

(12) **DEMANDE DE BREVET CANADIEN**
CANADIAN PATENT APPLICATION

(13) **A1**

(22) **Date de dépôt/Filing Date:** 2016/05/13

(41) Mise à la disp. pub./Open to Public Insp.: 2016/12/02

(30) **Priorité/Priority:** 2015/06/02 (TW104208746)

(51) **Cl.Int./Int.Cl. B25H 3/00** (2006.01),
B25B 13/06 (2006.01)

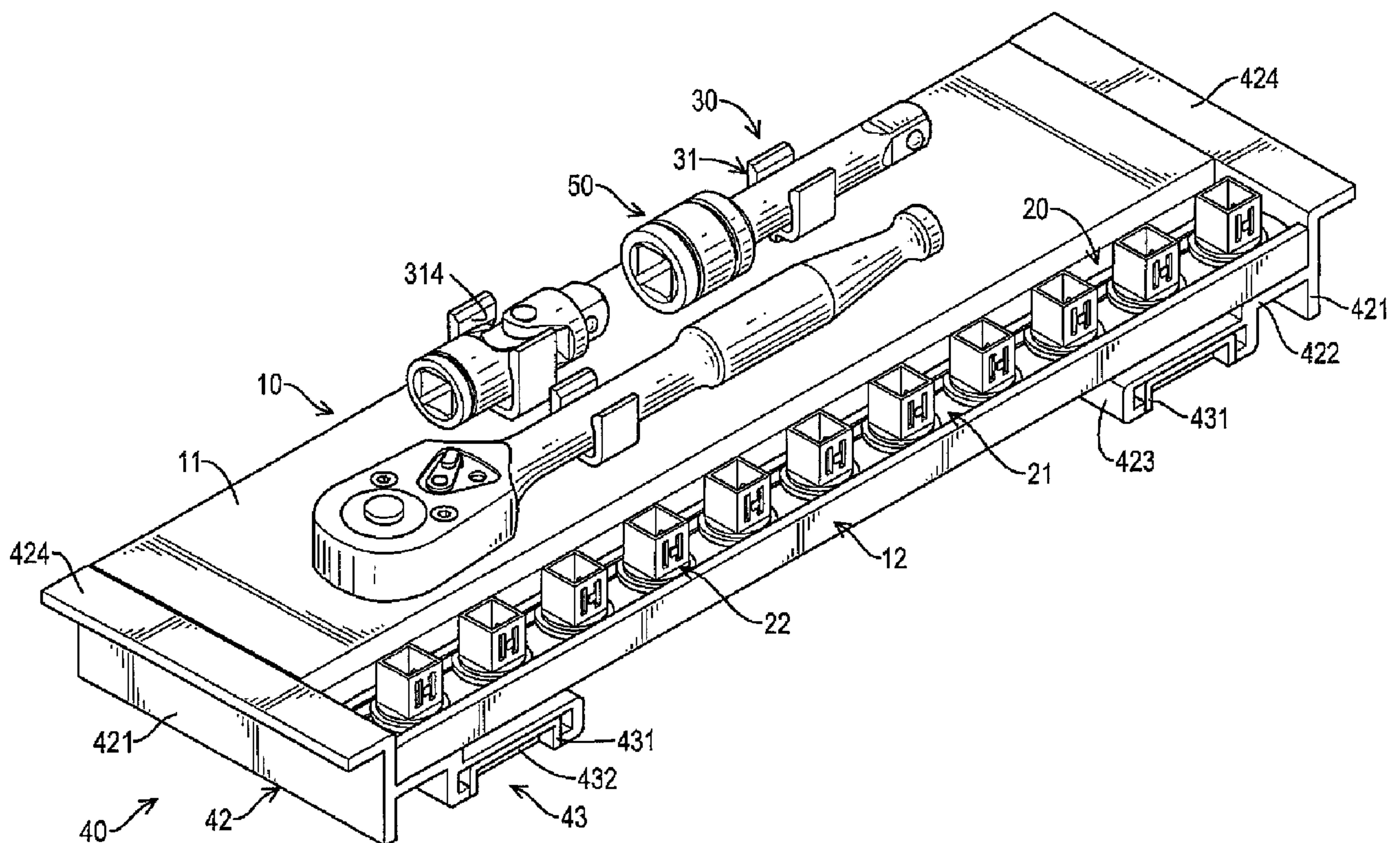
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(54) Titre : SUPPORT POUR OUTIL EN COMPOSITE

(54) **Title:** COMPOSITE TOOL HOLDER



(57) Abrégé/Abstract:

A composite tool holder has a base (10, 10B), a socket set (20, 20B), and a hand-tool set (30, 30B). The base (10, 10B) has a substrate (11, 11A, 11B) and a first-track (12, 12A, 12B). The first-track (12, 12A, 12B) has an upper-opening (121) and a sliding-

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

slot (122, 122B). The socket set (20, 20B) is connected to the base (10, 10B) and has multiple positioning-blocks (22, 2B, 22C) slidably mounted in the sliding-slot (122, 122)3 of the first-track (12, 12A, 12B). The hand-tool. set (30, 30B) is connected to the base (10, 10B) and has at least one holding-component (31, 31B) deposited on the substrate (11, 11A).

1 **ABSTRACT**

2 A composite tool holder has a base (10, 10B), a socket set (20, 20B), and
3 a hand-tool set (30, 30B). The base (10, 10B) has a substrate (11, 11A, 11B) and
4 a first-track (12, 12A, 12B). The first-track (12, 12A, 12B) has an upper-opening
5 (121) and a sliding-slot (122, 122B). The socket set (20, 20B) is connected to the
6 base (10, 10B) and has multiple positioning-blocks (22, 2B, 22C) slidably
7 mounted in the sliding-slot (122, 122B) of the first-track (12, 12A, 12B). The
8 hand-tool set (30, 30B) is connected to the base (10, 10B) and has at least one
9 holding-component (31, 31B) deposited on the substrate (11, 11A).

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1 **COMPOSITE TOOL HOLDER**

2 BACKGROUND OF THE INVENTION

3 1. Field of the Invention

4 The present invention relates to a holder, specifically to a composite tool
5 holder capable of storing both hand tools and sleeves.

6 2. Description of the Related Art

7 A conventional tool holder mainly has a base and multiple
8 positioning-blocks movably mounted in the base. A sliding track is formed on a
9 top surface of the base, and each one of the positioning-blocks has a sliding base
10 formed on a bottom of the positioning-block for engaging with the sliding track.
11 An inserting-portion is formed upward on a top surface of the sliding base of the
12 positioning-block, and the inserting-portion can be a socket or a hanging rod.
13 When the inserting-portion of each one of the positioning-blocks is the socket,
14 the socket can be used for storing a sleeve. Furthermore, when the
15 inserting-portion of each one of the positioning-blocks is the hanging rod, a hand
16 tool such as a socket wrench can be hung on the hanging rod to store the hand
17 tools.

18 However, a user mostly needs to use the sleeve and the hand tool at the
19 same time to fasten or unfasten a fastener, such as a bolt or a nut, but the
20 conventional tool holder cannot hold the sleeve and the hand tool at the same
21 time. Oftentimes the user may forget to bring the sleeve or the hand tool,
22 resulting in inconvenience. Moreover, when the user needs to use the sleeve and
23 the hand tool at the same time, the conventional tool holder may cause
24 inconvenience in carrying or storing the sleeve and the hand tool. Therefore, the

1 conventional tool holder needs to be improved.

2 SUMMARY OF THE INVENTION

3 One aspect of the present invention provides a composite tool holder
4 that may store both hand tools and sleeves.

5 Other advantages and novel features of the invention will become more
6 apparent from the following detailed description when taken in conjunction with
7 the accompanying drawings.

8 BRIEF DESCRIPTION OF THE DRAWINGS

9 Fig. 1 is a perspective view of a first embodiment of a composite tool
10 holder in accordance with the present invention;

11 Fig. 2 is an exploded perspective view of the composite tool holder in
12 Fig. 1;

13 Fig. 3 is a further exploded view of the composite tool holder in Fig. 2;

14 Fig. 4 is a side view in partial section of the composite tool holder in Fig.
15 1;

16 Fig. 4A is a partial enlarged view of Fig. 4;

17 Fig. 5 is a top side view of the composite tool holder in Fig. 1;

18 Fig. 6 is an enlarged side view in partial section of the composite tool
19 holder in Fig. 5 along line 6-6;

20 Fig. 7 is another enlarged side view in partial section of the composite
21 tool holder in Fig. 1;

22 Fig. 8 is a perspective view of a second embodiment of a composite tool
23 holder in accordance with the present invention;

24 Fig. 9 is an exploded perspective view of the composite tool holder in

1 Fig. 8;

2 Fig. 10 is a perspective view of a third embodiment of a composite tool
3 holder in accordance with the present invention;

4 Fig. 11 is an exploded perspective view of the composite tool holder in
5 Fig. 10;

6 Fig. 12 is a further exploded view of the composite tool holder in Fig.
7 11;

8 Fig. 13 is another exploded view of the composite tool holder in Fig. 11;

9 Fig. 14 is a top side view of the composite tool holder in Fig. 10;

10 Fig. 15 is a side view in partial section of the composite tool holder in
11 Fig. 14 along line 15-15;

12 Fig. 16 is an enlarged side view in partial section of the composite tool
13 holder in Fig. 14 along line 16-16;

14 Fig. 17 is another enlarged side view in partial section of the composite
15 tool holder in Fig. 10;

16 Figs. 17A and 17B are enlarged and cross sectional side views of the
17 composite tool holder in Fig. 17;

18 Fig. 18 is a perspective view of a fourth embodiment of a composite tool
19 holder in accordance with the present invention;

20 Fig. 19 is an exploded perspective view of the composite tool holder in
21 Fig. 18;

22 Fig. 20 is a further exploded view of the composite tool holder in Fig.
23 19;

24 Fig. 21 is a top side view of the composite tool holder in Fig. 18;

1 Fig. 22 is an enlarged side view in partial section of the composite tool
2 holder in Fig. 21 along line 22-22;

3 Fig. 23 is an enlarged and operational perspective view of the composite
4 tool holder in Fig. 18; and

5 Fig. 24 is a perspective view of a fifth embodiment of a composite tool
6 holder in accordance with the present invention.

7 DETAILED DESCRIPTION OF PREFERRED EMBODIMENT

8 With reference to Figs. 1 to 3, a first embodiment of a composite tool
9 holder in accordance with the present invention has a base 10, a socket set 20, a
10 hand-tool set 30, and a bracket set 40.

11 With reference to Figs. 2 to 4, the base 10 is an extruded aluminum
12 structure and comprises a substrate 11, a first-track 12, a second-track 13, and
13 two enclosed-tracks 14. The substrate 11 is a rectangular plate extending
14 transversally and has a top surface, a bottom surface, two elongated sides, a
15 length, at least one slot 111, at least one receiving-hole 112, and multiple
16 assembling-holes 113. The at least one slot 111 is strip-shaped and is formed
17 through the top surface and the bottom surface of the substrate 11. Furthermore,
18 the substrate 11 has three slots 111 formed through the substrate at spaced
19 intervals. The at least one receiving-hole 112 is formed through the top surface
20 and the bottom surface of the substrate 11.

21 With reference to Figs. 4 and 4A, the first-track 12 is formed on one of
22 the elongated sides of the substrate 11 and has a length, a top surface, a bottom
23 surface, an upper-opening 121, and a sliding-slot 122. The length of the
24 first-track 12 is equal to the length of the substrate 11. Additionally, a height is

1 formed between the first-track 12 and the substrate 11. The upper-opening 121 is
2 formed through the top surface of the first-track 12. The sliding-slot 122 is
3 formed in the first-track 12 and communicates with the upper-opening 121.
4 Furthermore, the sliding-slot 122 has a width W1 wider than a width W2 of the
5 upper-opening 121.

6 The second-track 13 is formed on the bottom surface of the first-track 12,
7 and has a top-opening 131 and an engaging-slot 132. The top-opening 131 is
8 formed through the bottom surface of the first-track 12 and communicates with
9 the sliding-slot 122. The engaging-slot 132 is formed in the second-track 13 and
10 communicates with the top-opening 131. Additionally, the top-opening 131 has a
11 width W3 narrower than the width W1 of the sliding-slot 122, and the
12 engaging-slot 132 has a width W4 wider than the width W3 of the top-opening
13 131.

14 The enclosed-tracks 14 are respectively formed on the bottom surfaces
15 of the substrate 11 and the first-track 12, and each one of the enclosed-tracks 14
16 has a length equal to the length of the substrate 11 and the length of the first-track
17 12. The enclosed-track 14 that is formed on the bottom surface of the substrate
18 11 communicates with the at least one slot 111, and the enclosed-track 14 that is
19 formed on the bottom surface of the first-track 12 is mounted around the
20 second-track 13. Each one of the enclosed-tracks 14 has a bottom surface, a
21 lower-opening 141, and an enclosed-slot 142. The lower-opening 141 is formed
22 through the bottom surface of the enclosed-track 14. The enclosed-slot 142 is
23 formed in the enclosed-track 14 and communicates with the lower-opening 141.
24 Furthermore, the lower-opening 141 has a width W5 narrower than a width W6

1 of the enclosed-slot 142.

2 With reference to Figs. 2 and 3, the socket set 20 is connected to the base
3 10 and has a positioning-plate 21 and multiple positioning-blocks 22. The
4 positioning-plate 21 is a strip-shaped plate with resilience, is disposed in the
5 engaging-slot 132 of the second-track 13, and has two long opposite sides, a
6 middle, and an abutting-portion 211. The abutting-portion 211 is arc-shaped and
7 is bent upwardly from the long opposite sides to the middle of the
8 positioning-plate 21 and has a top surface extending into the sliding-slot 122 of
9 the first-track 12.

10 Each one of the positioning-blocks 22 is rotatably and slidably mounted
11 in the sliding-slot 122 of the first-track 12, abuts the positioning-plate 21, and
12 has an engaging-portion 221 and an inserting-portion 222. The engaging-portion
13 221 of the positioning-block 22 is mounted in the sliding-slot 122 of the
14 first-track 12, abuts the abutting-portion 211 of the positioning-plate 21, and has
15 a bottom surface and a top surface. Furthermore, the engaging-portion 221 of the
16 positioning-block 22 may be a disk of a flattened structure or a stepped structure
17 and may be rotated relative to the first-track 12. The inserting-portion 222 is
18 formed on and protrudes from the top surface of the engaging-portion 221 and
19 extends out of the first-track 12 via the upper-opening 121. The inserting-portion
20 222 has an outer surface and a constraining-protrusion 223. The
21 constraining-protrusion 223 is deposited on the outer surface of the
22 inserting-portion 222, so that a sleeve may firmly engage with the
23 inserting-portion 222 of the positioning-block 22.

24 With reference to Figs. 3, 5, and 6, the hand-tool set 30 is connected to the

1 base 10 and has at least one holding-component 31. Each one of the at least one
2 holding-component 31 is connected to the substrate 11 and has a
3 combining-portion 311 and a holding-portion 312. The combining-portion 311 is
4 a plate and is mounted through one of the at least one slot 111 of the substrate 11.
5 The combining-portion 311 has a positioning-protrusion 313 formed on an outer
6 surface of the combining-portion 311 and abutting the substrate 11, so that the at
7 least one holding-component 31 can be firmly mounted on the substrate 11. The
8 holding-portion 312 is integrally formed on a top surface of the
9 combining-portion 311 and is mounted above the substrate 11.

10 The holding-portion 312 is U-shaped with resilience, such that the at least
11 one holding-component 31 can position a hand tool 50 on the substrate 11.
12 Additionally, the holding-portion 312 of the holding-component 31 has two
13 holding-protrusions 314 formed on an inner surface of the holding-portion 312
14 respectively near two free ends of the holding-portion 312. Furthermore, an
15 amount of the at least one holding-component 31 of the hand-tool set 30 and an
16 amount of the at least one slot 111 of the substrate 11 are the same. A
17 protrusion-head 51 of the hand tool 50 can extend to the bottom of the substrate
18 11 through the receiving-hole 112 of the substrate 11, such that the hand tool 50
19 can be positioned firmly on the substrate 11 by the at least one
20 holding-component 31 and the receiving-hole 112.

21 With reference to Figs. 1, 2, and 7, the bracket set 40 is detachably
22 connected to the base 10 beside the socket set 20, and has multiple fixing-plates
23 41, two supporting-bases 42, and two magnetic-bases 43. Each one of the
24 fixing-plates 41 is a rectangular plate and disposed in one of the enclosed-tracks

1 14 and near an end of the substrate 11 or an end of the first-track 12. Each one of
2 the fixing-plates 41 has a fixing-hole 411 formed through the fixing-plate 41 and
3 communicating with the lower-opening 141 of a corresponding enclosed-track
4 14, so that a fixing-component 60 can be connected to the fixing-plate 41 via the
5 lower-opening 141. The supporting-bases 42 are extruded aluminum structures
6 and are respectively connected to two sides of the base 10, so as to enclose the
7 first-track 12, the second-track 13, and the enclosed-tracks 14.

8 Each one of the supporting-bases 42 has an enclosed-plate 421, an
9 extending-plate 422, and a connecting-track 423. The enclosed-plate 421 is
10 disposed longitudinally and abuts one of the sides of the base 10, so as to enclose
11 the first-track 12, the second-track 13, and the enclosed-tracks 14. Furthermore,
12 each supporting-base 42 has a supporting-plate 424 transversally formed on a
13 top of the enclosed-plate 421 and aligning to the substrate 11. Therefore, a user
14 can lift the composite tool holder by holding the two supporting-plates 424.

15 The extending-plate 422 is transversally formed on and protrudes from the
16 enclosed-plate 421 under the base 10, is opposite to the supporting-plate 424,
17 and has two through-holes 425 formed through the extending-plate 422 at a
18 spaced interval, so that two fixing-components 60 may be respectively mounted
19 through the through-holes 425 and respectively connected to the fixing-holes
20 411 of the fixing-plates 41 that are mounted at a same side of the base 10. Then,
21 the supporting-base 42 can be disposed on the side of the base 10 by the
22 engagement of the two fixing-components 60 and the two corresponding
23 fixing-plates 41. The connecting-track 423 is formed downwardly on a bottom of
24 the extending-plate 422 away from the enclosed-plate 421. Furthermore, a gap G

1 is formed between the connecting-track 423 and the base 10.

2 The magnetic-bases 43 are respectively connected to the supporting-bases
3 42 under the base 10, and each one of the magnetic-bases 43 has a
4 combining-frame 431 and at least one magnetic-block 432. The
5 combining-frame 431 is U-shaped and is securely mounted in the
6 connecting-track 423 of the supporting-base 42. Furthermore, a fastening
7 component 70 is mounted through the combining-frame 431 and the
8 connecting-track 423 to connect the combining-frame 431 with the
9 connecting-track 423. The at least one magnetic-block 432 is securely mounted
10 on a bottom of the combining-frame 431 opposite to the connecting-track 423 to
11 provide an attaching effect to metal objects, so that the composite tool holder
12 may be mounted on a tool cabinet by the magnetic-bases 43.

13 With reference to Figs. 1 and 4, when the first embodiment in accordance
14 with the present invention is in use, the user can mount a sleeve around the
15 inserting-portion 222 of one of the positioning-blocks 22, and the sleeve can be
16 firmly disposed on the positioning-block 22 by the constraining-protrusion 223.
17 The user can apply a force to the sleeve to drive the positioning-block 22 to
18 rotate relative to the positioning-plate 21, so that a size mark on an outer surface
19 of the sleeve is rotated to face the user for ease of retrieving and identifying the
20 sleeve. The engaging-portion 221 of each positioning-block 22 abuts the
21 abutting-portion 211 of the positioning-plate 21, so that after the user rotates or
22 slides the sleeve, the positioning-block 22 and the positioning-plate 21 abut each
23 other and are firmly disposed in the first-track 12. Therefore, the sleeve on the
24 positioning-block 22 does not rotate or slide relative to the first-track 12. That is,

1 the sleeve can be firmly disposed on the base 10.

2 With further reference to Figs. 3, 4, and 6, the user can position the hand
3 tool 50 on the substrate 11 by the two holding-protrusions 314 of the
4 holding-component 31 of the hand-tool set 30, and the hand tool 50 can
5 cooperate with the sleeve mounted on the positioning-block 22. The hand tool 50
6 includes the protrusion-head 51 extending to the bottom of the substrate 11 via
7 the receiving-hole 112 of the substrate 11. In addition, the hand tool 50 can be
8 positioned on the substrate 11 by the holding-component 31 and the
9 receiving-hole 112. Furthermore, with reference to Figs. 1 and 2, after the sleeve
10 and the hand tool 50 are positioned on the base 10 by the socket set 20 and the
11 hand-tool set 30, the sleeve and the hand tool 50 disposed on the base 10 can be
12 securely mounted on the tool cabinet by a magnetic force that is provided by the
13 magnetic-bases 43 of the bracket set 40. The sleeve and the hand tool 50 can be
14 stored at the same time to facilitate convenience in use and prevent the user from
15 forgetting to bring the sleeve or the hand tool 50.

16 With reference to Figs. 8 and 9, a second embodiment of a composite tool
17 holder in accordance with the present invention is substantially the same as the
18 first embodiment except for the following features. The first-track 12A and the
19 substrate 11A are formed with each other at a same horizontal level, so there is
20 no height formed between the first-track 12A and the substrate 11A.

21 With reference to Figs. 10 to 13, a third embodiment of a composite tool
22 holder in accordance with the present invention is substantially the same as the
23 first embodiment except for the following features. The substrate 11B of the base
24 10B does not have the least one slot 111 that is disclosed in the first embodiment

1 of the composite tool holder in accordance with the present invention. The
2 substrate 11B has a receiving-hole 112B and multiple assembling-holes 113B
3 formed through the top surface and the bottom surface of the substrate 11B at
4 spaced intervals. With reference to Figs. 11 and 13, the first-track 12B is
5 detachably connected to one of the elongated sides of the substrate 11B by a
6 hooking structure between the substrate 11B and the first-track 12B, and the
7 length of the first-track 12B is equal to the length of the substrate 11B.

8 With reference to Figs. 11, 13, and 16, one of the enclosed-tracks 14B is
9 formed downwardly on the bottom surface of the substrate 11B along one of the
10 two elongated sides that is opposite to the first-track 12B, and communicates
11 with some of the assembling-holes 113B. The other one of the enclosed-tracks
12 14B is formed downwardly on the bottom surface of the first-track 12B around
13 the second-track 13B. The enclosed-tracks 14B have lengths equal to the lengths
14 of the substrate 11B and the first-track 12B.

15 With reference to Figs. 11, 13, 16, and 17, the socket set 20B is
16 connected to the base 10B and has multiple engaging recesses 212B being
17 curved and formed in the top surface of the abutting-portion 211B at spaced
18 intervals. Each one of the positioning-blocks 22B is rotatably and slidably
19 mounted in the sliding-slot 122B of the first-track 12B and has an engaging
20 element 224B formed on and protruding downwardly from the bottom surface of
21 the engaging-portion 221B and selectively engages with one of the engaging
22 recesses 212B of the positioning-plate 21B to hold the positioning-block 22B
23 securely on the positioning-plate 21B without sliding relative to the first-track
24 12B. Additionally, the engaging element 224B is an engaging ring.

1 With reference to Figs. 17, 17A, and 17B, when each one of the
2 positioning-blocks 22B is mounted on the positioning-plate 21B, a part of the
3 engaging ring engages in one of the engaging recesses 212B and the remaining
4 part of the engaging ring presses against the top surface of the abutting-portion
5 211B. Then, the abutment relationship between the engaging ring and the
6 positioning-plate 21B may allow the part of the engaging ring to engage more
7 securely in the corresponding engaging recess 212B, and the positioning-block
8 22B may be securely positioned on the base 10B by the positioning-plate 21B.

9 With reference to Figs. 11, 12, 14, and 15, the hand-tool set 30B is
10 detachably connected to the base 10B, the at least one holding-component 31B is
11 deposited on the substrate 11B. Furthermore, the hand-tool set 30B has a
12 mounting-cover 32B detachably mounted on the substrate 11B, and the
13 mounting-cover 32B may be U-shaped and has a top surface, a bottom surface, at
14 least one mounting-hole 321B, and multiple inserting-tubes 322B. The at least
15 one mounting-hole 321B is formed through the top surface and the bottom
16 surface of the mounting-cover 32B and aligns with the at least one
17 receiving-hole 112B of the substrate 11B. The inserting-tubes 322B are formed
18 on and protrude downwardly from the bottom surface of the mounting-cover
19 32B at spaced intervals, and are respectively mounted into the assembling-holes
20 113B of the substrate 11B when the bottom surface of the mounting-cover 32B
21 abuts the top surface of the substrate 11B. Additionally, the mounting-cover 32B
22 has multiple washers 323B respectively mounted around the inserting-tubes
23 322B that extend through the substrate 11B, and multiple fasteners 324B are
24 respectively connected to the inserting-tubes 322B and are pressed against the

1 washers 323B. Then, the mounting-cover 32B is securely mounted on the
2 substrate 11B.

3 Furthermore, each one of the at least one holding-component 31B is
4 formed on the top surface of the mounting-cover 32B and has a
5 combining-portion 311B and a holding-portion 312B. The combining-portion
6 311B is formed on the top surface of the mounting-cover 32B and has a top
7 surface. The holding-portion 312B is U-shaped, is integrally formed on the top
8 surface of the combining-portion 311B, and is disposed above the
9 mounting-cover 32B. Then, the hand tool 50 may be securely mounted on the
10 mounting-cover 32B over the substrate 11B by the holding-portion 312B of the
11 at least one holding-component 31B. With reference to Figs. 12 and 15, the
12 protrusion-head 51 of the hand tool 50 may extend through the substrate 11B via
13 the at least one mounting-hole 321B and the at least one receiving-hole 112B,
14 such that the hand tool 50 may be positioned firmly on the mounting-cover 32B
15 over the substrate 11B by the at least one holding-component 31B, the at least
16 one mounting-hole 321B, and the at least one receiving-hole 112B.

17 With reference to Figs. 11, 15, and 16, the bracket set 40B is detachably
18 connected to the base 10B beside the socket set 20B, and does not have the
19 magnetic-bases 43 that are disclosed in the first embodiment of the composite
20 tool holder in accordance with the present invention. Each one of the
21 fixing-plates 41B is a rectangular plate and is disposed in one of the
22 enclosed-tracks 14B and near an end of the substrate 11B or an end of the
23 first-track 12B. Each one of the supporting-bases 42 does not have the
24 connecting-track 423 that is disclosed in the first embodiment of the composite

1 tool holder in accordance with the present invention.

2 With reference to Figs. 10, 16, and 17, when the third embodiment of the
3 invention is in use, the user can mount a sleeve on one of the positioning-blocks
4 22B of the socket set 20B, and the user can apply a force to the sleeve to drive the
5 positioning-block 22B to rotate relative to the positioning-plate 21B, so that a
6 size mark on an outer surface of the sleeve is rotated to face the user for ease of
7 retrieving and identifying the sleeve. In addition, the engaging-portion 221B of
8 each one of the positioning-blocks 22B abuts the abutting-portion 211B of the
9 positioning-plate 21B, and the engaging element 224B of each one of the
10 positioning-blocks 22B engages with one of the engaging recesses 212B of the
11 positioning-plate 21B to hold the positioning-block 22B securely on the
12 positioning-plate 21B without sliding relative to the first-track 12B. After the
13 user rotates or slides the sleeve, the positioning-block 22B and the
14 positioning-plate 21B abut each other and are firmly disposed in the first-track
15 12B by the engagement between the engaging element 224B and a
16 corresponding engaging recess 212B. Therefore, the sleeve on the
17 positioning-block 22B does not rotate or slide relative to the first-track 12B. That
18 is, the sleeve can be firmly disposed on the base 10B.

19 With reference to Figs. 10, 12, 14, and 15, the user can position the hand
20 tool 50 on the mounting-cover 32B over the substrate 11B by the at least one
21 holding-component 31B of the hand-tool set 30B, and the hand tool 50 can
22 cooperate with the sleeve mounted on the positioning-block 22B. The hand tool
23 50 has a protrusion-head 51B extending to the bottom surface of the substrate
24 11B via the at least one mounting-hole 321B of the mounting-cover 32B and the

1 at least one receiving-hole 112B of the substrate 11B. In addition, the hand tool
2 50 can be positioned on the mounting-cover 32B over the substrate 11B by the at
3 least one holding-component 31B, the at least one mounting-hole 321B, and the
4 at least one receiving-hole 112B. Furthermore, after the sleeve and the hand tool
5 50 are positioned on the base 10B by the socket set 20B and the hand-tool set
6 30B, the sleeve and the hand tool 50 disposed on the base 10B can be stored at
7 the same time to facilitate convenience in use and prevent the user from
8 forgetting to bring the sleeve or the hand tool 50.

9 With reference to Figs. 18 to 22, a fourth embodiment of a composite
10 tool holder in accordance with the present invention is substantially the same as
11 the third embodiment except for the following features. The composite tool
12 holder further has an auxiliary first-track 12C, an auxiliary second-track 13C,
13 and an auxiliary socket set 20C. The auxiliary first-track 12C is detachably
14 connected to one of the elongated sides of the substrate 11B by a hooking
15 structure between the substrate 11B and the auxiliary first-track 12C, and is
16 opposite to the first-track 12B. That is, the first-track 12B and the auxiliary
17 first-track 12C are respectively connected to the two elongated sides of the
18 substrate 11B. The auxiliary second-track 13C is formed on the auxiliary
19 first-track 12C. In addition, the structures of the auxiliary first-track 12C and the
20 auxiliary second-track 13C are substantially the same as the first-track 12B and
21 the second-track 13B. Furthermore, the two enclosed-tracks 14B are respectively
22 formed downwardly on the first-track 12B and the auxiliary first-track 12C
23 respectively around the second-track 13B and the auxiliary second-track 13C.

24 The auxiliary socket set 20C is connected to the auxiliary first-track 12C

1 and the auxiliary second-track 13C, and has a positioning-plate 21C and multiple
2 positioning-blocks 22C. The positioning-plate 21C of the auxiliary socket set
3 20C is mounted in the auxiliary second-track 13C, and each one of the engaging
4 recesses 212C is elongated and is formed in the top surface of the
5 abutting-portion 211C at spaced intervals.

6 The positioning-blocks 22C are un-rotatably and slidably mounted in the
7 auxiliary first-track 12C and abut the positioning-plate 21C, and each one of the
8 positioning-blocks 22C has an engaging-portion 221C and an inserting-portion
9 222C. The engaging-portion 221C is rectangular, is mounted in the auxiliary
10 first-track 12C, and abuts the abutting-portion 211C of the positioning-plate 21C.
11 The engaging element 224C of the engaging-portion 221C is an elongated
12 engaging rib, and selectively engages with one of the engaging recesses 212C of
13 the positioning-plate 21C to hold the positioning-block 22C securely on the
14 positioning-plate 21C without sliding relative to the auxiliary first-track 12C.

15 Furthermore, the length of each one of the supporting-bases 42C is long
16 enough to enclose the first-track 12B, the auxiliary first-track 12C, the
17 second-track 13B, the auxiliary second-track 13C, and the enclosed-tracks 14B.

18 With reference to Figs. 22 and 23, when the composite tool holder of the
19 fourth embodiment in the present invention is in use, sleeves 80 may be mounted
20 on the positioning-blocks 22B, 22C of the socket set 20B and the auxiliary
21 socket set 20C, since the engaging-portions 221B of the socket set 20B are
22 circular plates, and the sleeves 80 that are mounted around the
23 positioning-blocks 22B of the socket set 20B may be rotated and slid relative to
24 the first-track 12B. Furthermore, since the engaging-portions 221C of the

1 auxiliary socket set 20C are rectangular, the sleeves 80 that are mounted around
2 the positioning-blocks 22C of the auxiliary socket set 20C can only slide relative
3 to the auxiliary first-track 12C without rotating.

4 With reference to Fig. 24, a fifth embodiment of a composite tool
5 holder in accordance with the present invention is substantially the same as the
6 fourth embodiment except for the following features. The composite tool holder
7 further has an extending first-track 12D, an extending second-track 13D, and an
8 additional socket set 20D. The extending first-track 12D is connected to and
9 parallel with the first-track 12B by an extending panel 15D, the extending
10 second-track 13D is formed on the extending first-track 12D, and the additional
11 socket set 20D is connected to the extending first-track 12D and the extending
12 second-track 13D. Furthermore, the structures of the extending first-track 12D,
13 the extending second-track 13D, and the additional socket set 20D are
14 respectively and substantially the same as the first-track 12B, the second-track
15 13B, and the socket set 20B. With the increasing structures of the extending
16 first-track base 12D, the extending second-track 13D, and the additional socket
17 set 20D, the composite tool holder may store more sleeves 80 on the composite
18 tool holder.

19 By the above technical features, the composite tool holder of the
20 invention allows the user to fix and store the sleeves 80 and the hand tools 50 on
21 the base 10, 10B at the same time by disposing the socket set 20, 20B and the
22 hand-tool set 30, 30B. Therefore, it allows the user to use or store the sleeves 80
23 and the hand tools 50 at the same time and prevents the user from forgetting to
24 bring the sleeves 80 or the hand tools 50. In addition, the structural strength can

1 be enhanced by the bracket sets 40, 40B disposed on two sides of the base 10,
2 10B, and the user can carry the composite tool holder by holding the two
3 supporting-plates 424. The invention provides the composite tool holder to store
4 the sleeves 80 and the hand tool 50 at the same time, and this is convenient in use.
5 Additionally, the base 10 can be securely mounted on the tool cabinet by a
6 magnetic force that is provided by the magnetic-bases 43 of the bracket set 40.
7 Furthermore, the socket set 20B, the auxiliary socket set 20C, the additional
8 socket set 20D, and the hand-tool set 30B are deposited on the base 10B, and the
9 user can store the sleeves 80 and the hand tools 50 on the base 10, 10B at the
10 same time, and this is convenient in use.

11

1 **WHAT IS CLAIMED IS:**

2 1. A composite tool holder comprising:

3 a base having

4 a substrate having

5 a top surface;

6 a bottom surface;

7 two elongated sides;

8 a length; and

9 at least one slot formed through the top surface and

10 the bottom surface of the substrate; and

11 a first-track formed on one of the elongated sides of the

12 substrate, and having

13 a length being equal to the length of the substrate;

14 a top surface;

15 a bottom surface;

16 an upper-opening formed through the top surface of

17 the first-track; and

18 a sliding-slot formed in the first-track and

19 communicating with the upper-opening;

20 a socket set connected to the base and having multiple

21 positioning-blocks rotatably mounted in the first-track and moved along the

22 first-track; and

23 a hand-tool set connected to the base and having

24 at least one holding-component deposited on the substrate and

1 having

2 a combining-portion mounted through one of the at
3 least one slot of the substrate and having a positioning-protrusion formed on an
4 outer surface of the combining-portion and abutting the substrate; and

5 a holding-portion integrally formed on a top surface
6 of the combining-portion and mounted above the substrate.

7 2. The composite tool holder as claimed in claim 1, wherein

8 the base has a second-track formed on the bottom surface of the
9 first-track, and the second-track has

10 a top-opening formed through the bottom surface of the
11 first-track and communicating with the sliding-slot; and

12 an engaging-slot formed in the second-track and
13 communicating with the top-opening; and

14 the socket set has a positioning-plate disposed in the engaging-slot of the
15 second-track and having

16 two long opposite sides;

17 a middle; and

18 an abutting-portion being arc-shaped, being bent upwardly
19 from the long opposite sides to the middle of the positioning-plate and having a
20 top surface extending into the sliding-slot of the first-track to abut against the
21 positioning-blocks.

22 3. The composite tool holder as claimed in claim 2, wherein

23 the base has two enclosed-tracks respectively formed on the bottom
24 surfaces of the substrate and the first-track, the enclosed-track that is formed on

1 the bottom surface of the substrate communicates with the at least one slot, and
2 the enclosed-track that is formed on the bottom surface of the first-track is
3 mounted around the second-track; and

4 each one of the enclosed-tracks has

5 a length being equal to the length of the substrate and the
6 length of the first-track;

7 a bottom surface;

8 a lower-opening formed through the bottom surface of the
9 enclosed-track; and

10 an enclosed-slot formed in the enclosed-track and
11 communicating with the lower-opening.

12 4. The composite tool holder as claimed in claim 3, wherein

13 the composite tool holder has a bracket set detachably connected to the
14 base beside the socket set; and

15 the bracket set has

16 multiple fixing-plates disposed in one of the enclosed-tracks
17 and near an end of the substrate or an end of the first-track, and each one of the
18 fixing-plates having

19 a fixing-hole formed through the fixing-plate and
20 communicating with the lower-opening of a corresponding enclosed-track; and

21 a fixing-component connected to the fixing-plate via
22 the lower-opening; and

23 two supporting-bases respectively connected to two sides of
24 the base to enclose the first-track, the second-track, and the enclosed-tracks.

1 5. The composite tool holder as claimed in claim 4, wherein
2 each one of the supporting-bases has
3 an enclosed-plate disposed longitudinally and abutting one of
4 the sides of the base;
5 a supporting-plate transversally formed on a top of the
6 enclosed-plate and aligning to the substrate;
7 an extending-plate transversally formed on and protruding
8 from the enclosed-plate under the base, being opposite to the supporting-plate,
9 and having two through-holes formed through the extending-plate at a spaced
10 interval to enable the fixing-components to respectively mount through the
11 through-holes and respectively connect to the fixing-holes of the fixing-plates
12 that are mounted at a same side of the base; and
13 a connecting-track formed downwardly on a bottom of the
14 extending-plate away from the enclosed-plate; and
15 the bracket set has two magnetic-bases respectively connected to the
16 supporting-bases under the base, and each one of the magnetic-bases has
17 a combining-frame securely mounted in the connecting-track
18 of one of the supporting-bases;
19 a fastening component mounted through the combining-frame
20 and the connecting-track to connect the combining-frame with the
21 connecting-track; and
22 at least one magnetic-block securely mounted on a bottom of
23 the combining-frame opposite to the connecting-track.
24 6. A composite tool holder comprising:

1 a base having
2 a substrate having
3 two elongated sides; and
4 a length; and
5 a first-track detachably connected to one of the elongated sides
6 of the substrate by a hooking structure between the substrate and the first-track,
7 and having a length being equal to the length of the substrate;
8 a hand-tool set detachably connected to the base and having at least one
9 holding-component deposited on the substrate; and
10 a bracket set detachably connected to the base and having two
11 supporting-bases respectively connected to two sides of the base to enclose the
12 first-track.
13 7. The composite tool holder as claimed in claim 6, wherein
14 the first-track has
15 a top surface;
16 a bottom surface;
17 an upper-opening formed through the top surface of the
18 first-track; and
19 a sliding-slot formed in the first-track and communicating with
20 the upper-opening; and
21 the base has a second-track formed on the bottom surface of the
22 first-track and having
23 a top-opening formed through the bottom surface of the
24 first-track and communicating with the sliding-slot; and

1 an engaging-slot formed in the second-track and
2 communicating with the top-opening; and
3 the composite tool holder has a socket set connected to the base and
4 having
5 a positioning-plate disposed in the engaging-slot of the
6 second-track and having
7 two long opposite sides;
8 a middle;
9 an abutting-portion bent upwardly from the long
10 opposite sides to the middle of the positioning-plate and having a top surface;
11 and
12 multiple engaging recesses formed in the top surface
13 of the abutting-portion at spaced intervals; and
14 multiple positioning-blocks slidably mounted in the first-track
15 and abutting the positioning-plate, and each one of the positioning-blocks having
16 an engaging-portion mounted in the sliding-slot of
17 the first-track, abutting the abutting-portion of the positioning-plate, and having
18 a bottom surface;
19 a top surface; and
20 an engaging element formed on and
21 protruding downwardly from the bottom surface of the engaging-portion and
22 selectively engaging with one of the engaging recesses of the positioning-plate
23 to hold the positioning-block securely on the positioning-plate; and
24 an inserting-portion formed on and protruding from

1 the top surface of the engaging-portion and extending out of the first-track via
2 the upper-opening.

3 8. The composite tool holder as claimed in claim 7, wherein

4 the substrate has

5 a top surface;

6 a bottom surface;

7 at least one receiving-hole formed through the top surface and
8 the bottom surface of the substrate; and

9 multiple assembling-holes formed through the top surface and
10 the bottom surface of the substrate at spaced intervals; and

11 the hand-tool set has a mounting-cover detachably mounted on the
12 substrate, and the mounting-cover has

13 a top surface;

14 a bottom surface; and

15 at least one mounting-hole formed through the top surface and
16 the bottom surface of the mounting-cover and aligning with the at least one
17 receiving-hole of the substrate to receive a protrusion-head of a hand tool;

18 multiple inserting-tubes formed on and protruding
19 downwardly from the bottom surface of the mounting-cover at spaced intervals,
20 and respectively mounted into the assembling-holes of the substrate when the
21 bottom surface of the mounting-cover abuts the top surface of the substrate;

22 multiple washers respectively mounted around the
23 inserting-tubes that extend through the substrate; and

24 multiple fasteners respectively connected to the

1 inserting-tubes and pressed against the washers to mount the mounting-cover
2 securely on the substrate.

3 9. The composite tool holder as claimed in claim 8, wherein
4 each one of the at least one holding-component is formed on the top
5 surface of the mounting-cover and has

6 a combining-portion formed on the top surface of the
7 mounting-cover and having a top surface; and

8 a holding-portion being U-shaped, integrally formed on the top
9 surface of the combining-portion and disposed above the mounting-cover, and
10 having

11 two free ends; and

12 two holding-protrusions respectively formed on the
13 free ends of the holding-portion;

14 the base has two enclosed-tracks, one of the enclosed-tracks is formed
15 downwardly on the bottom surface of the substrate along one of the elongated
16 sides that is opposite to the first-track and communicates with some of the
17 assembling-holes, and the other one of the enclosed-tracks is formed
18 downwardly on the bottom surface of the first-track around the second-track;

19 each one of the enclosed-tracks has

20 a bottom surface;

21 a lower-opening formed through the bottom surface of the
22 enclosed-track; and

23 an enclosed-slot formed in the enclosed-track and
24 communicating with the lower-opening;

1 the bracket set has multiple fixing-plates, and each one of the
2 fixing-plates is disposed in one of the enclosed-tracks and near an end of the
3 substrate or an end of the first-track and has a fixing-hole formed through the
4 fixing-plate and communicating with the lower-opening of a corresponding
5 enclosed-track; and

6 each one of the supporting-bases has

7 an enclosed-plate disposed longitudinally and abutting one of
8 the two sides of the base to enclose the first-track, the second-track, and the
9 enclosed-tracks;

10 an extending-plate transversally formed on and protruding
11 from the enclosed-plate and abutting the enclosed-tracks under the base, and
12 having two through-holes formed through the extending-plate at a spaced
13 interval; and

14 two fixing-components respectively mounted through the
15 through-holes and respectively connected to the fixing-holes of the fixing-plates
16 that are mounted at a same side of the base.

17 10. The composite tool holder as claimed in claim 8, wherein

18 each one of the supporting-bases has a supporting-plate transversally
19 formed on a top of the enclosed-plate and aligning to the substrate;

20 each one of the engaging recesses of the positioning-plate is curved;

21 the engaging element of the engaging-portion of each one of the
22 positioning-blocks is an engaging ring, and a part of the engaging ring engages in
23 one of the engaging recesses and the remaining part of the engaging ring presses
24 against the top surface of the abutting-portion;

1 the engaging-portion of each one of the positioning-blocks is a circular
2 plate rotatable relative to the first-track;
3 the inserting-portion of each one of the positioning-blocks has
4 an outer surface; and
5 a constraining-protrusion deposited on the outer surface of the
6 inserting-portion; and
7 the composite tool holder further has
8 an auxiliary first-track detachably connected to one of the
9 elongated sides of the substrate by a hooking structure between the substrate and
10 the auxiliary first-track, and being opposite to the first-track;
11 an auxiliary second-track formed on the auxiliary first-track;
12 and
13 an auxiliary socket set connected to the auxiliary first-track
14 and the auxiliary second-track, and having
15 a positioning-plate mounted in the auxiliary
16 second-track, and having
17 an abutting-portion having a top surface;
18 and
19 multiple engaging recesses being elongated
20 and formed in the top surface of the abutting-portion at spaced intervals; and
21 multiple positioning-blocks un-rotatably and
22 slidably mounted in the auxiliary first-track and abutting the positioning-plate,
23 and each one of the positioning-blocks having
24 an engaging-portion being rectangular,

1 mounted in the auxiliary first-track, and abutting the abutting-portion of the
2 positioning-plate; and
3 an inserting-portion being an elongated
4 engaging rib, and selectively engaging with one of the engaging recesses of the
5 positioning-plate to hold the positioning-block securely on the positioning-plate;
6 wherein the first-track and the auxiliary first-track are respectively
7 connected to the two elongated sides of the substrate;
8 the base has two enclosed-tracks respectively formed downwardly on
9 the first-track and the auxiliary first-track respectively around the second-track
10 and the auxiliary second-track; and
11 a length of each one of the supporting-bases is long enough to enclose
12 the first-track, the auxiliary first-track, the second-track, the auxiliary
13 second-track, and the enclosed-tracks.

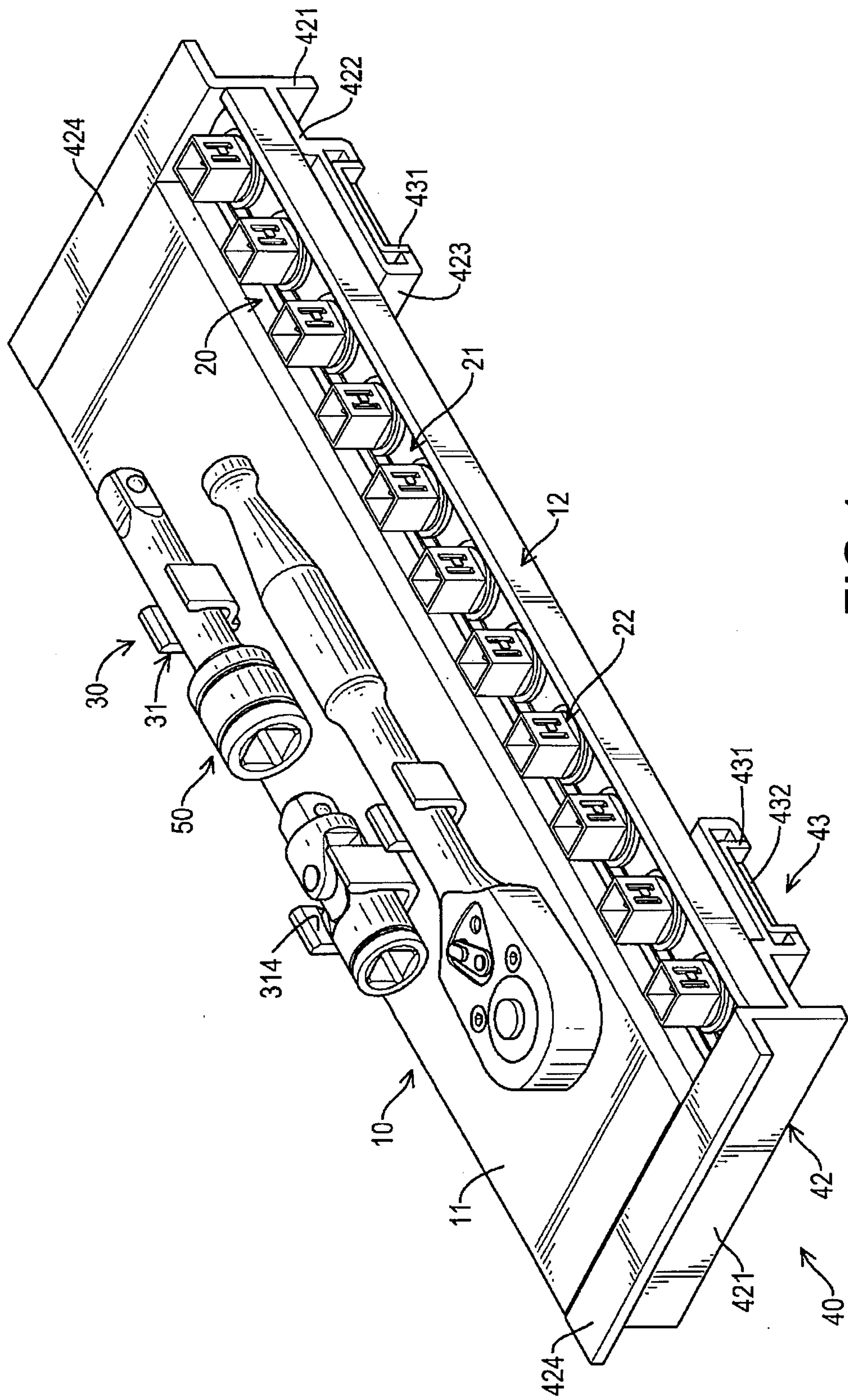
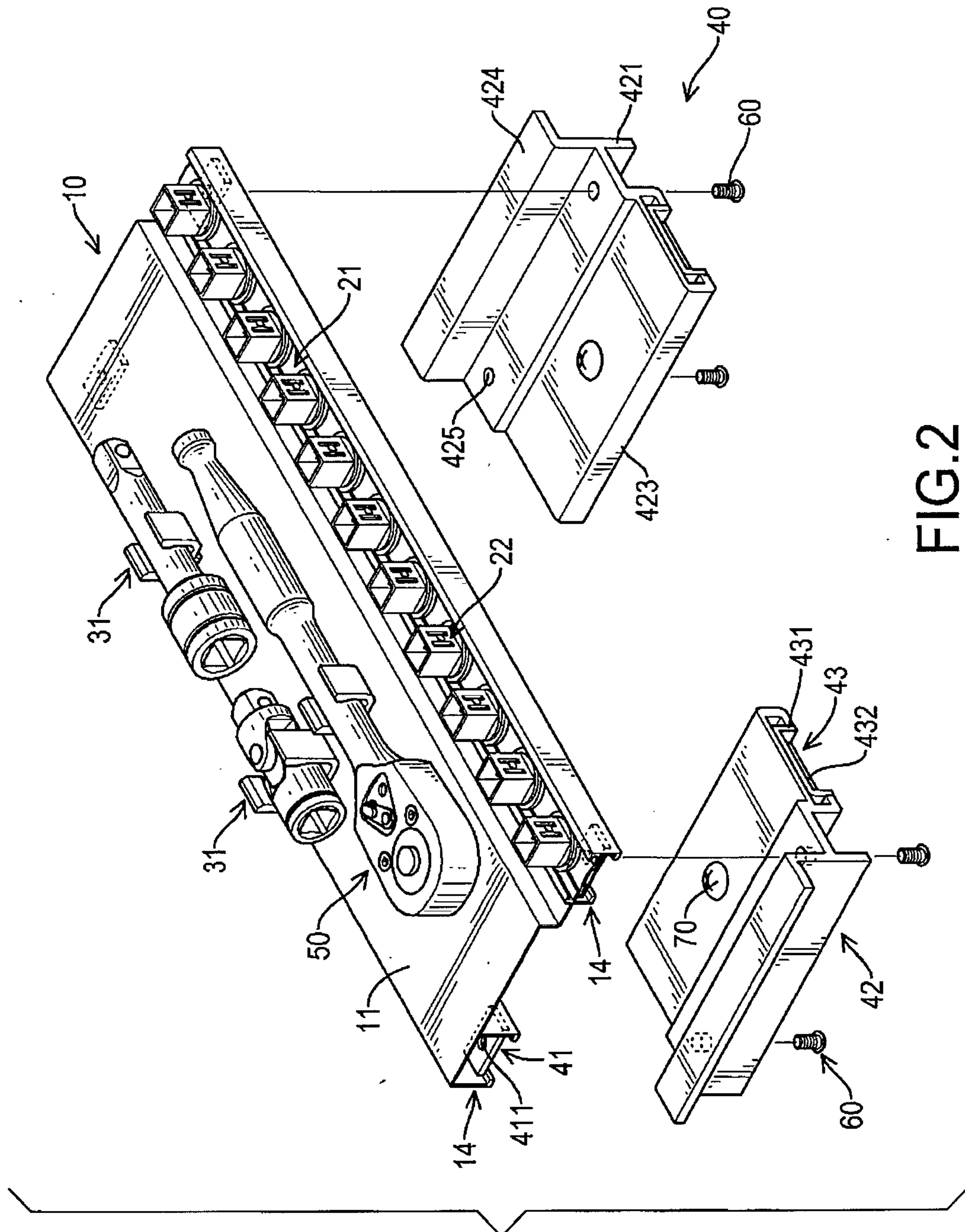
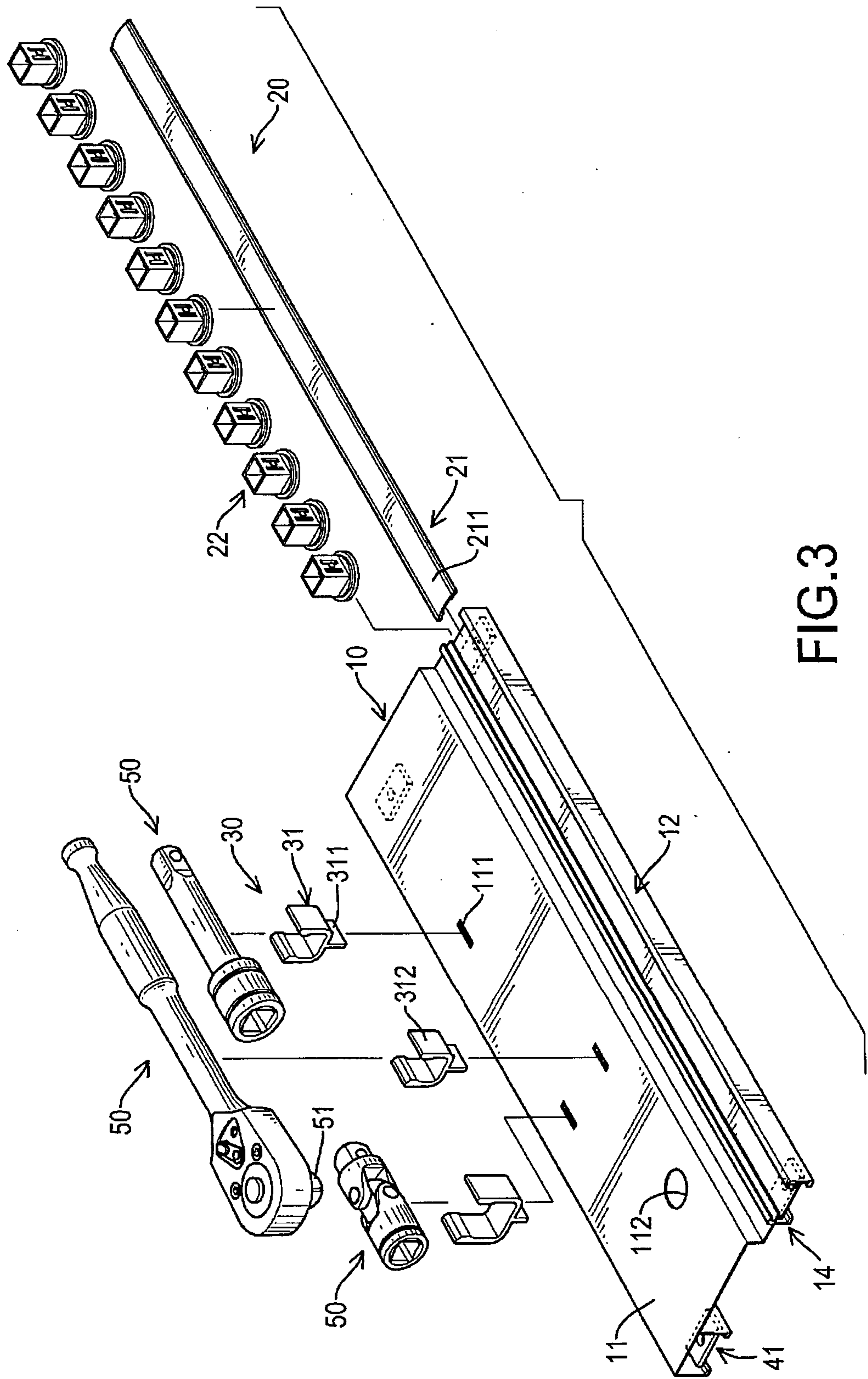
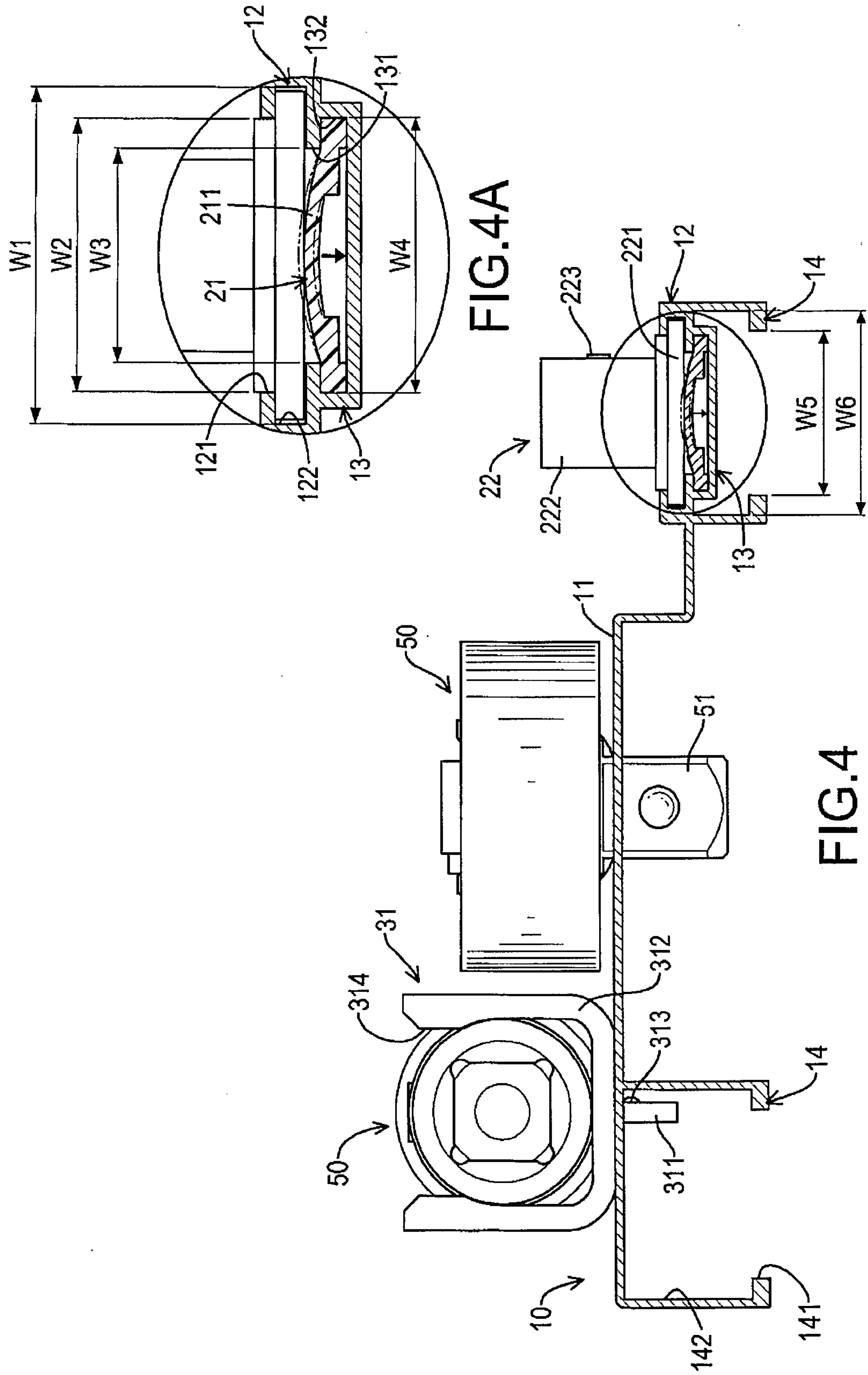


FIG. 1







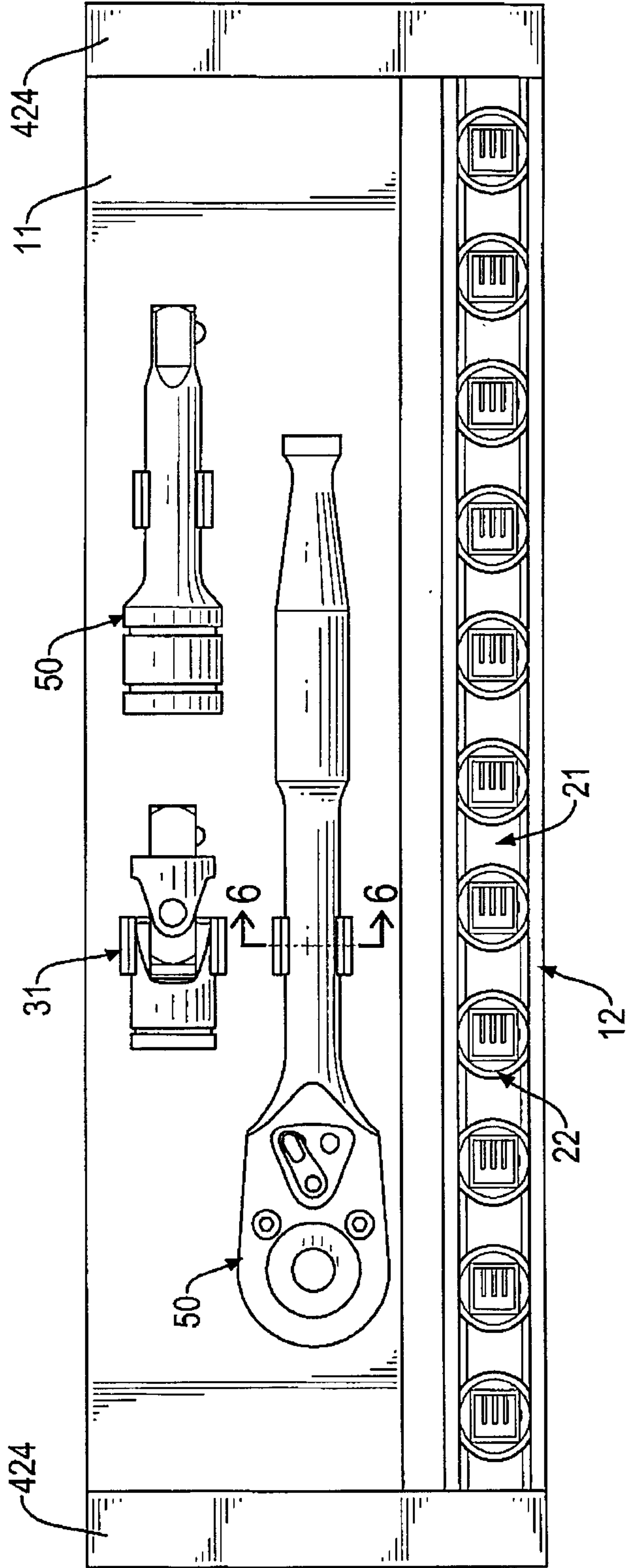


FIG. 5

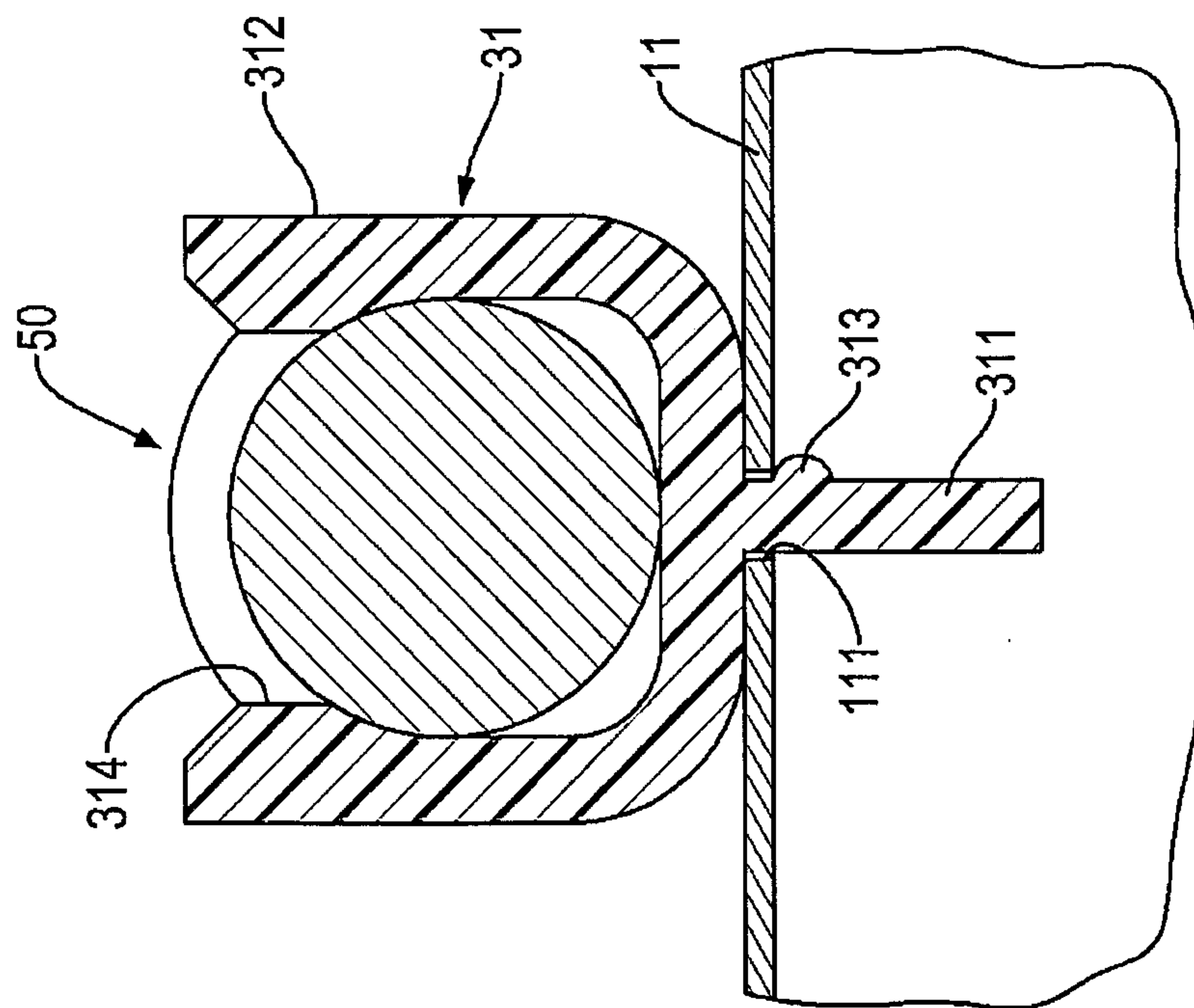


FIG.6

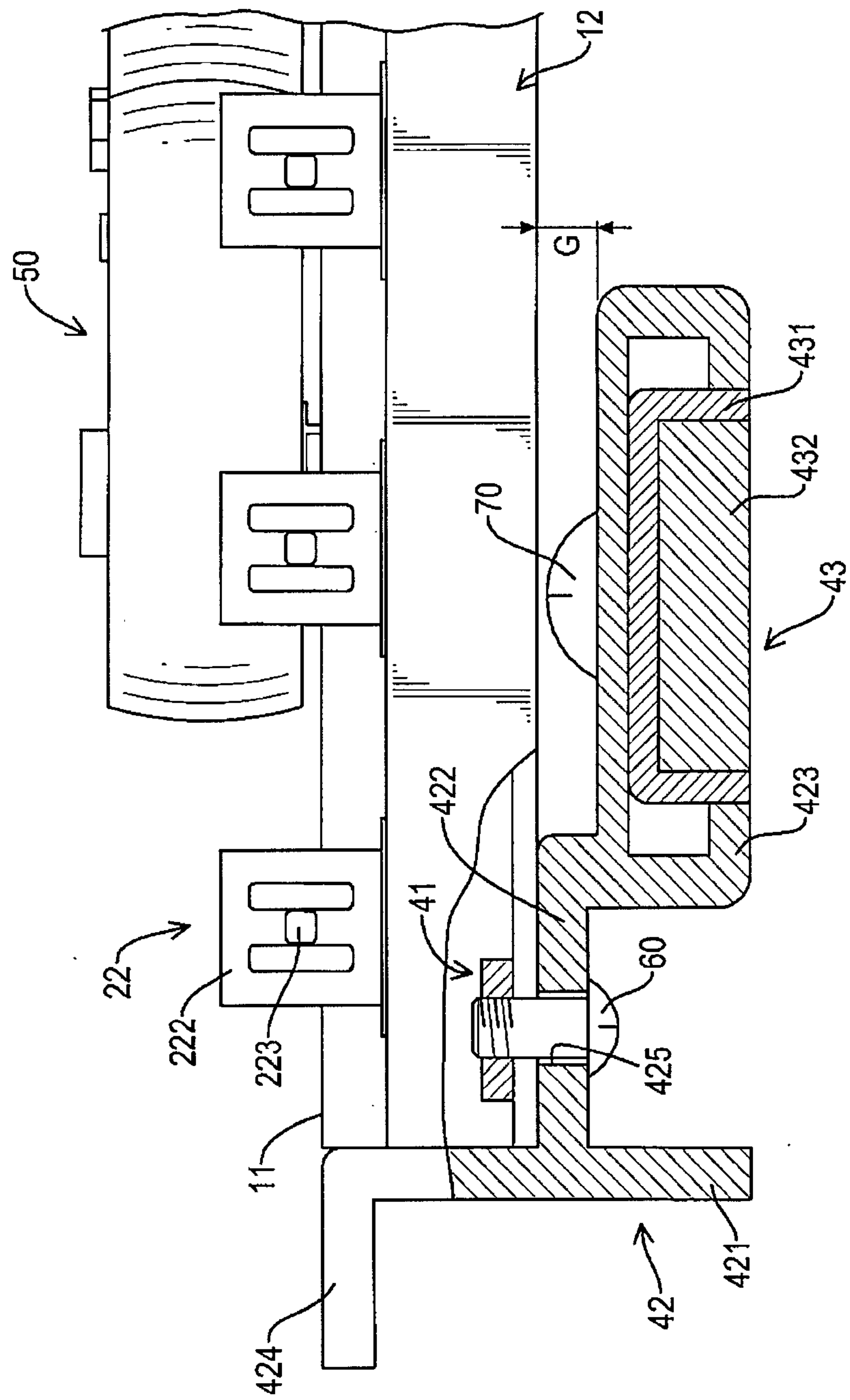


FIG. 7

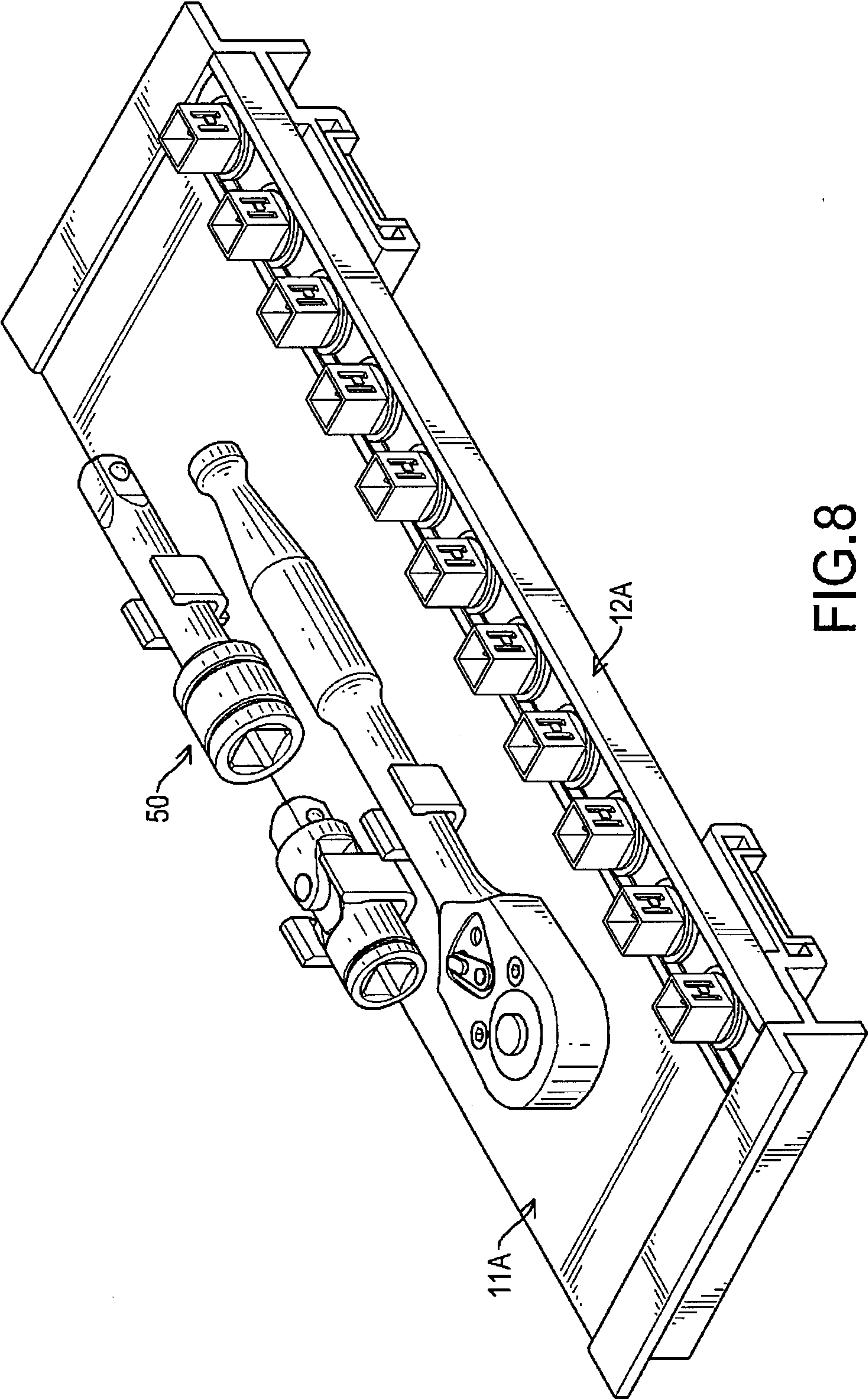


FIG.8

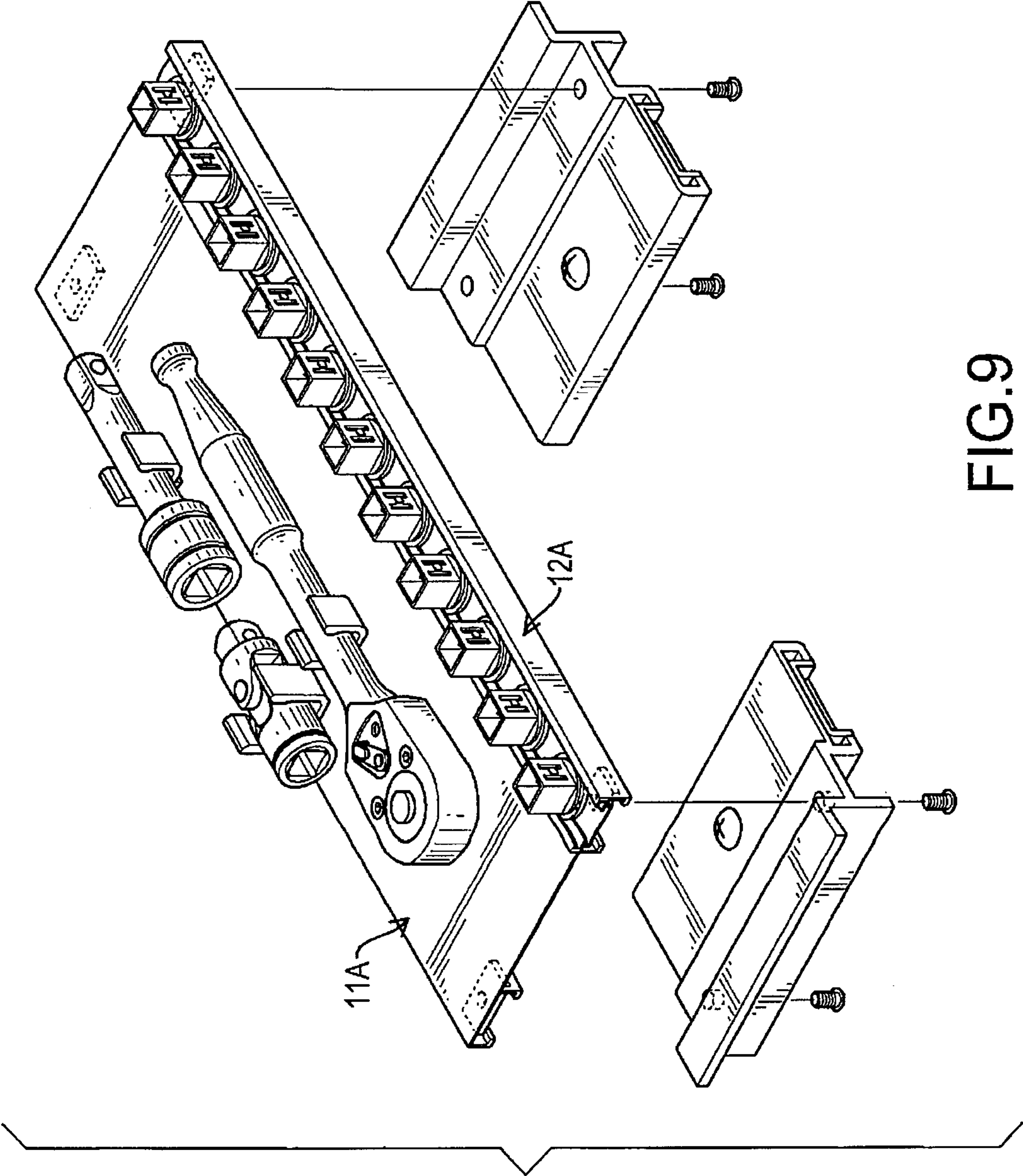
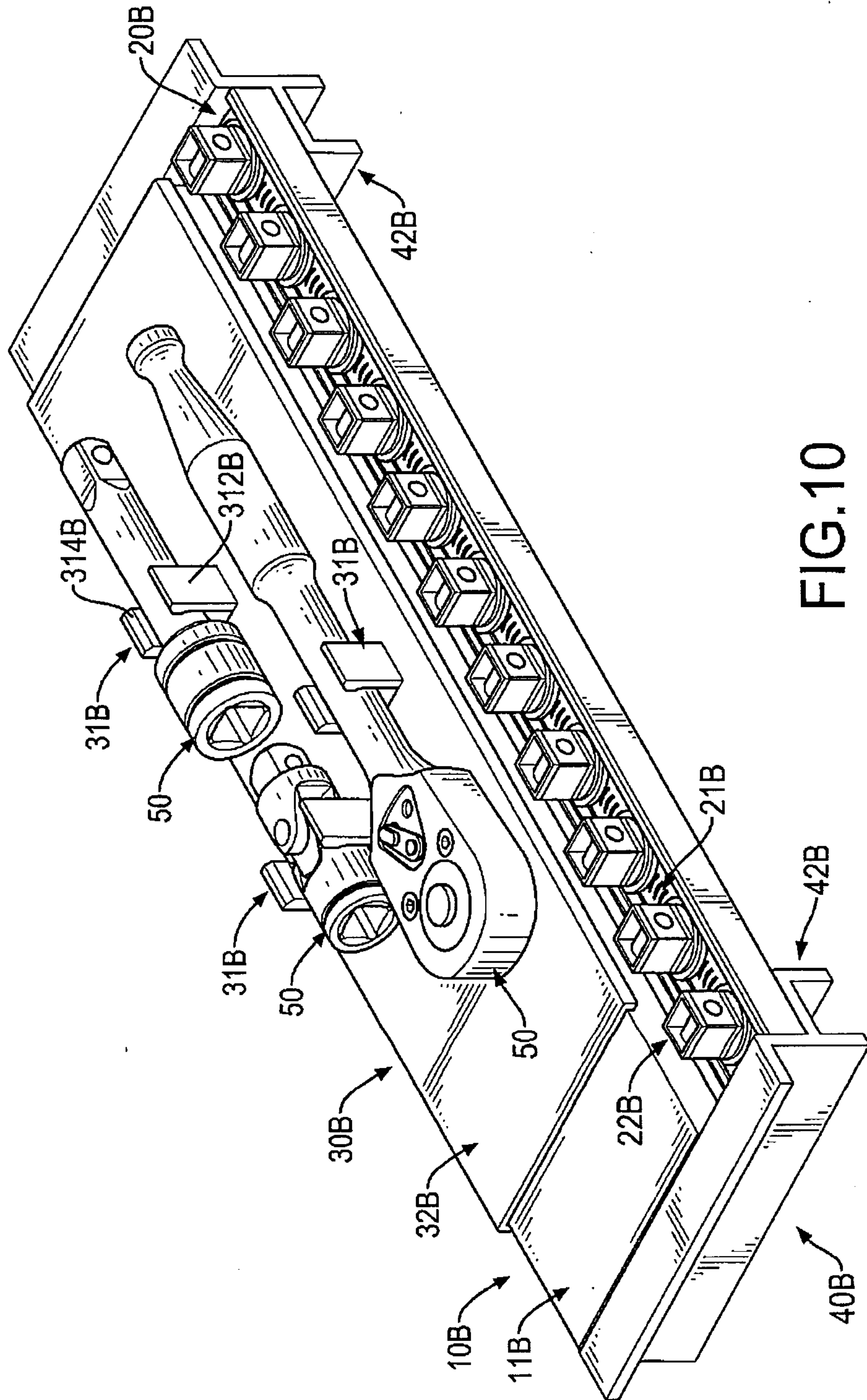


FIG.9



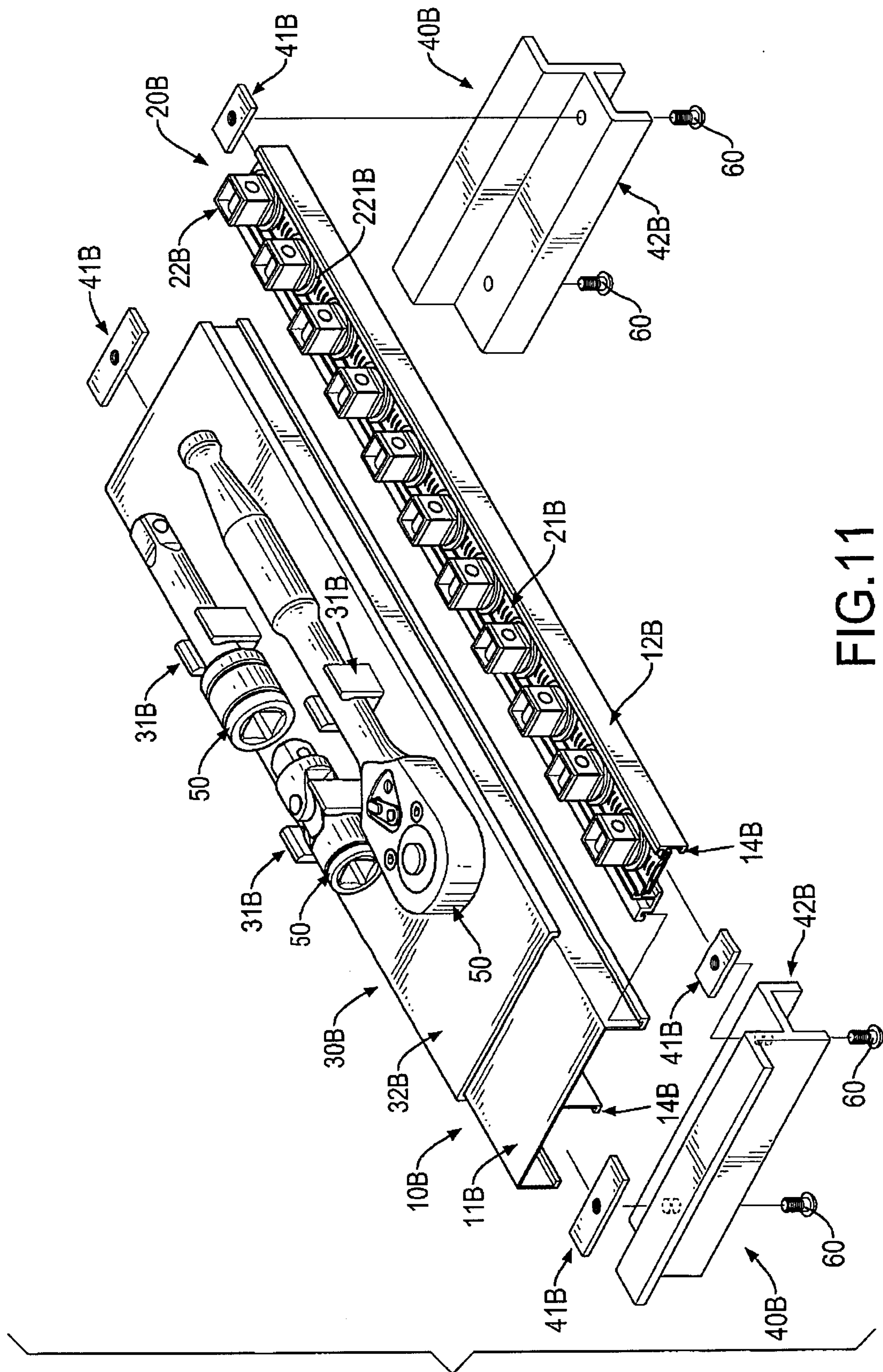


FIG.11

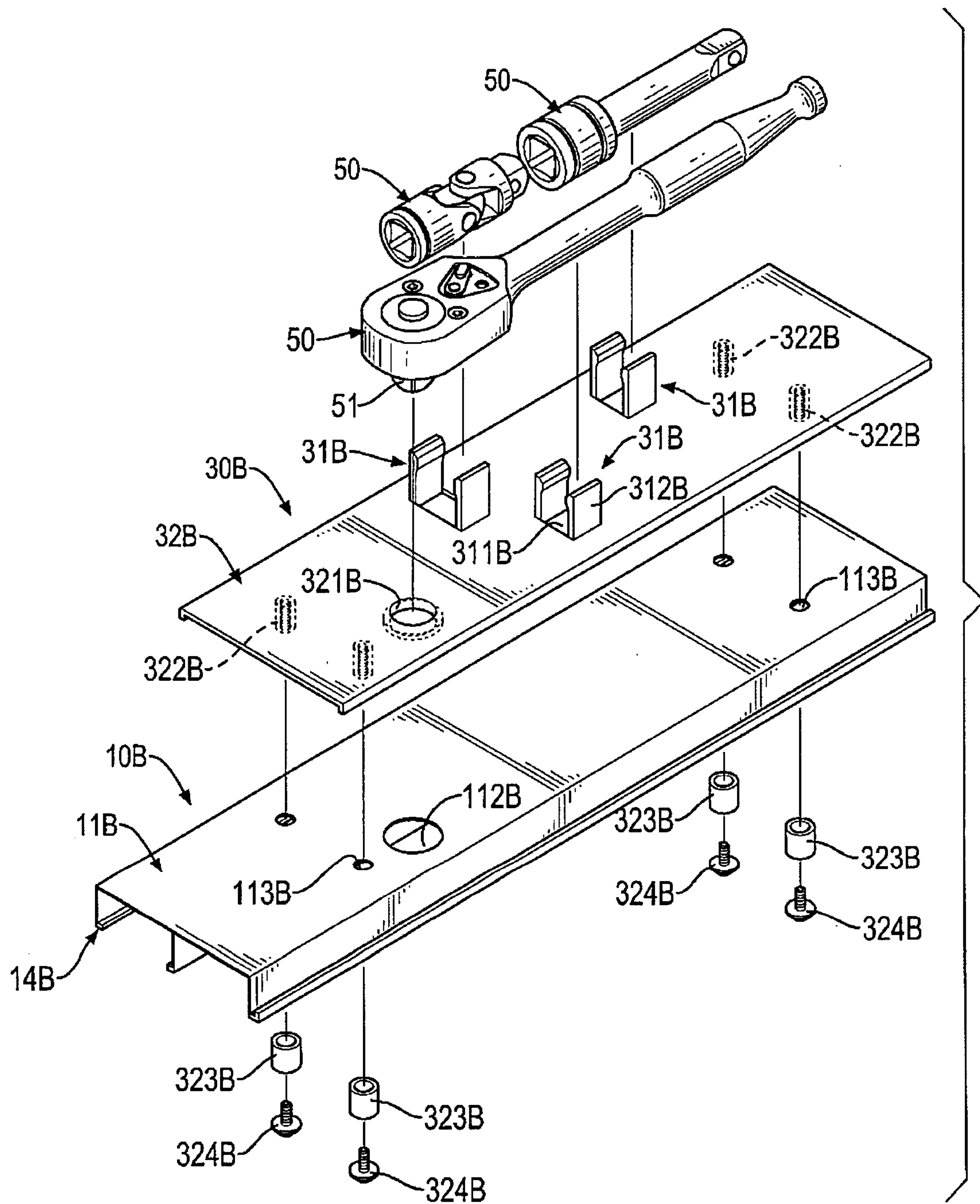


FIG.12

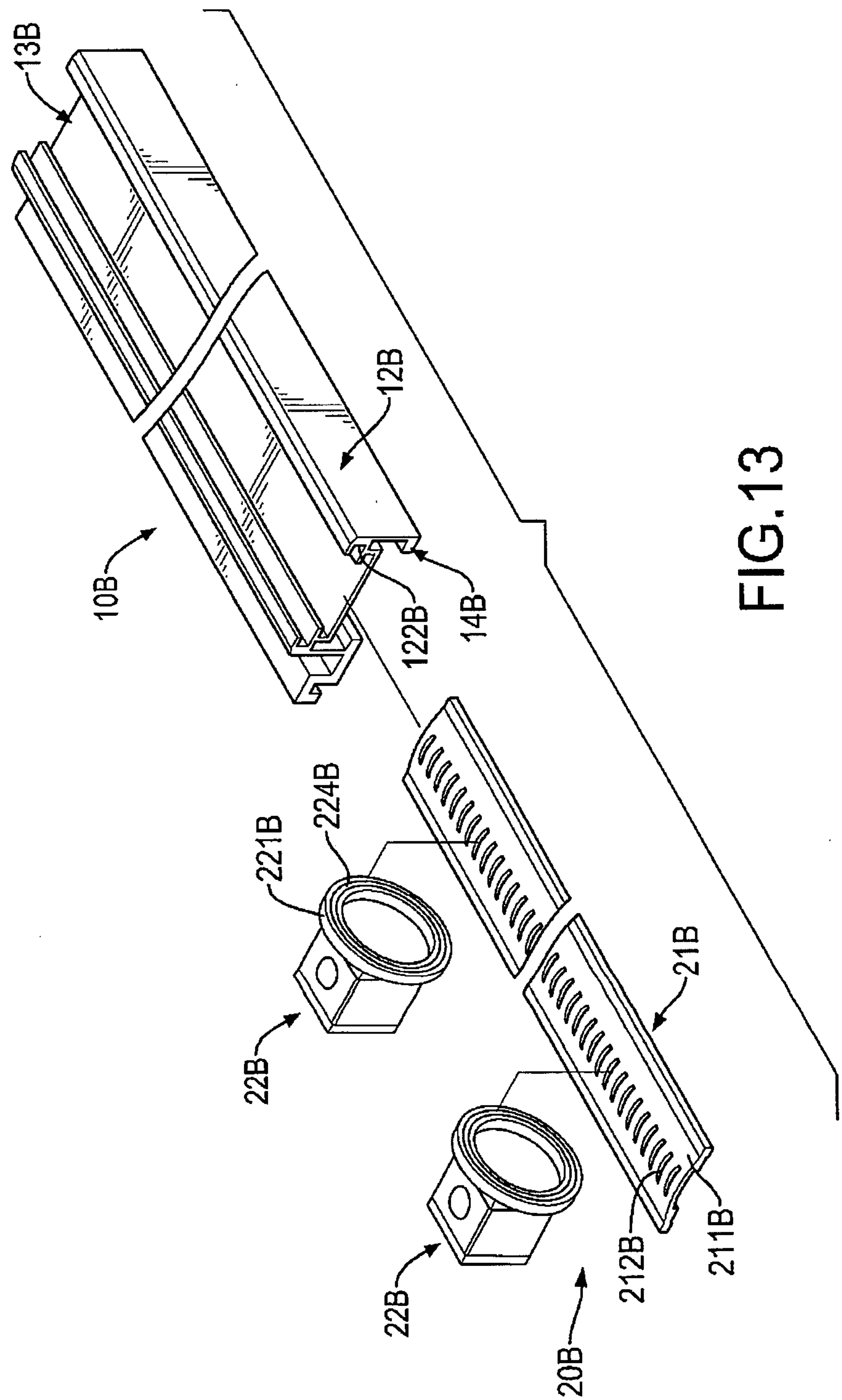


FIG.13

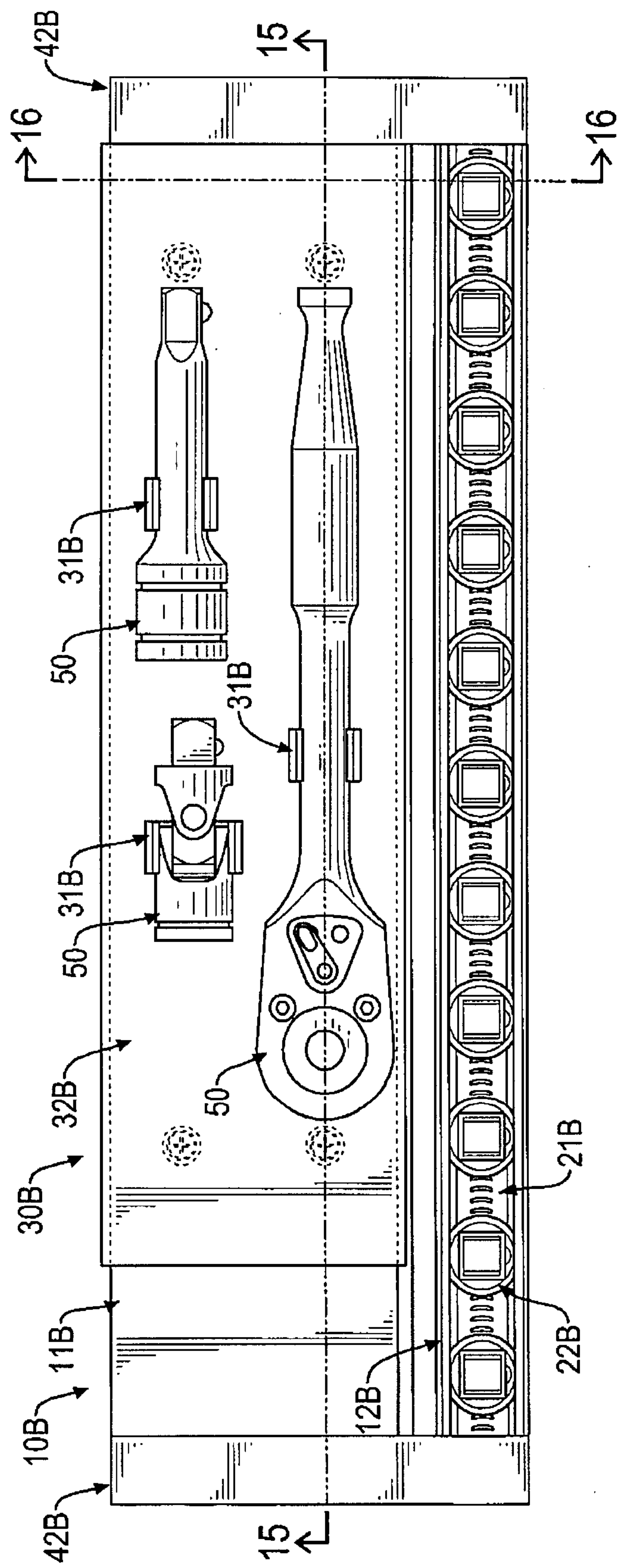


FIG. 14

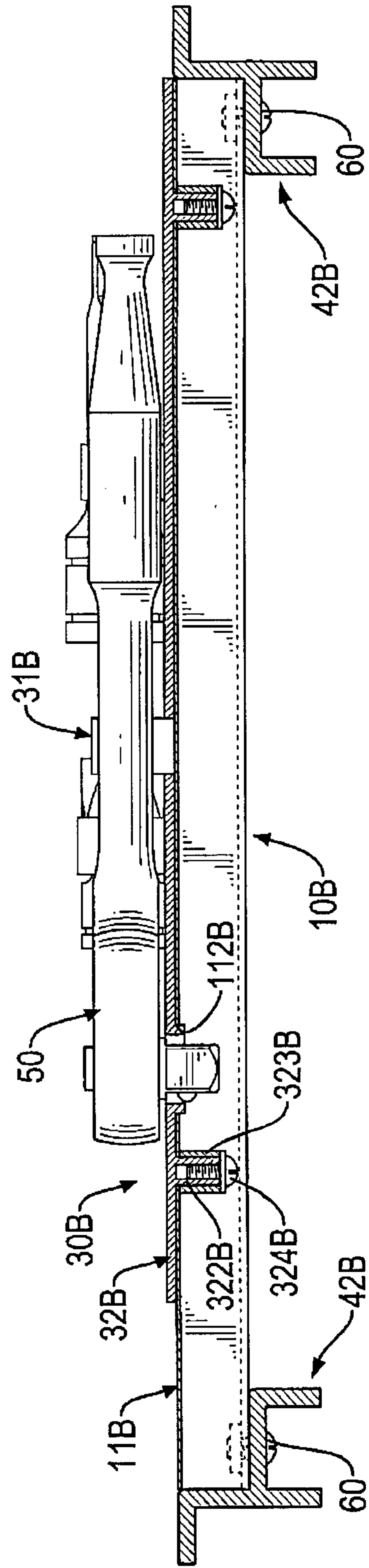


FIG.15

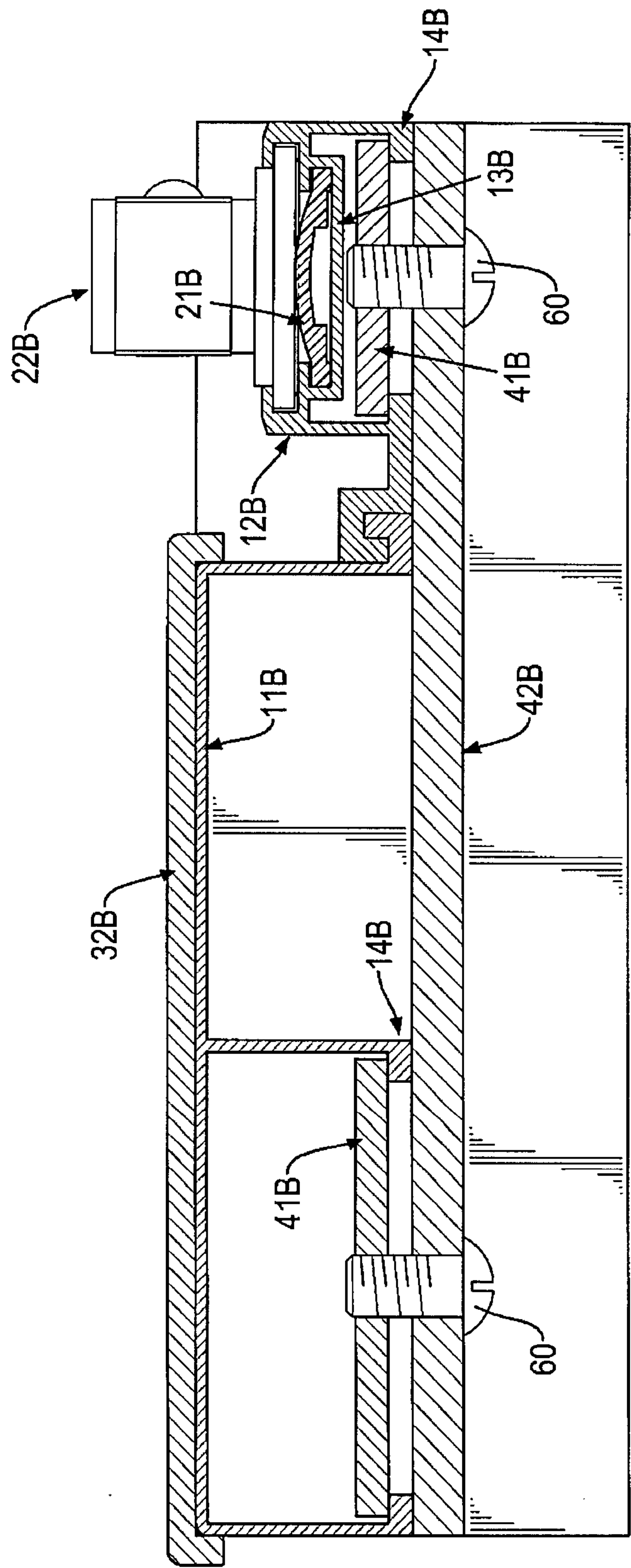


FIG.16

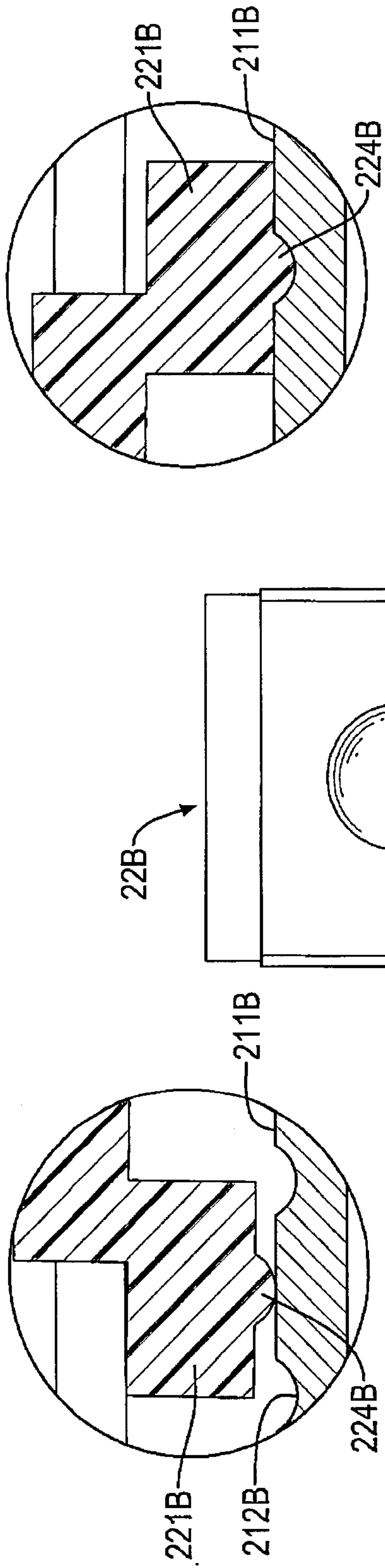


FIG. 17A

FIG. 17B

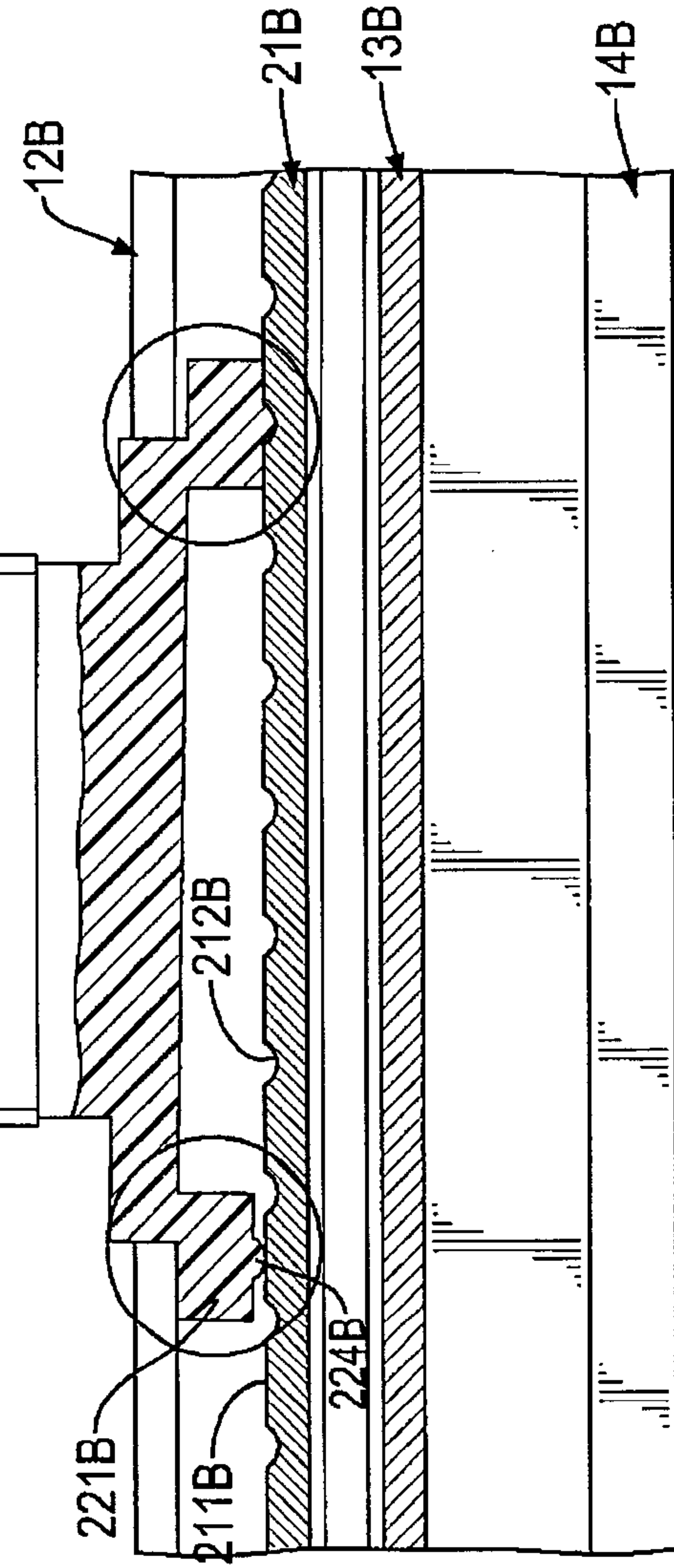


FIG. 17

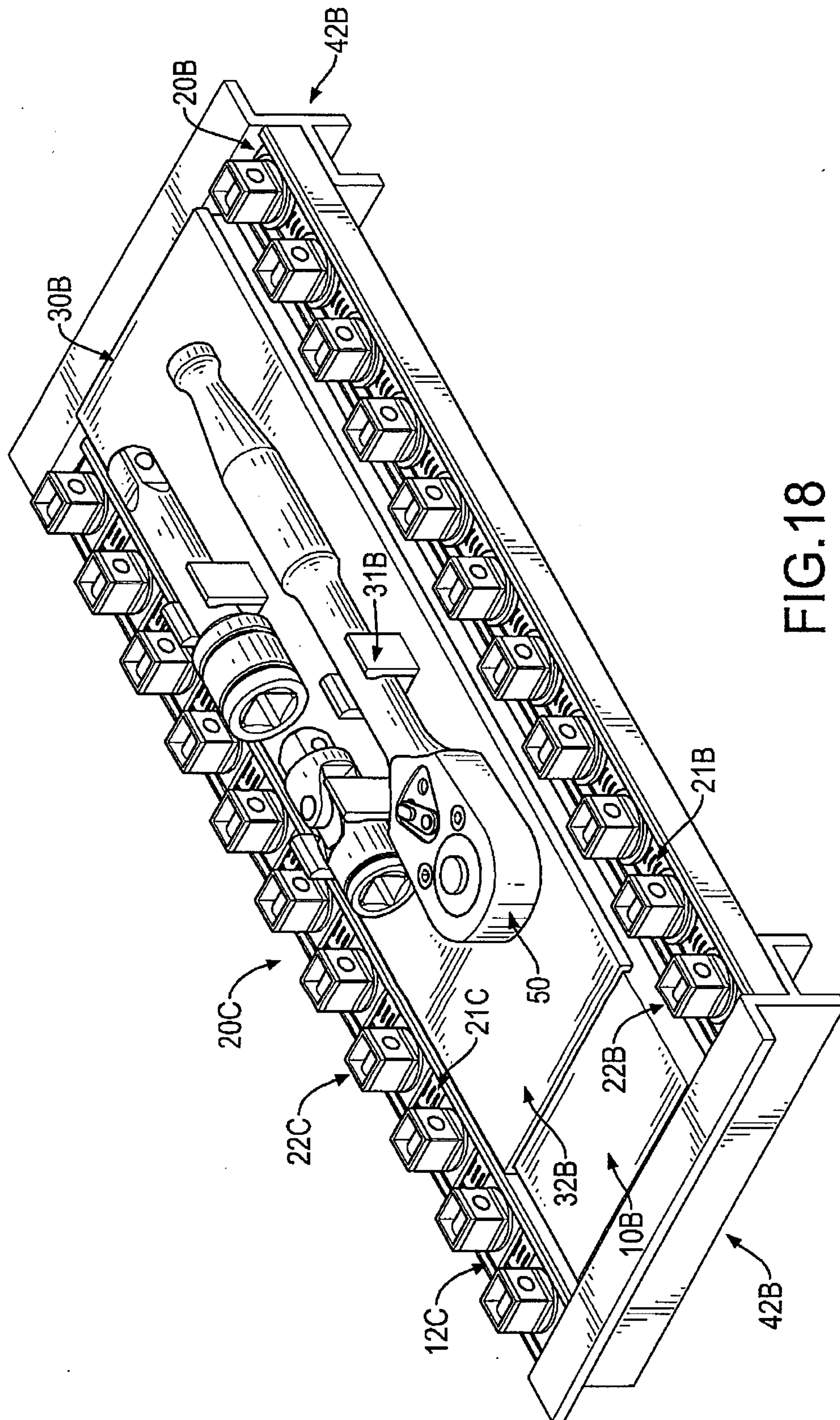


FIG. 18

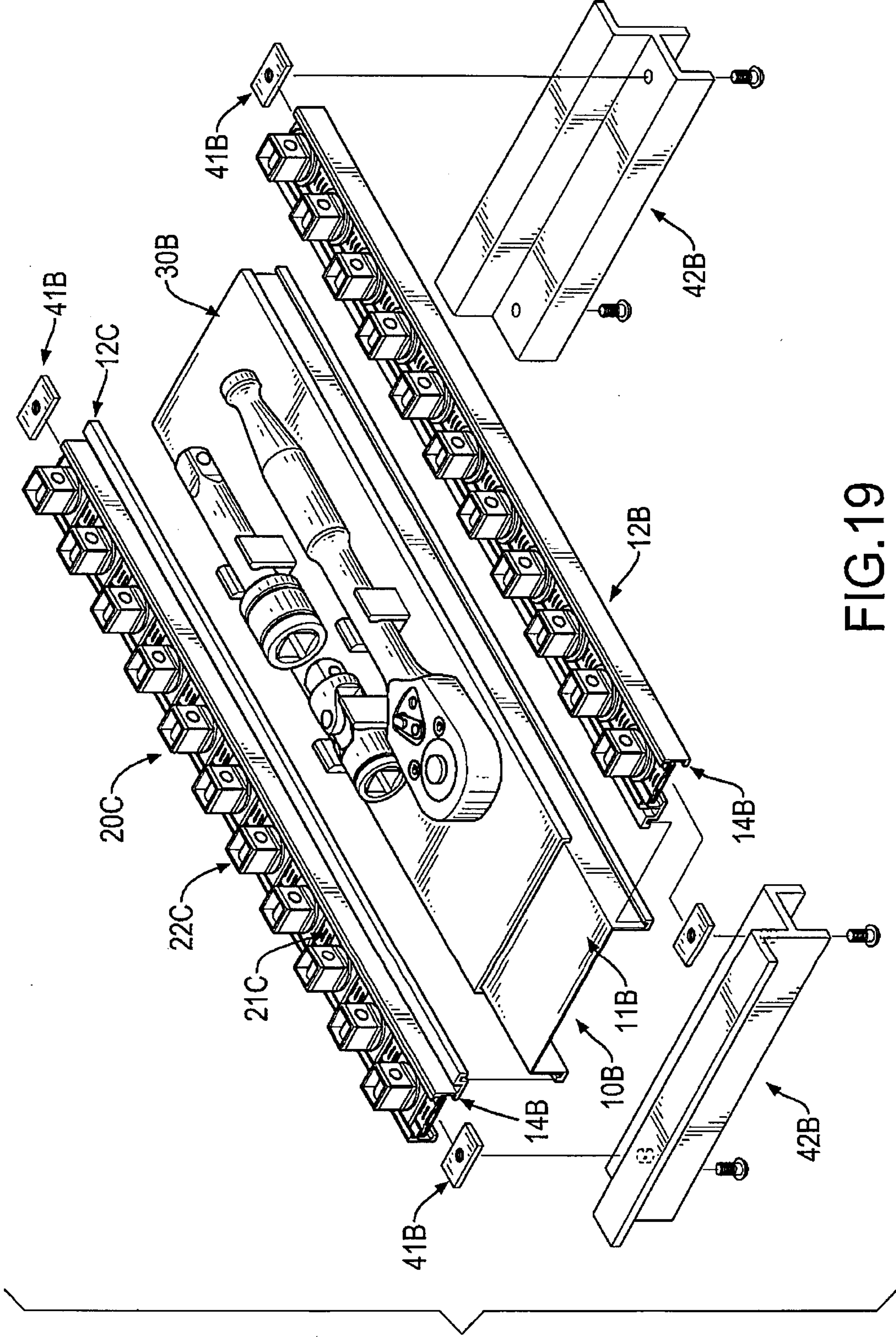
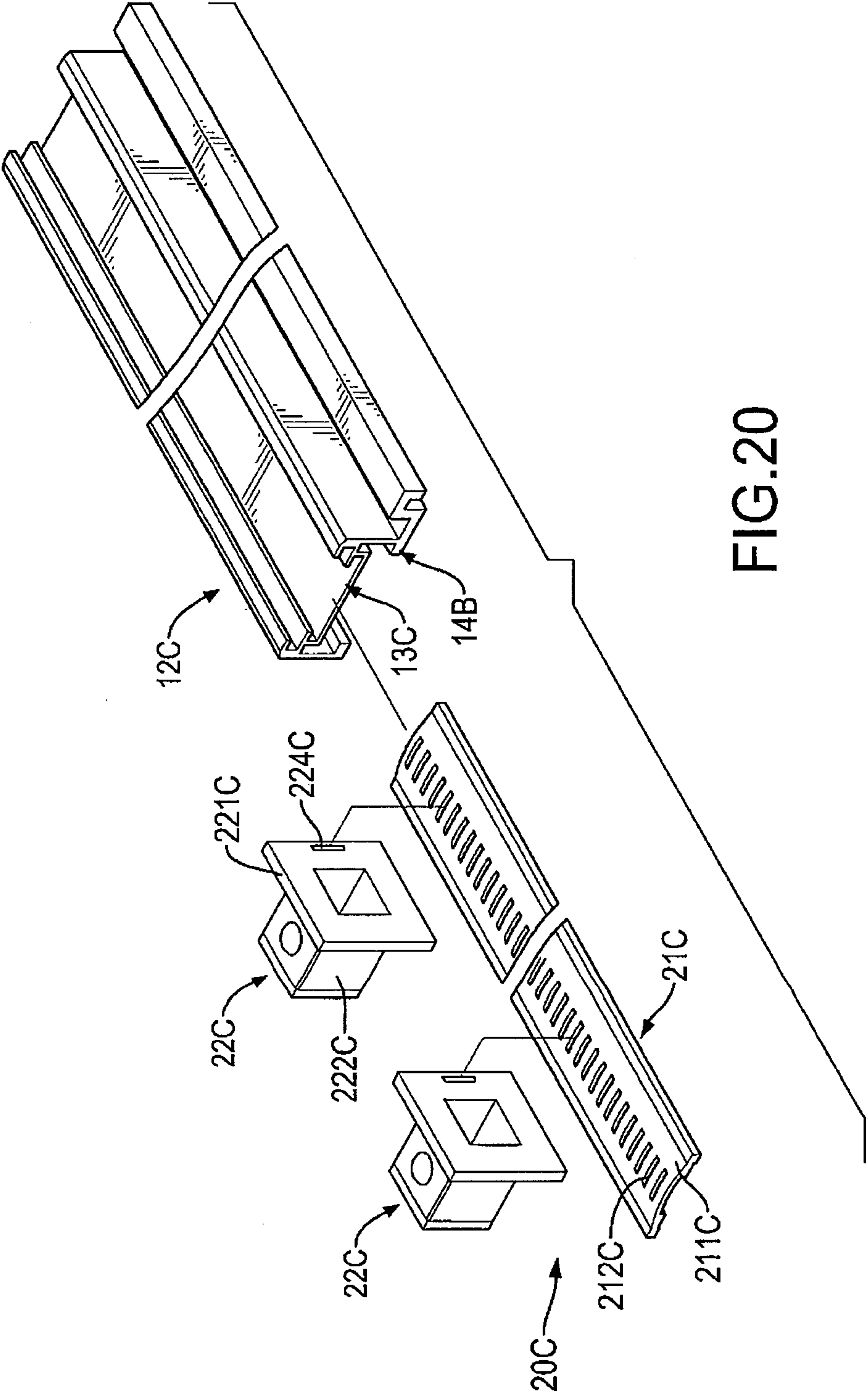


FIG.19



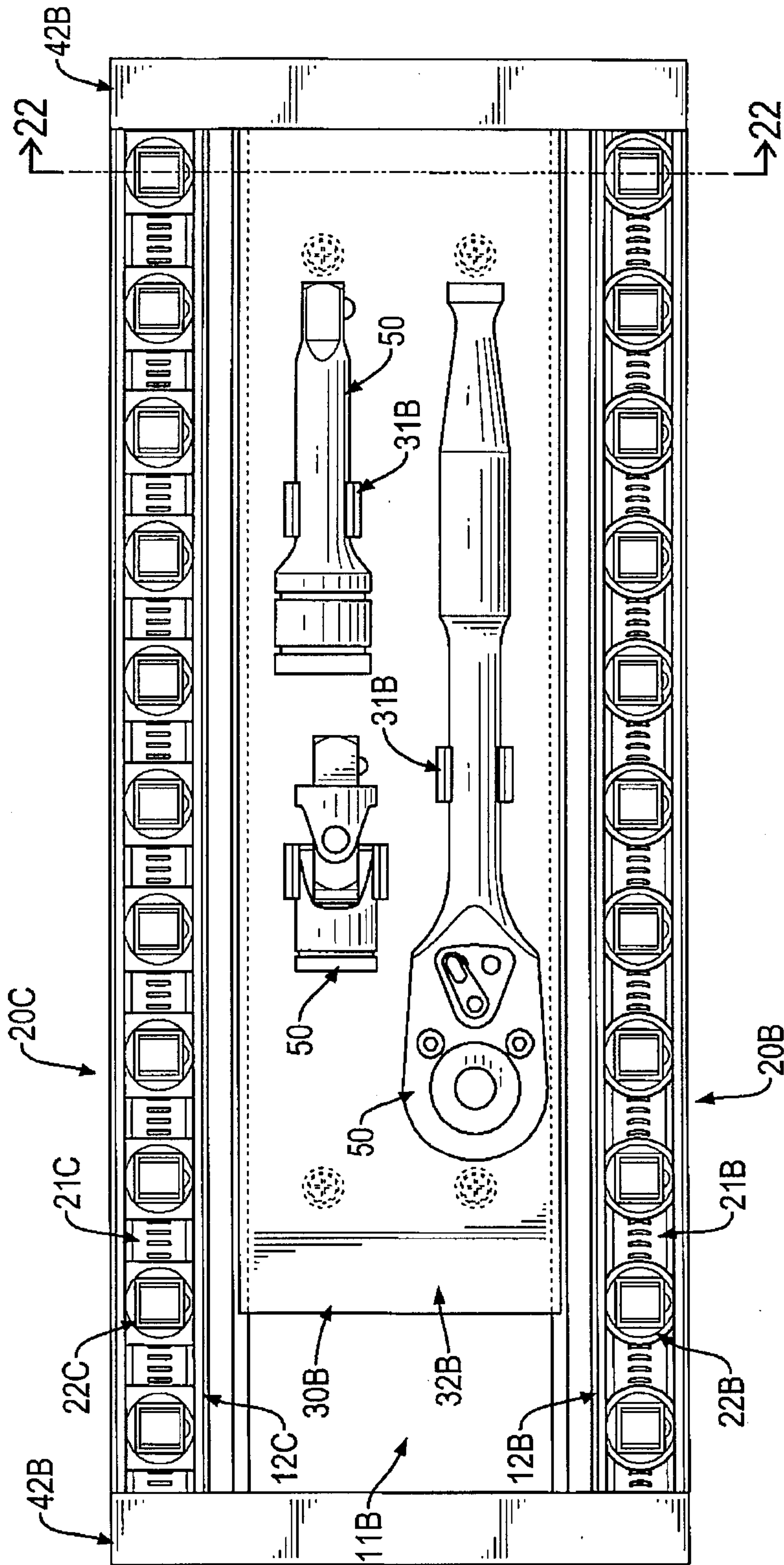


FIG. 21

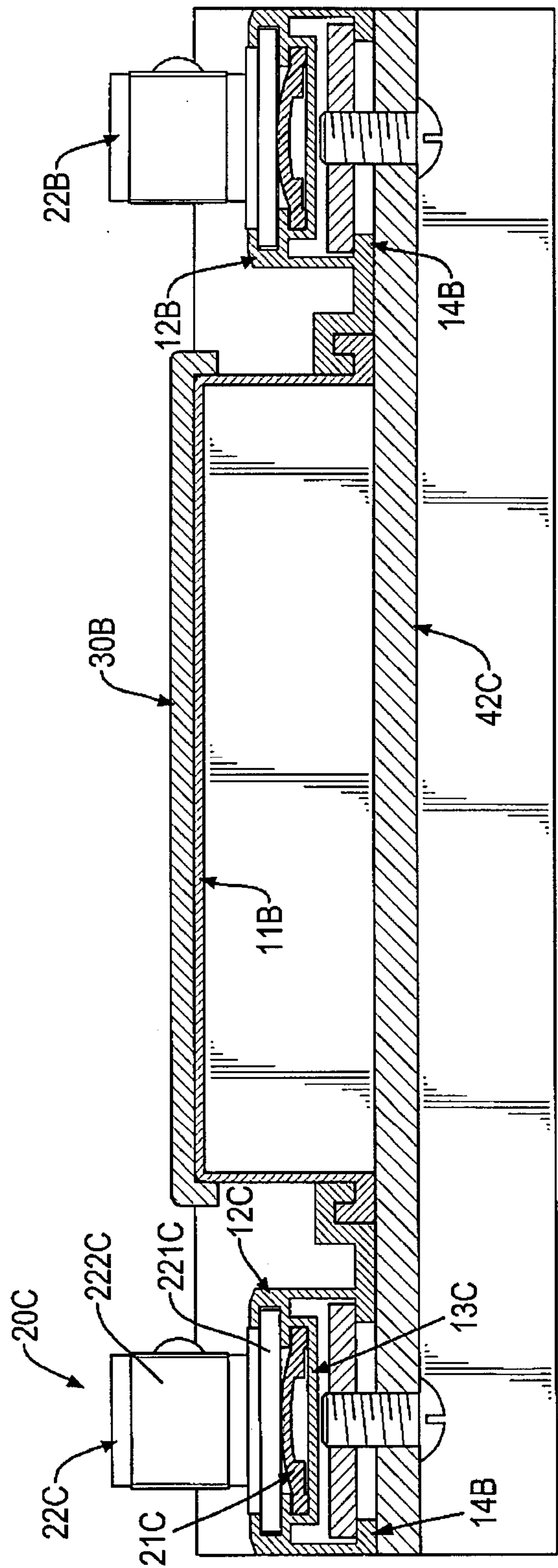


FIG.22

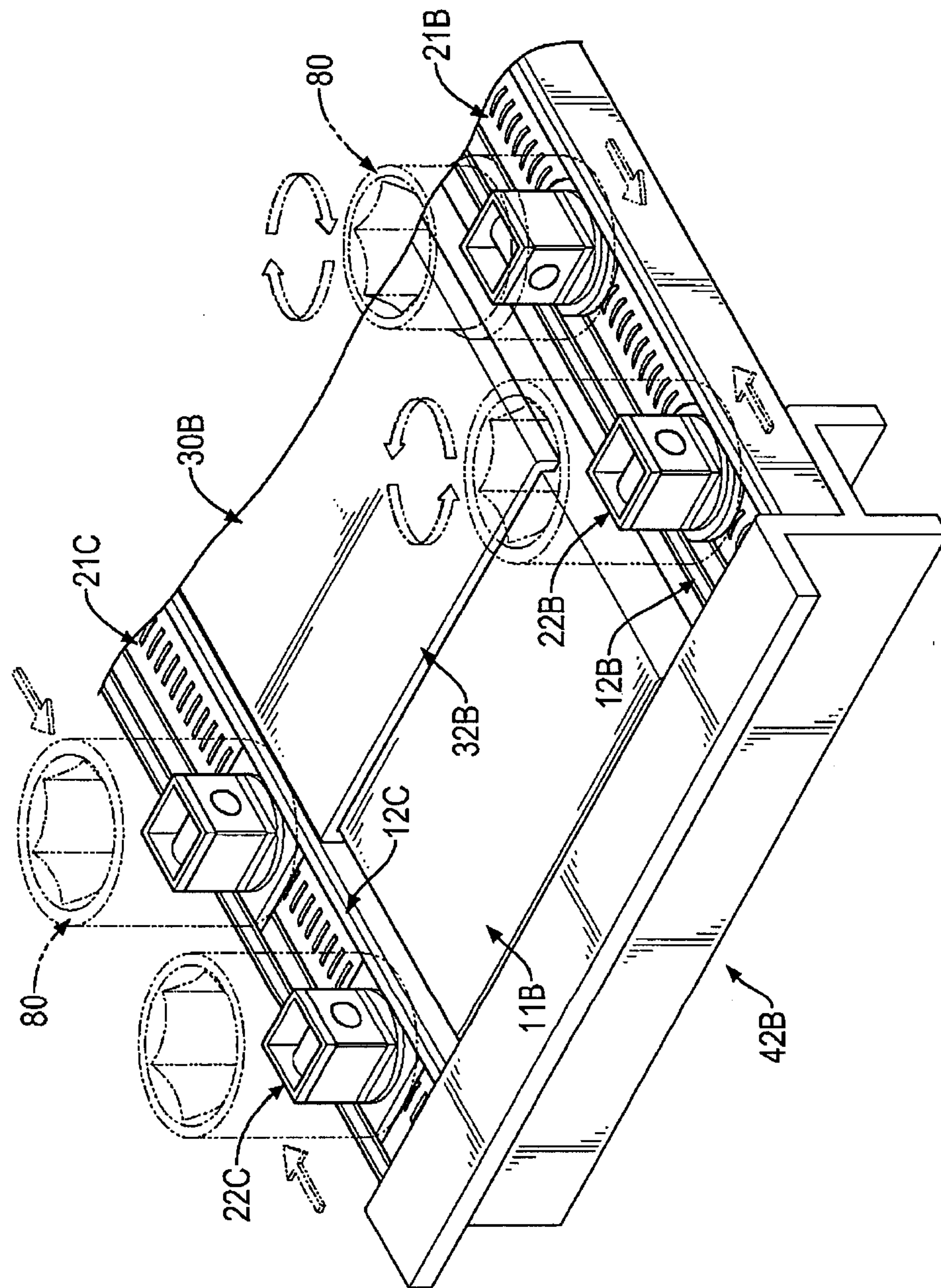


FIG. 23

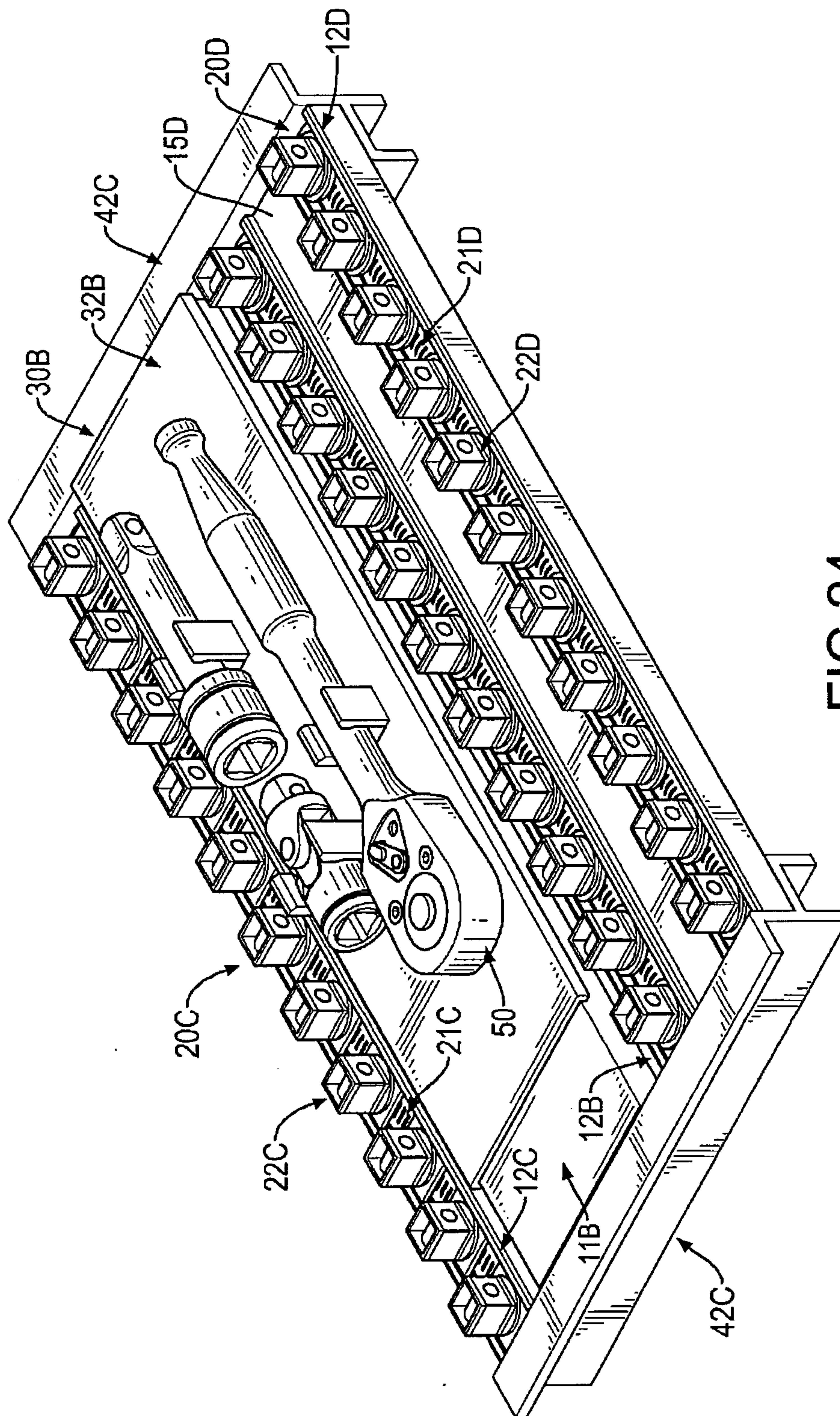


FIG. 24

