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E. F. McHENRY
MOTOR TRUCK DECKING
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2,540,400

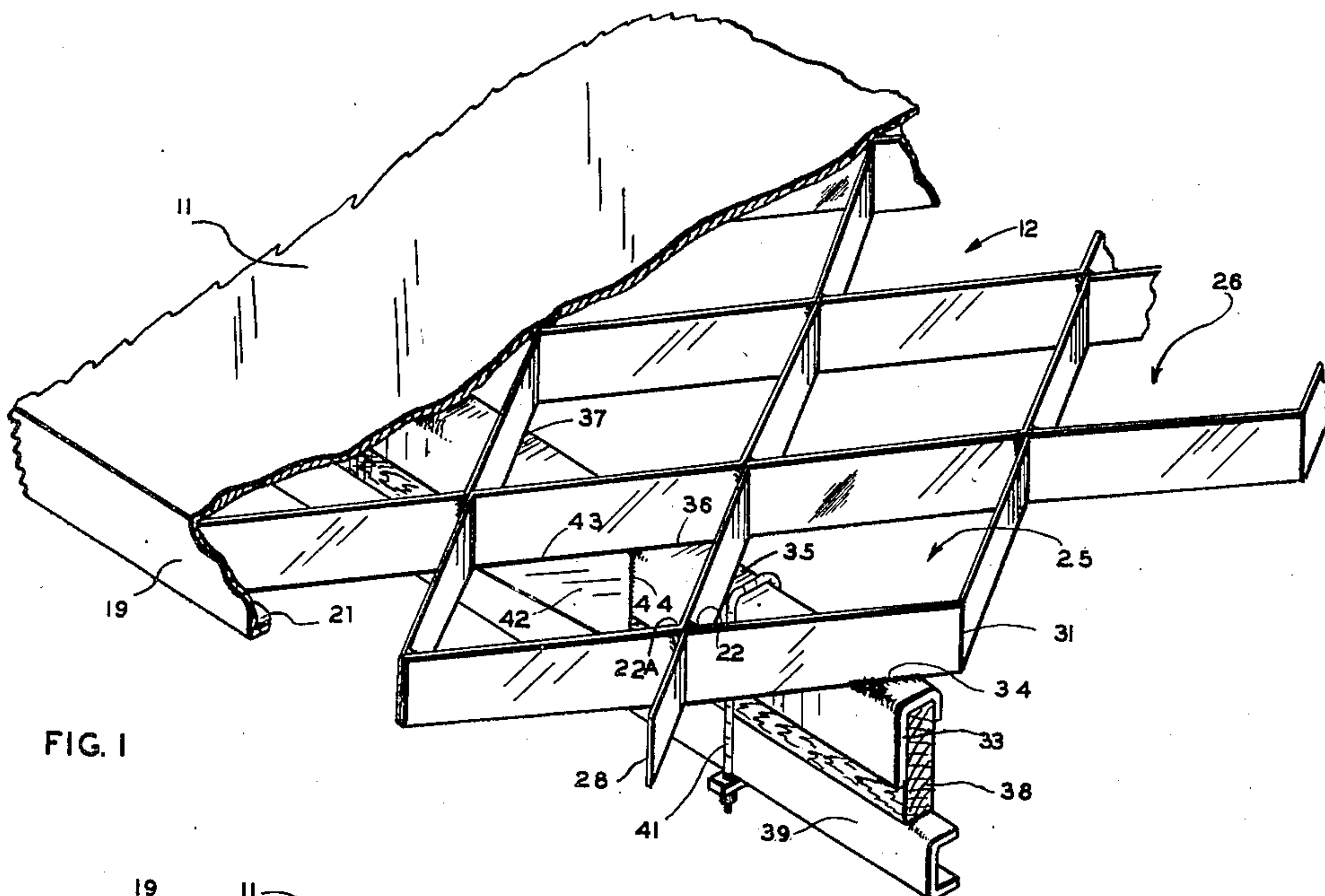


FIG. 1

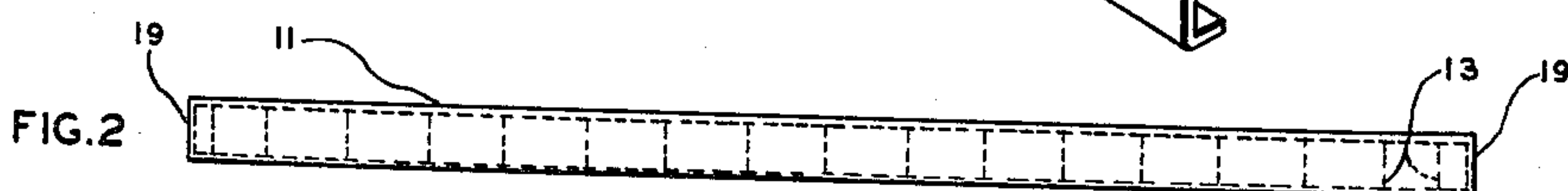


FIG. 2

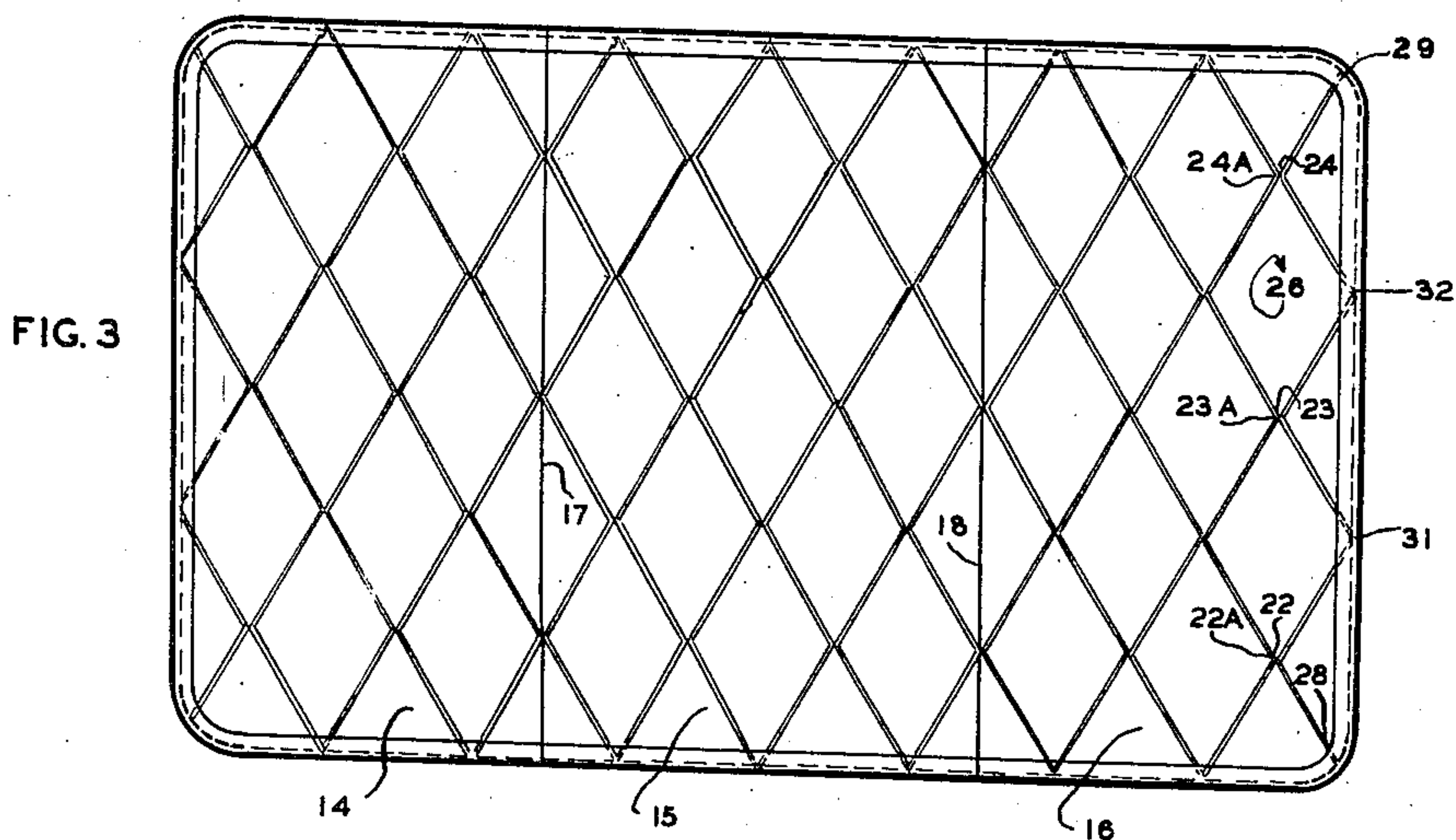


FIG. 3

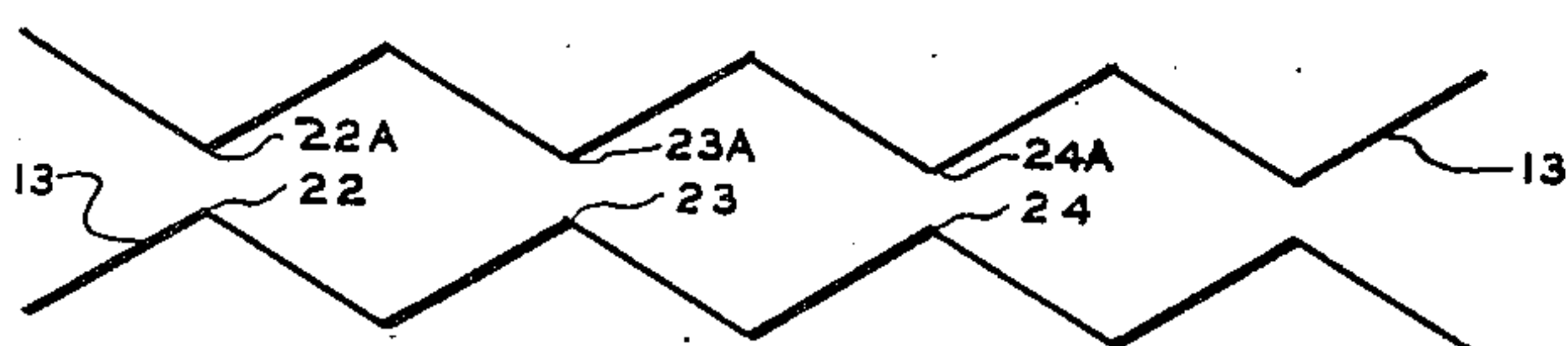


FIG. 4

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MOTOR TRUCK DECKING

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1 Claim. (Cl. 296—28)

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This invention relates to floor structure generally and concerns itself more particularly with motor truck decking.

It is a general aim of the invention to provide a truck bed floor which will have all of the advantages of a metal deck without the heretofore inherent disadvantage of metal structures residing in excessive weight over and above that of wooden floors.

Another object of the invention is to provide a metal truck bed decking which, though light in weight, will not sag or pocket, which is easily and economically fabricated and which is structurally stronger per unit weight than wooden decking or the like.

More specifically, it is an object of the invention to provide a motor truck decking having a comparatively thin surface plate supported throughout its entire area by a lattice-work of metal strips arranged with one of their edges normal to the plate and welded together to form a support grating presenting a series of diamond shaped designs.

Other objects and advantages will become apparent as the description proceeds and a more comprehensive understanding of the invention will be afforded from the following detailed description when considered in conjunction with the accompanying drawing in which

Fig. 1 is a perspective view of a motor truck decking embodying the instant invention with portions of its sheet decking removed to show its internal construction and a mode of attaching it to a truck frame,

Figs. 2 and 3 are, respectively, side and bottom views of the decking illustrated in Fig. 1, and

Fig. 4 is a view showing the form taken by the metal strips from which a sheet decking support is fabricated.

In a preferred embodiment, the invention contemplates a metal sheet decking 11 which is supported throughout its entire area by a metal grating or lattice-work 12 fabricated from a plurality of corrugated metal strips 13.

The sheet decking 11 may be in one piece or it may be fabricated from a plurality of sections such as 14, 15 and 16, Fig. 3. In practice, it has been found desirable to make the decking in sections for easy handling, in which case the sections are butt welded at 17 and 18 and the welds finished smooth on the top side.

The decking is turned down at both sides and at its ends to form an apron 19 and a section 21 of this apron is turned under to form with the decking itself a channel in which the ends of

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strips 13 terminate. This construction, in addition to providing added support, gives to the entire structure a neat and finished appearance.

The corrugated strips 13 (Fig. 4) of which the lattice-work 12 is formed are so shaped that points 22—24 of one strip may be joined to companion points 22a—24a of another strip by butt welds to form the diamond patterns, such as 25 and 26, of the lattice-work. The ends 28 and 29 and the points 31 and 32 of the first strip are in turn welded to the apron 19 and section 21 of the decking 11. Welding of additional strips in this manner form the completed decking.

While it is not intended to limit the invention to any particular sequence in the various fabricating steps or to any particular material of a particular size and shape, it has been found convenient to build the supporting lattice-work 12 into the decking, strip by strip, rather than to form it as a unit and then weld it on to the decking.

It has been found also that metal strips of about one eighth inch thickness are of sufficient size for all practical purposes. These strips are about three and one-half inches wide and are bent to form diamond patterns with thirteen inch sides with a short diagonal of eight inches. It is conceivable that other dimensions and designs could be selected, but this particular one gives adequate support to the entire surface of the deck and also makes possible the use of strips which are easily bent to their desired form and lend themselves to rapid fabrication of the lattice-work.

Once the decking is made to the desired size and shape, it may be rigidly secured to a truck bed in the following manner. A metal sub-sill cap 33 bent to the desired form is welded to the lattice-work 12 at suitable points on the strips 13 such as 34, 35, 36 and 37, Fig. 1.

The sub-sill cap 33, only one section of which is shown, is shaped to conform to the truck frame and is fitted onto a wooden sub-sill 38 throughout its length. The sub-sill 38 in turn rests on top of a channel 39 forming the truck frame and the entire decking assembly is bolted to the frame with a suitable number of U-bolts 41.

For added structural support against shifting, a plurality of side plates such as that designated 42, are welded along selected ones of the strips as at 43 and then to the sub-sill cap 33 as at 44. The side plates 42 are welded along their horizontal edges to the bottoms of the selected strips and along their vertical edges to the side of the sub-sill cap.

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Although a particular embodiment of the invention has been illustrated and described it is obvious that other modifications thereof may be made. Accordingly, it is intended that the representation and descriptions herein made shall be interpreted as illustrative only and nowise in a limiting sense and that the invention shall be bounded only by the appended claim.

What is claimed is:

In a motor truck decking, a metal surface plate having its edges turned down and under to form channeled side walls and ends therefor, a plurality of corrugated metal strips turned edge-wise and welded together to form a supporting lattice-work characterized by regular designs, said lattice-work being welded to said surface plate in a manner to have its outside edges supported in said channeled walls and ends, a metal sub-sill cap welded onto said strips, and a plurality of triangularly shaped side plates each welded along one edge to a selected strip and along a second edge to said sub-sill cap.

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