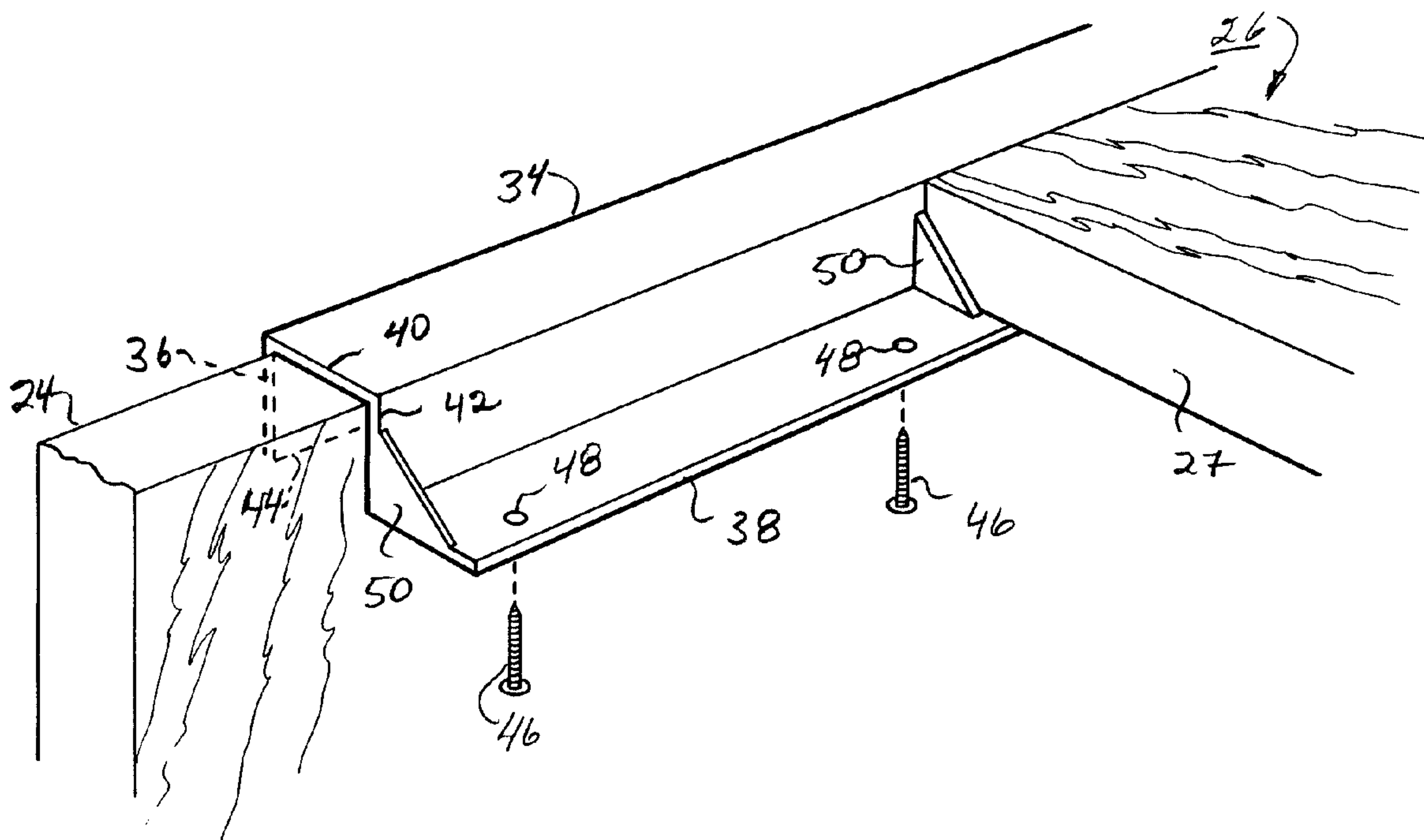




(22) Date de dépôt/Filing Date: 2000/03/30
(41) Mise à la disp. pub./Open to Public Insp.: 2001/09/30

(51) Cl.Int.⁷/Int.Cl.⁷ E04B 1/38
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(54) Titre : SUPPORT POUR LA CONSTRUCTION DE TABLIER OU DE QUAI MODULAIRE
(54) Title: BRACKET FOR CONSTRUCTING MODULAR DECK OR DOCK



(57) Abrégé/Abstract:

A deck bracket for coupling a deck to a pair of stringers forming part of a dock or deck has a channel for receiving the stringers and a transverse flange for supporting the lengths of decking forming the deck. The flange is downwardly spaced from the top of the bracket so that the decking is flush with the top of the bracket. Apertures in the flange are provided to receive fasteners to secure the decking to the bracket. A deck unit made with a pair of deck brackets and lengths of decking extending between the brackets can be easily dropped onto the stringers and removed, as the need arises.

ABSTRACT

A deck bracket for coupling a deck to a pair of stringers forming part of a dock or deck has a channel for receiving the stringers and a transverse flange for supporting the lengths of decking forming the deck. The flange is downwardly spaced from the top of the bracket so that the decking is flush with the top of the bracket. Apertures in the flange are provided to receive fasteners to secure the decking to the bracket. A deck unit made with a pair of deck brackets and lengths of decking extending between the brackets can be easily dropped onto the stringers and removed, as the need arises.

BRACKET FOR CONSTRUCTING MODULAR DECK OR DOCK

Field of the Invention

This invention relates to a bracket for facilitating the construction of a dock or
5 deck, and which is easily dismantled for seasonal use.

Background of the Invention

Docks are commonly constructed by erecting a supporting metal framework
having legs which extend into the water onto the lake or river bottom, a frame made of
10 lumber comprising stringers coupled to the supporting framework, and decking which is
fastened to the stringers.

Because docks are subject to damage from weathering and especially from shifting
ice and heavy spring water flows, it is common practice in northern climates to erect and
at least partially dismantle a dock on a seasonal basis.

15 However, lumber is inherently very heavy, and decks are of an awkward size. It
is therefore desirable to construct a dock in a modular fashion which will facilitate their
construction and which will facilitate dismantling the dock at the end of the watercraft
season.

An object of this invention is to provide a bracket for facilitating the construction
20 of docks so that they can be easily dismantled.

Summary of the Invention

In accordance with the invention, there is provided a bracket for coupling a stringer to least one length of decking, the bracket having a longitudinally extending channel for receiving a stringer therein, and a transversely extending flange to which the decking is attached. The channel is oriented in use so that it is closed at the top of the bracket and the flange is downwardly spaced from the top of the bracket by a height sufficient to accommodate the height of the deck. Preferably, the flange is provided with apertures for receiving fasteners to secure the decking to the bracket.

Bracket Description of the Drawings

In order that the invention may be more closely understood, a preferred embodiment is described below with reference to the accompanying drawings, in which:

Fig. 1 is a perspective view showing a dock unit made in accordance with the invention;

Fig. 2 (drawn to a larger scale) is a partly sectioned perspective view showing a bracket in accordance with the invention in association with a stringer and a length of decking; and

Fig. 3 is a perspective view of the bracket from a bottom side thereof.

Description of Preferred Embodiment with Reference to Drawings

A dock constructed in accordance with the invention is shown in Fig. 1 where a single unit generally indicated by numeral 20 is shown. It will be understood that several units 20 may be erected end to end and at right angles to each other to create the docking

space required. The dock unit 20 comprises a supporting framework 22 constructed from metal tubing, a pair of parallel spaced stringers 24, and a deck 26.

5 The supporting framework 22 comprises a set of four legs 28 which in use extend downwardly into the water and which will have different terminations selected according to the nature of the bottom, which could be rocky, and firm or silty. The legs 28 are coupled in pairs to respective cross arms 30 with brackets 32, and the cross arms 30 are normally spaced apart a maximum distance of about ten feet.

10 The stringers 24 are fastened to the brackets 32 and extend the length of the dock unit 20, between a respective pair of cross-arms 30. The stringers 24 are normally 2in by 6in or 2in by 8in and are provided in pairs each ten feet long so that there is a stringer on each side of the dock unit. The deck 26 comprises lumber, usually in three to four foot lengths of decking 27, five and one half in wide, which extend transversely on the dock unit 20 between the stringers 24. In the past, the deck 26 would be fastened directly to the stringers 24 with wood screws.

15 In accordance with the invention, the deck 26 is coupled to the stringers 24 using a deck bracket 34. In the embodiment illustrated in Fig. 1, five deck brackets 34 are disposed end to end on a respective stringer 24 and five more brackets 34 are disposed on the opposing stringer 24.

20 The deck bracket 34 in accordance with the invention is shown in more detail in Fig. 2 and comprises a longitudinally extending channel 36 and a transversely extending flange 38. The channel 36 is U-shaped and dimensioned to receive a stringer 24 therein. In use, the channel 36 is oriented so that it is closed at the top 40, and open at the bottom

so that the deck bracket 34 simply rests over the associated stringer 24 with the stringer 24 received between an inner leg 42 and outer leg 44 defining the U-shaped channel 36.

The flange 38 is downwardly spaced from the top 40 of the deck bracket 34 by a height sufficient to accommodate the height of the deck 26 and to be flush with the inner leg 42. In this way, the top surface of the deck 26 is flush with the top 40 of the deck bracket 34. The deck 26 is fastened to the deck bracket 34 with wood screws 46 received through countersunk apertures 48 formed in the flange 38. The screws 46 penetrate into the bottom surface of the deck 26 (as drawn) and at least two such fasteners are provided at each end of a length of decking 27. The lengths of decking 27 are each located between a pair of gussets 50 comprising a triangular web joining the inner leg 42 to the flange 38.

In the embodiment illustrated, the deck bracket 34 is designed to accommodate three lengths of decking 27 and therefore three gussets 50 are provided, two outer gussets provided at the ends of the deck bracket 34 and a single inner gusset disposed midway between the ends. It will be noted that the outer gussets 50 have half the width of the inner gusset 50 so that when two deck brackets 34 are disposed side by side on a stringer 24, the outer gussets 50 together occupy substantially the same width as a single, inner gusset.

In use, three lengths of decking 27 would be fastened with screws 46 at each end to a respective deck bracket 34 to form a deck unit 52 (Fig. 1). As will be seen in Fig. 1, five such deck units 52 are used to form the dock unit 20 and these are located side by side on the stringers 24 where they are held by gravity. A fascia or end piece 54 (Fig. 1) completes the assembly and is fastened to the ends of the stringers 24 to form a

rectangular box. At the end of a season, the deck units 52 are simply lifted from the stringers 24 and stored for future use.

It will be understood that several variations may be made to the above-described embodiment of the invention as will be apparent to those skilled in the art. In particular,
5 it will be understood that dimensions where given are only illustrative and may be varied to suit any intended application. The deck brackets 34 in accordance with the invention may locate any number of lengths of decking 27 and are not limited to three, as illustrated and need not have any locating gussets 50, as described. Conveniently, the deck bracket
34 in accordance with the invention is cast from an aluminum alloy but the same profile
10 could be made by extrusion and could be fabricated from suitable synthetic plastic material. Other such variations will be apparent to those skilled in the art and are within the scope of the rights being claimed. The invention has been described with reference to the construction of a dock but will equally find application to the construction of any deck supported on a platform whether it is raised or cantilevered to another structure.

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CLAIMS:

1. A bracket for coupling a deck to a pair of longitudinally extending, spaced parallel stringers associated with a supporting framework, the deck comprising a plurality of lengths of decking extending transversely between said stringers, the bracket comprising
5 a channel for receiving a stringer therein and a dependent flange extending transversely thereto for supporting at least one length of decking.
2. A bracket according to Claim 1 in which the channel has an inverted U-shape.
- 10 3. A bracket according to Claim 1 in which the flange is downwardly spaced from a top for the bracket by a height commensurate with a thickness of a length of decking.
4. A bracket according to Claim 1 in which the flange has a plurality of longitudinally spaced apertures for receiving fasteners to secure the lengths of decking to the bracket.
- 15 5. A bracket according to Claim 1 having a plurality of longitudinally spaced gussets adjoining the channel and the flange for locating said lengths of decking.
6. A deck unit assembly comprising at least one length of decking secured to a pair
20 of oppositely disposed, spaced parallel deck brackets, each deck bracket comprising a channel for receiving a longitudinally extending stringer therein and a dependent flange extending transversely to the channel for supporting said at least one length of decking.

7. A deck unit according to Claim 6 in which the flange is downwardly spaced from a top for the bracket by a height commensurate with a thickness of a length of decking and the flange has a plurality of longitudinally spaced apertures for receiving fasteners to secure the lengths of decking to the bracket.

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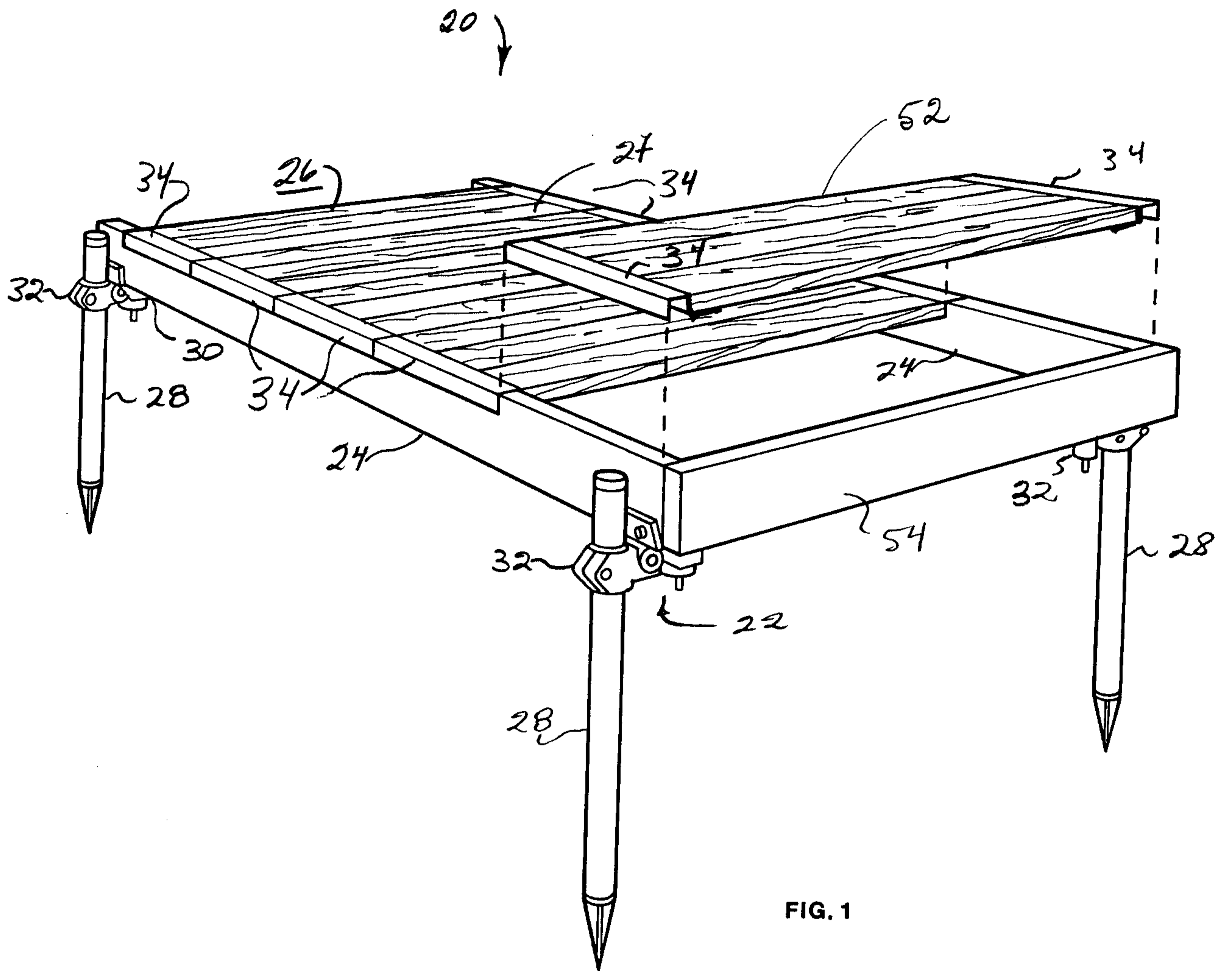


FIG. 1

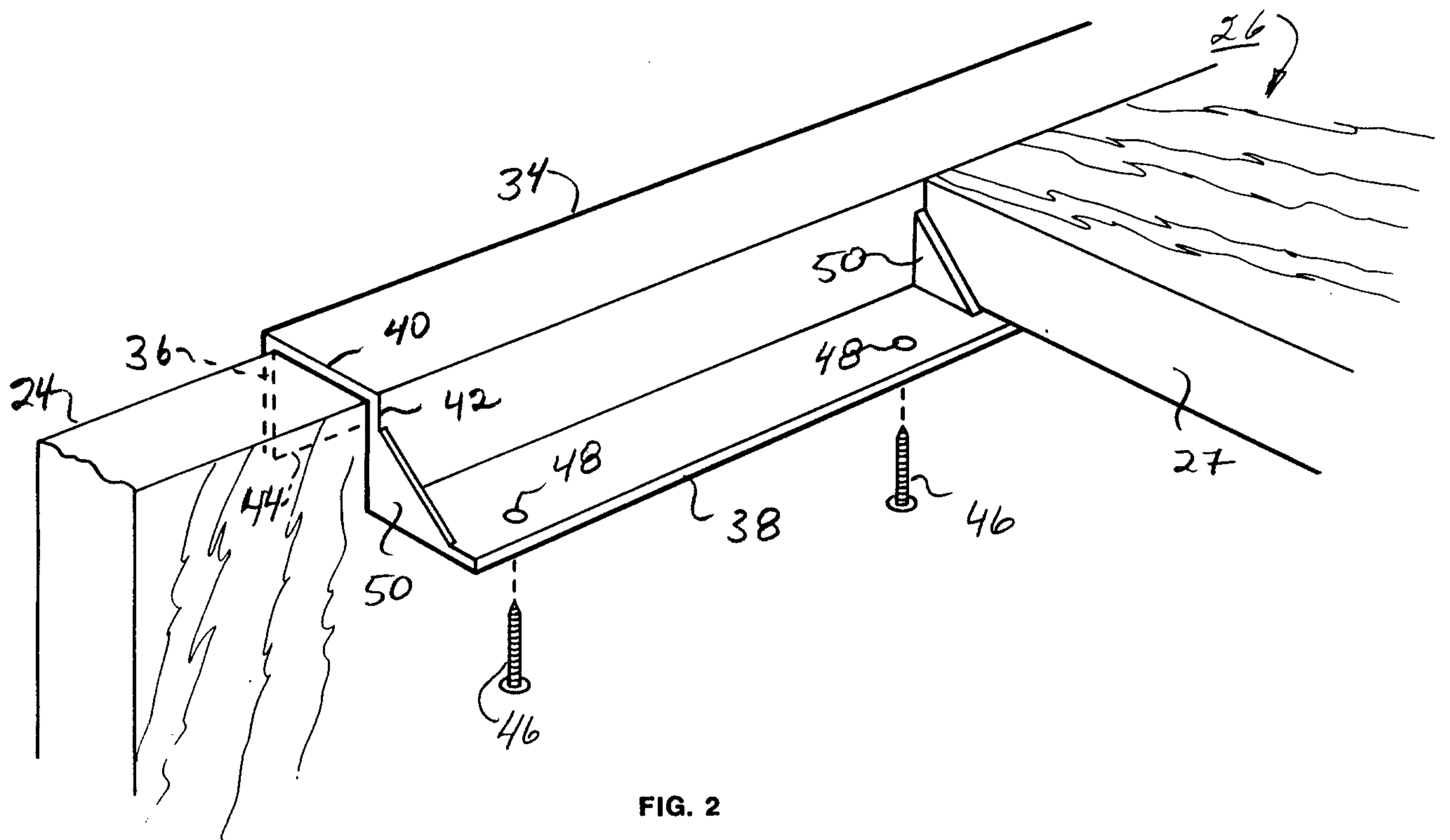


FIG. 2

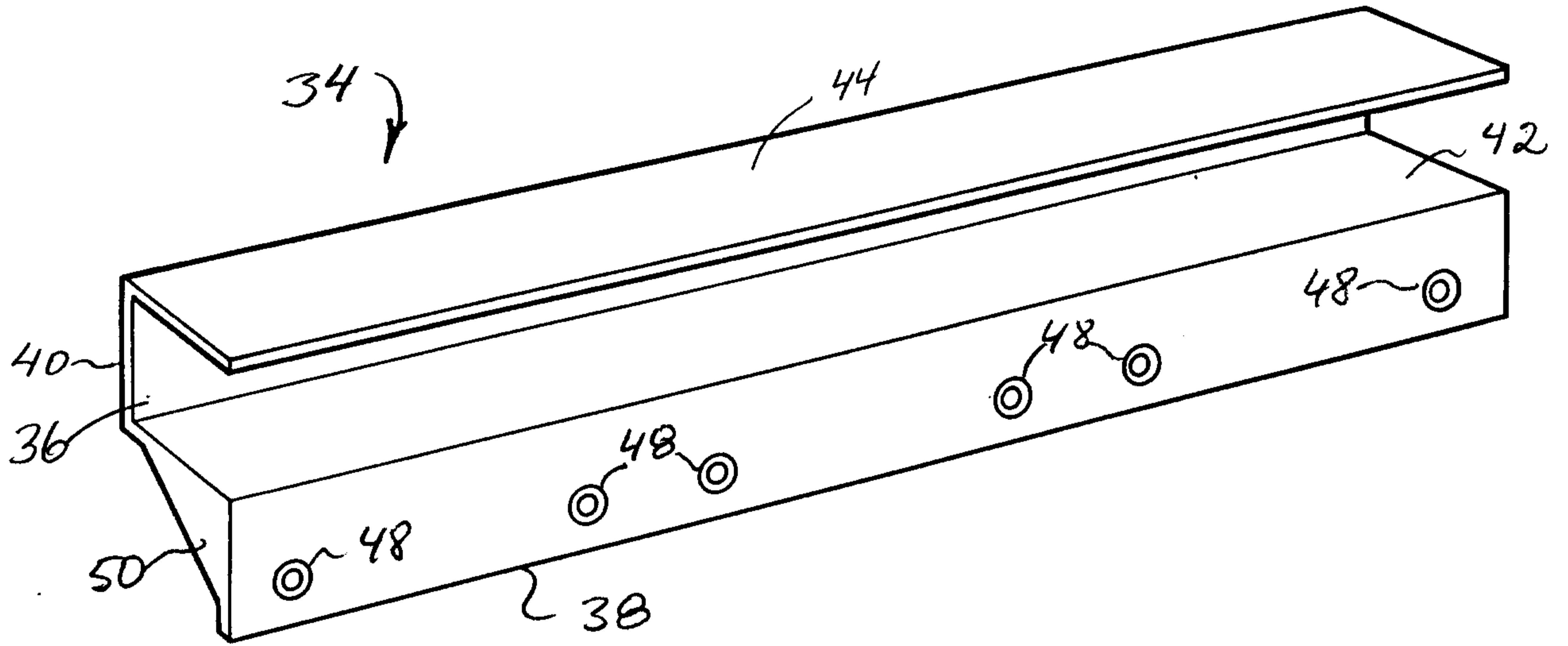


FIG. 3

