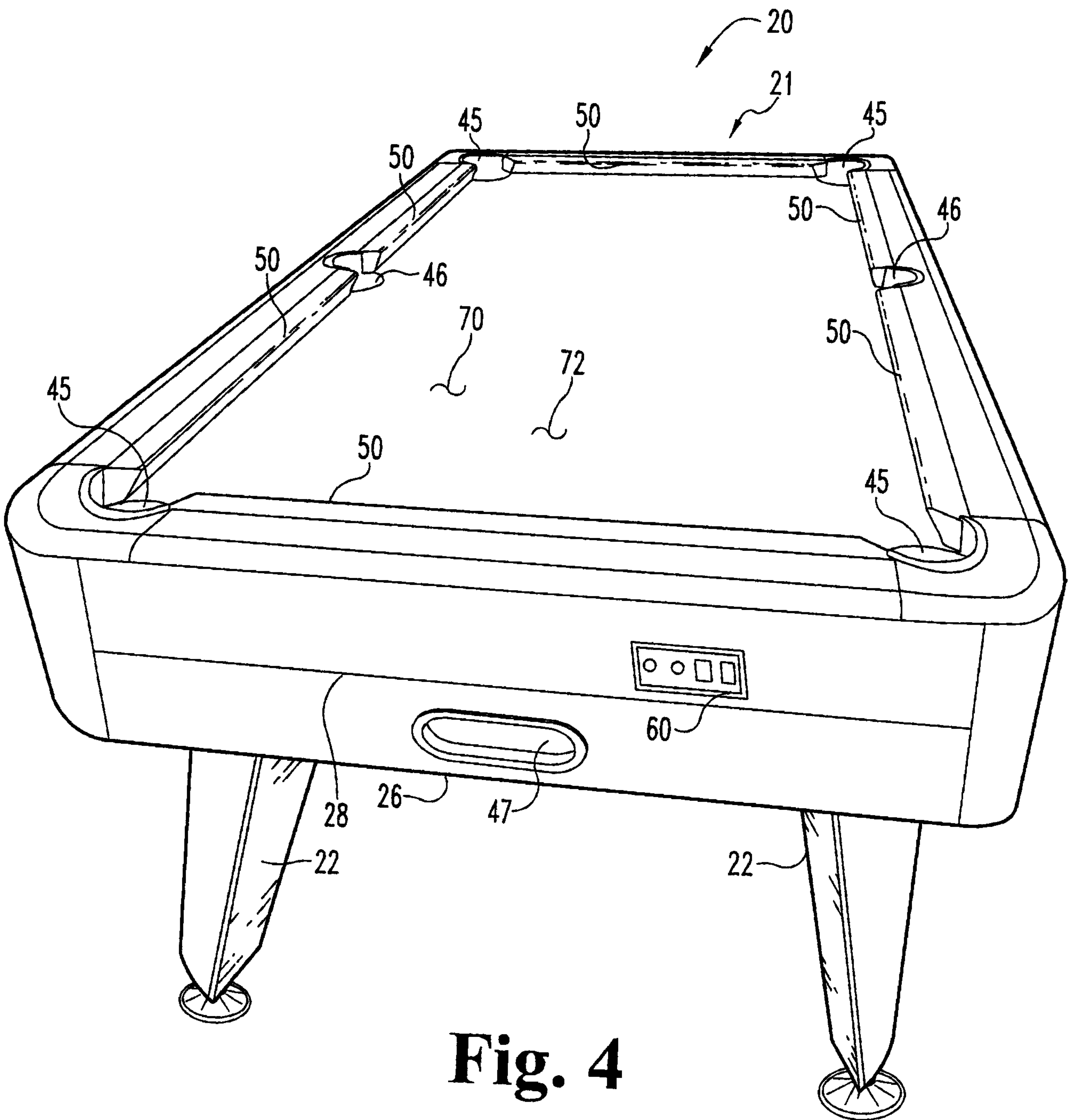


Fig. 4

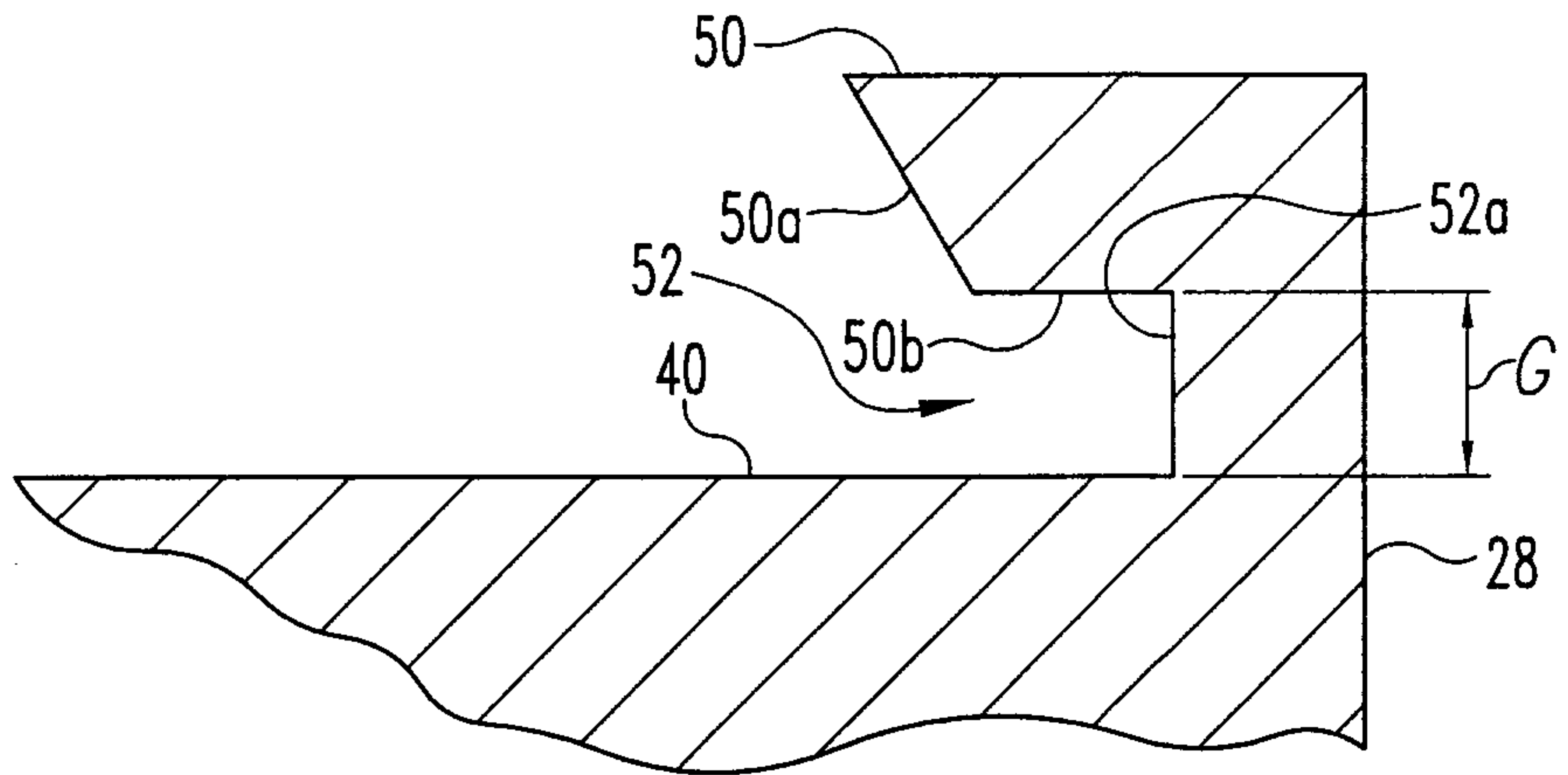


Fig. 5

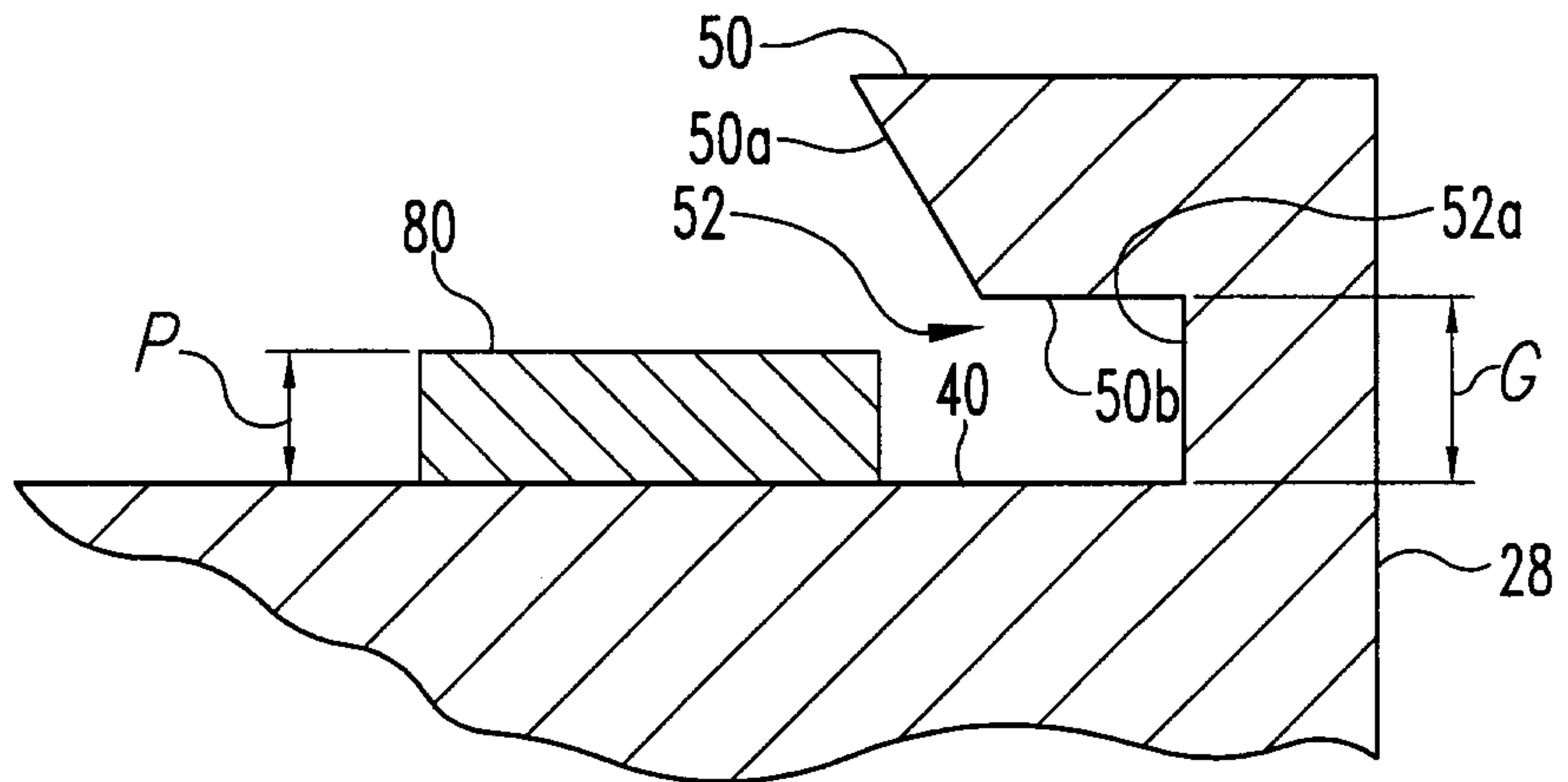


Fig. 6

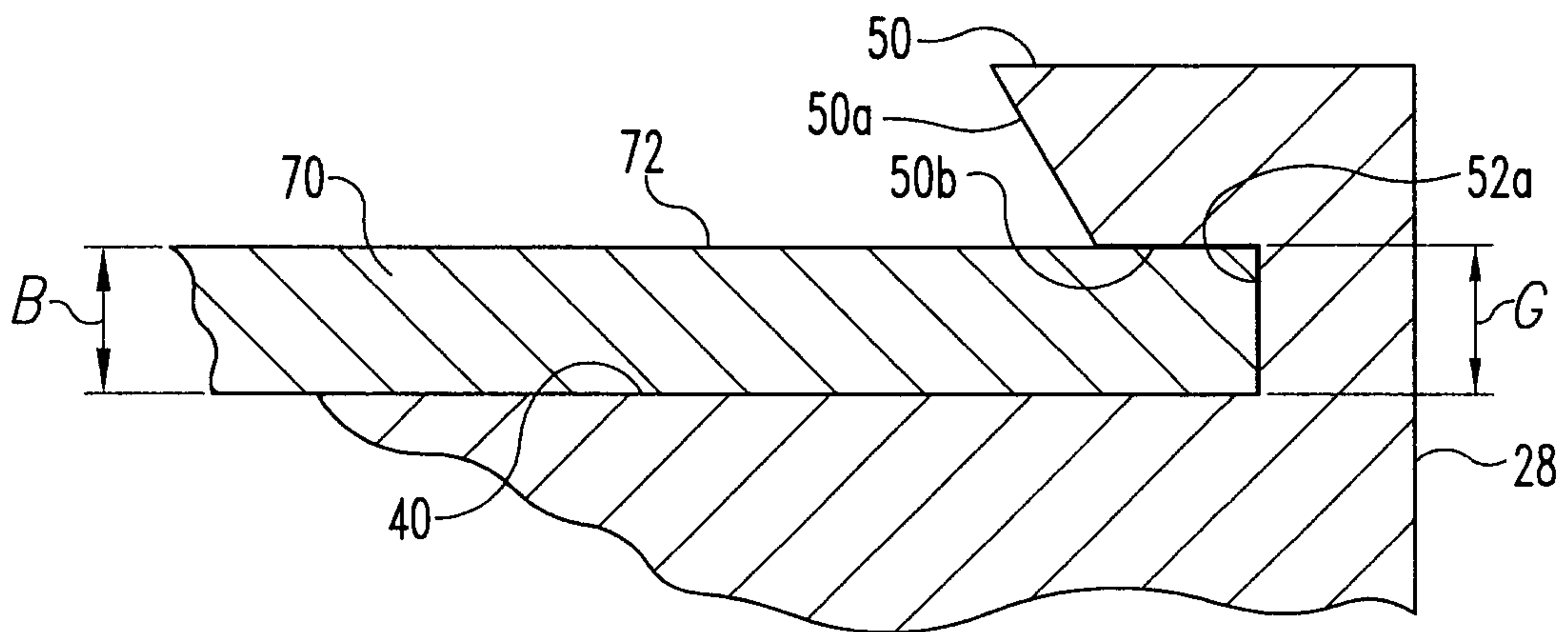


Fig. 7

