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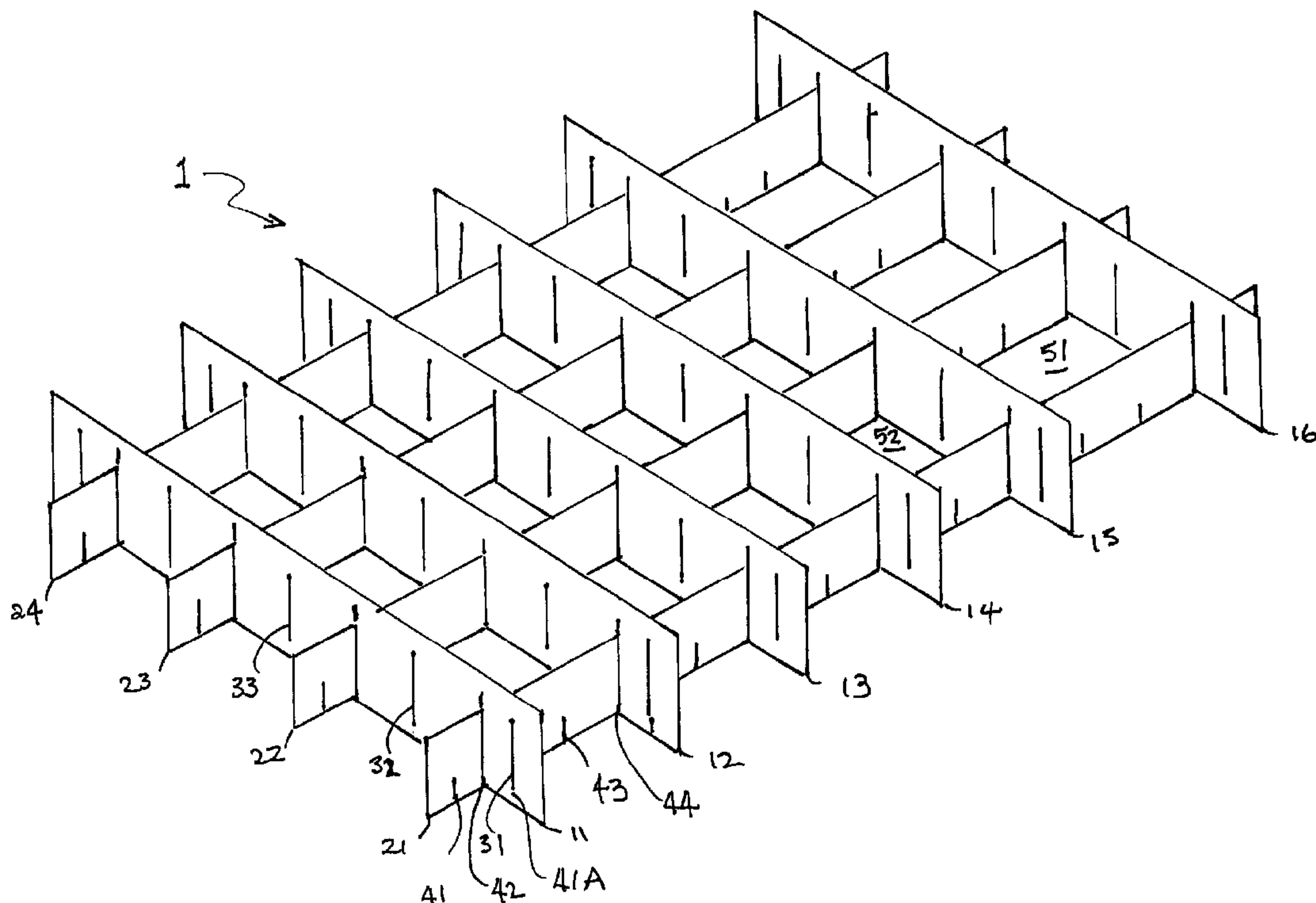
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(54) Titre : ENSEMBLE DE SEPARATEURS REGLABLES

(54) Title: ADJUSTABLE PARTITION ASSEMBLY



(57) **Abrégé/Abstract:**

An adjustable partition assembly for use in containers carrying items such bottles, cans, and the like. The adjustable partition assembly includes a first member and a second member. The first members include spaced apart slots located a short distance from the long edges of the member, through which the second apt can be inserted. The second members include spaced apart notches in thier edges. The partition is assembled by inserting the second members into the slots in the first memebbers, and engaging the notches in the second members onto the first members. The assembly can be adjusted to accept different size items by relocating the first and second members use a different selection of notches and slots, or to use one or more member of a different length. The partition assembly is conveniently fabricated from strip plastic material, such as polyethylene, of a suitable width.

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Adjustable Partition Assembly

This invention relates to a partition assembly for use in a container to separate articles therein. More particularly, this invention relates to a partition assembly for use in a picnic cooler.

Partition assemblies are commonly used to divide the space within a container into an orderly array of compartments, for example an array of compartments for bottles. The partitions are generally sturdy and can be re-used, but only with bottles of the same size. In order to fit bottles of a different size into the container a different partition has to be used. However, bottles are made in several sizes, both for different amounts of the same product and for different products. It is therefore quite difficult to provide containers with fixed partition assemblies for handling all of the different sized bottles. A different set of partitions must be provided for each different size of bottle. Exemplary prior art includes US 2,489,528; US 2,958,452; US 2,920,782; US 3,343,742 and US 3,767,106.

The present invention seeks to provide an adjustable partition assembly for use in containers carrying bottles, cans and the like. According to this invention, the container can be provided with an adjustable partition assembly, which can be adjusted to divide the container into an array of compartments of different sizes. Thus one container can be used to transport several different sizes of items, such as bottles, depending on how the adjustable partition assembly is adjusted. The partition assembly of this invention can also be used to provide an array of compartments within the same container which are not all the

same size thus allowing several different sizes of items to be accommodated simultaneously.

It is a further feature of this invention to seek to provide an adjustable and removable partition assembly which is sturdy enough to be re-used many times, and which may be knocked-down or collapsed so that a plurality of the partition assemblies may be stored in a minimum amount of space when not in use. The partition assembly also is preferably constructed from water proof material, such as a sheet plastic material, so that it can be readily cleaned.

The adjustable partition assembly of this invention is durable, inexpensive, versatile, simple to adjust, and inexpensive to manufacture.

Thus in its broadest embodiment this invention seeks to provide an adjustable partition assembly for a container comprising in combination:

a first set of partition members each having a length and height capable of being received upright in the container and having a plurality of parallel spaced part slots having a length extending from adjacent an upper edge of the member to adjacent a lower edge of the member, the lower end of the slot being separated from the lower edge of the member by a first distance, and the upper end of the slot being separated from the upper edge by a third distance; and

a second set of partition members each having a length capable of being received upright in the container, a height less than the length of the slots in the first partition members, and a plurality of spaced apart notches in a lower

edge of the partition member extending upwardly therefrom for a second distance;

wherein the first and second distances are substantially the same so that when the second members are inserted through the slots in the first members, the slots in the second member engage the first member below the lower ends of the slots to provide an array of compartments within the container.

Preferably the slots in each first member and the notches in each second member are both regularly spaced. More preferably, the slots in each first member and the notches in each second member are both regularly spaced by the same distance.

Preferably, the first and third distances are the same.

Preferably, the first members are shorter than the second members. Alternatively, the first members are longer than the second members.

Preferably, the first and second members are fabricated from a water resistant material. More preferably the first and second members are fabricated from sheet plastic material.

The invention will now be described with reference to the attached drawings in which:

Figure 1 shows a perspective view of an assembled partition;
Figure 2 shows a portion of a first partition member; and
Figure 3 shows a portion of a second partition member.

In Figure 1 the adjustable partition 1 is shown in its assembled form. The partition comprises essentially two parts: the first members 11, 12, 13, 14, 15 and 16, and the second

members 21, 22, 23 and 24. The first members each include a series of slots as at, for example, 31, 32 and 33. The second members include notches, as at 41, 42, 43 and 44. The relative sizes of the slots and of the notches is shown in more detail in Figures 2 and 3. The adjustable partition is assembled by inserting a set of second members into the slots in a set of first members, and then moving the second members so that the notches, e.g. as at 41, engage with the space in the first member below the slots, e.g. as at 41A. The assembly can then be adjusted in several ways:

- (a) at least one first or second member can be disengaged, removed from the set, and relocated into a different position; or
- (b) at least one first or second member can be removed entirely; or
- (c) a shorter first member can be used, so that all of the first members are not the same length; or
- (d) a shorter second member can be used, so that all of the second members are not the same length; or
- (e) any suitable combination of the preceding steps to provide the required array of compartments.

It is thus contemplated within this invention that a set of first and second members for an adjustable partition for a container may also include additional first and/or second members that may be used to customise the array of compartments.

Figure 1 also shows several further features of this invention. Due to the locations chosen within the set for the first and second members, not all of the array of compartments are of the same size, or of the same shape: compartment 51 is essentially square and compartment 52, which is essentially half the size of compartment 51, is rectangular.

Although the majority of the slots and notches are regularly spaced, some are not: the space between slots 31 and 32 is not the same as that between 32 and 33, and similarly the space between notches 41 and 42 is not the same as that between 42 and 43. Further, the spacing of the slots in the first members and the spacing of the notches in the second members even when fully regular in each case need not be the same. For clarity the different spacings are only shown in Figure 1 at the ends of the two sets of members.

Figure 2 shows in more detail a portion 17 of a first member. The member includes a plurality of slots as at 35 which are separated along the member 17 by the distance A, are separated by a first distance B from the lower edge 18, have a width C, a length D, and are separated from the upper edge 19 by a distance E. Figure 3 shows in more detail a portion 25 of a second member. The member includes a plurality of notches 35 in its lower edge 36 which are separated along the member 25 by the distance A, extend upwardly a distance B from the lower edge 36, have a width C, and are separated from the upper edge 19 by a distance E. The member has overall width D.

These four distances are inter-related as follows. The distance A as shown is the same in both members; the slots and notches are thus both each regularly spaced, and each are spaced by the same distance. The distance B as shown is substantially the same in both members, so that when the first member is engaged with the second its upper edge will be at the chain line 37 in Figure 1, and the lower edge 18 and 25 of the two members will be in the same plane. The distance D is also essentially the same in both members, so that the second member 25 is a reasonably close fit in the slot 35. The distances C are also

both substantially the same, and imply that each member is fabricated from the same thickness material. As shown, the distance E is the same as B: if it is not, then care has to be taken when assembling a partition to see that all of the first members are oriented with the distance E at the at the same edge, which will usually be at the top.

The adjustable partition assembly of this invention can be fabricated from a variety of materials. A material that has been found to be very convenient both as regards cost and ease of handling is polyethylene sheet or strip of the desired widths. A suitable thickness has been found to be about .040", for a partition assembly to be used in a container with internal dimensions of about 22" by 13". For this application, the first members are about 4" wide, and the second members are about 3" wide.

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What is claimed is:

1. An adjustable partition assembly for a container comprising in combination:

a first set of partition members each having a length and height capable of being received upright in the container and having a plurality of parallel spaced part slots having a length extending from adjacent an upper edge of the member to adjacent a lower edge of the member, the lower end of the slot being separated from the lower edge of the member by a first distance, and the upper end of the slot being separated from the upper edge by a third distance; and

a second set of partition members each having a length capable of being received upright in the container, a height less than the length of the slots in the first partition members, and a plurality of spaced apart notches in a lower edge of the partition member extending upwardly therefrom for a second distance;

wherein the first and second distances are substantially the same so that when the second members are inserted through the slots in the first members, the slots in the second member engage the first member below the lower ends of the slots to provide an array of compartments within the container.

2. An adjustable partition assembly according to Claim 1 wherein the slots in each first member and the notches in each second member are both regularly spaced.

3. An adjustable partition assembly according to Claim 1 wherein the slots in each first member and the notches in each second member are both regularly spaced by the same distance.
4. An adjustable partition assembly according to Claim 1 wherein the first and third distances are the same.
5. An adjustable partition assembly according to Claim 1 wherein the first members are shorter than the second members.
6. An adjustable partition assembly according to Claim 1 wherein the first members are longer than the second members.
7. An adjustable partition assembly according to Claim 1 wherein the first and second members are fabricated from a water resistant material.
8. An adjustable partition assembly according to Claim 1 wherein the first and second members are fabricated from sheet plastic material.
9. An adjustable partition assembly according to Claim 8 wherein the first and second members are fabricated from sheet polyethylene.
10. An adjustable partition assembly according to Claim 1 wherein all of the first members are the same length.
11. An adjustable partition assembly according to Claim 1 wherein all of the first members are not the same length.
12. An adjustable partition assembly according to Claim 1 wherein all of the second members are the same length.

13. An adjustable partition assembly according to Claim 1 wherein all of the second members are not the same length.

14. An adjustable partition assembly according to Claim 1 wherein the height of the second members is such that the second members are a close fit in the slots in the first members.

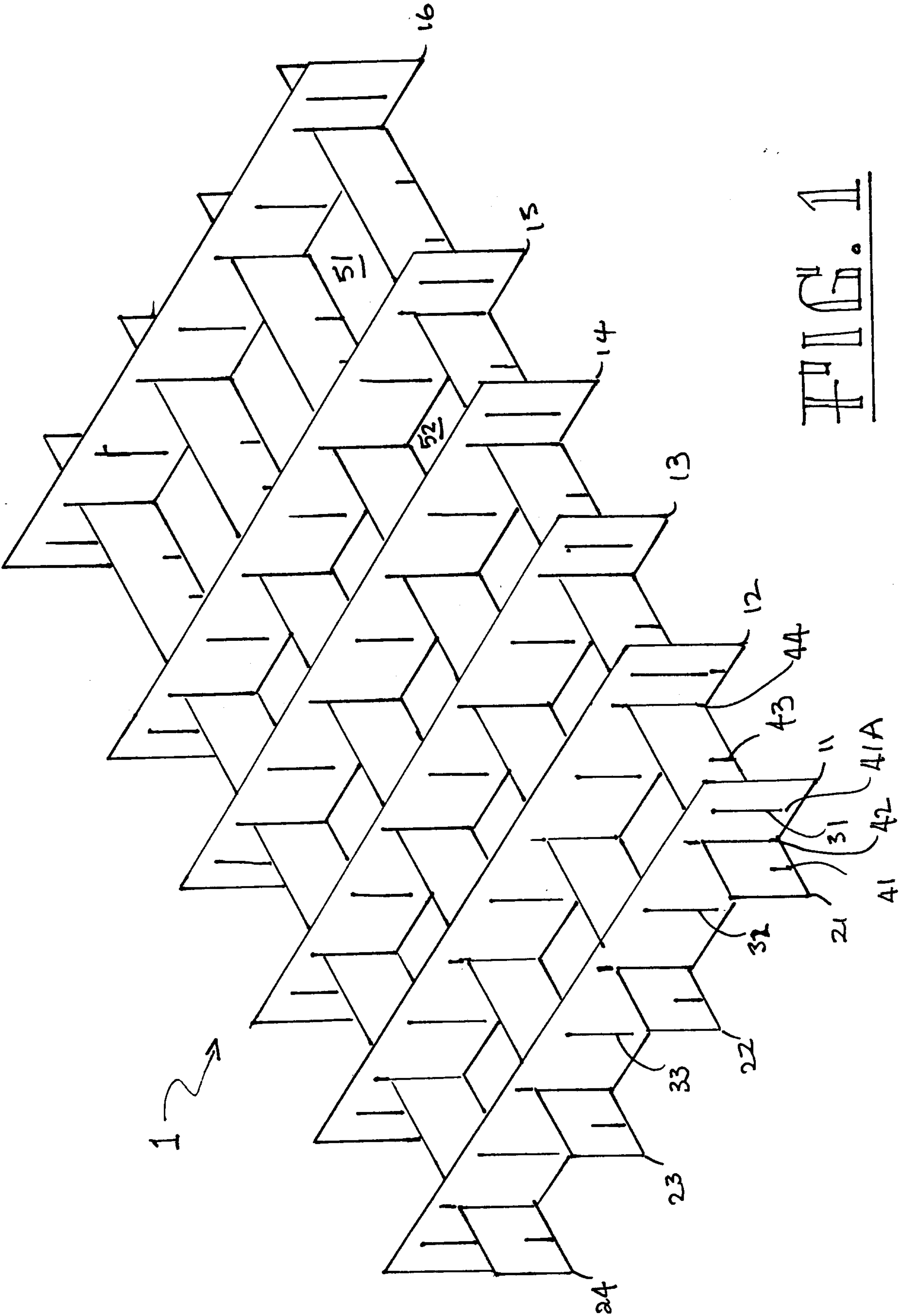


FIG. 1

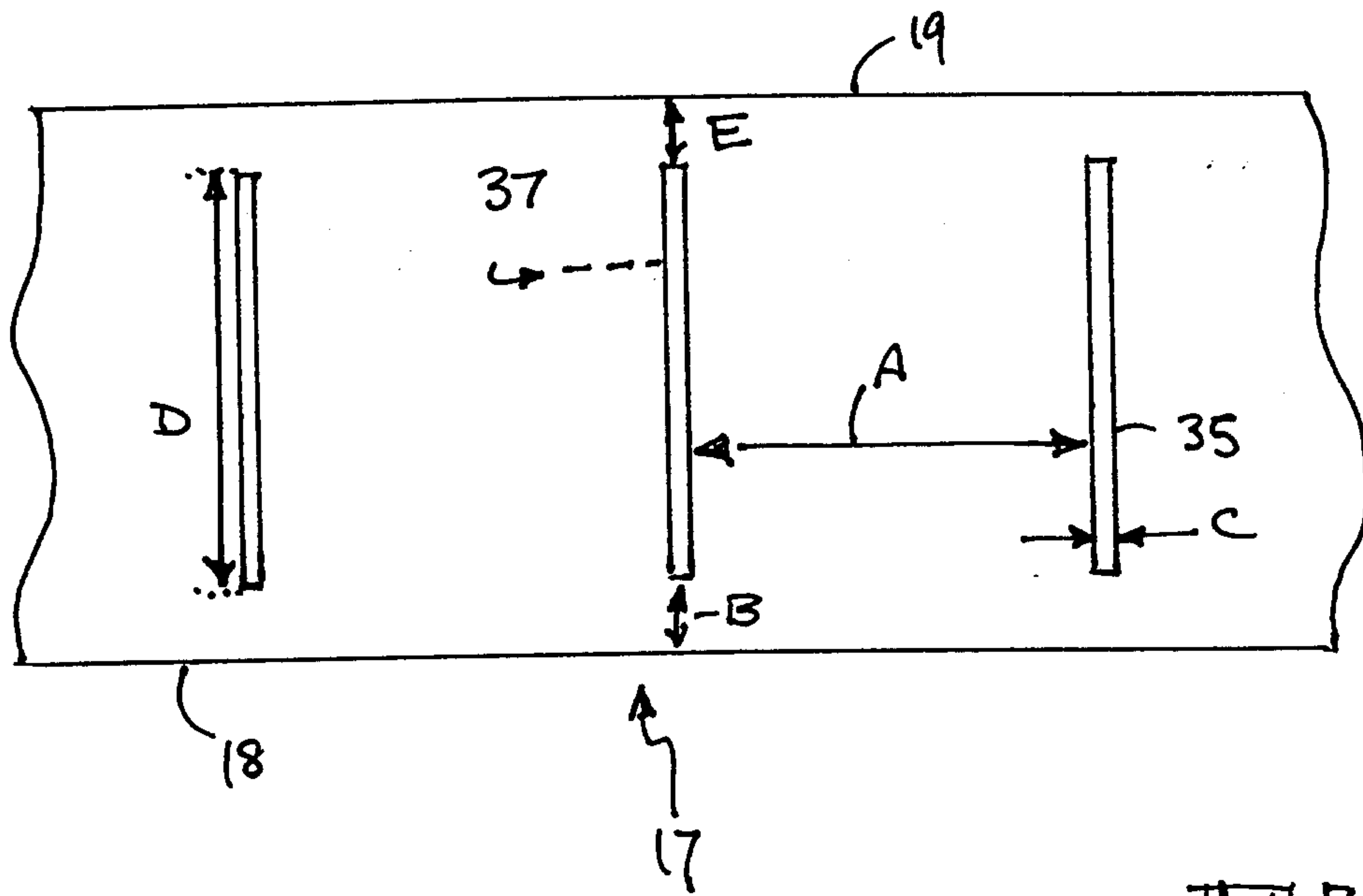


FIG. 2

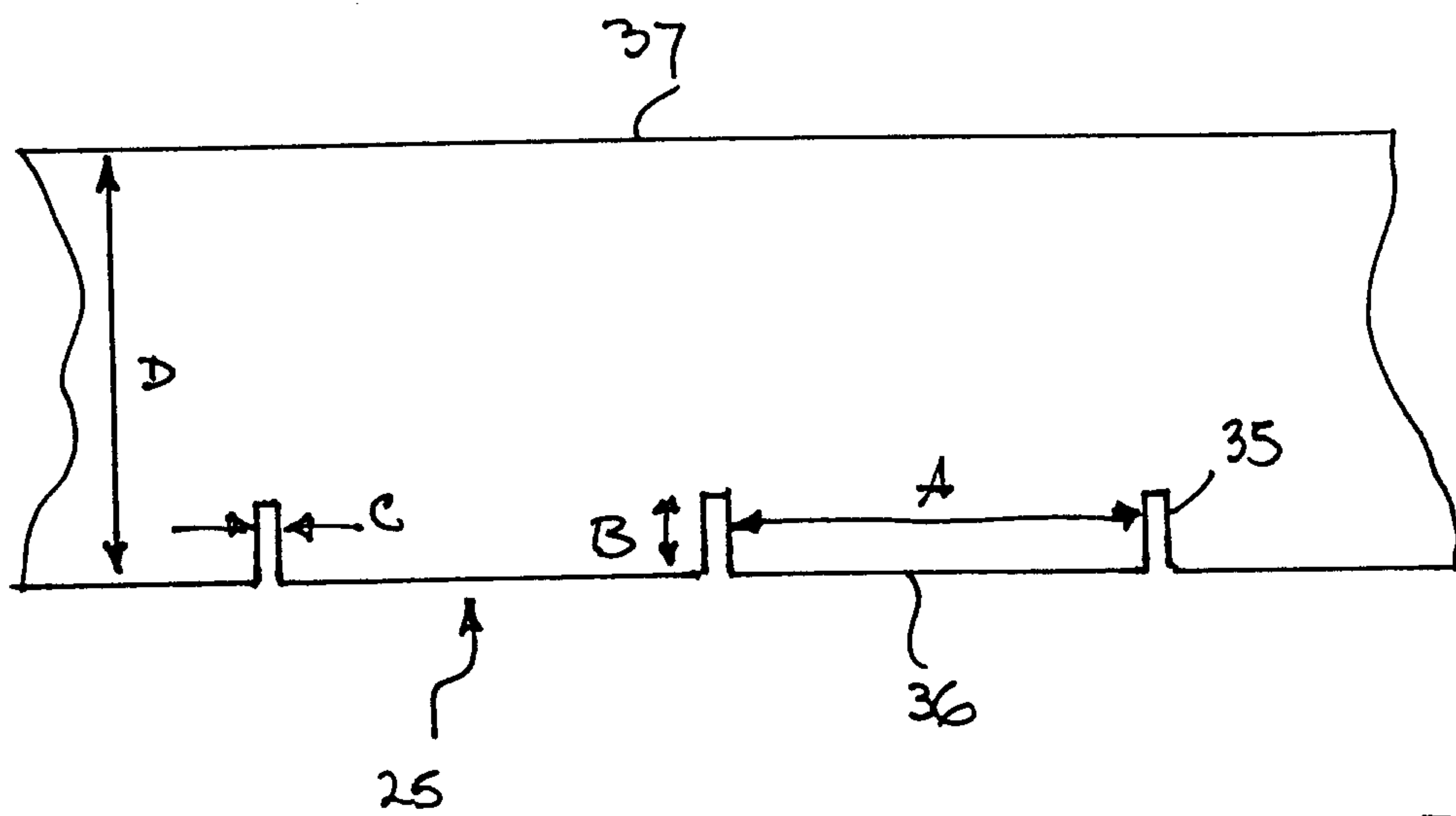


FIG. 3

