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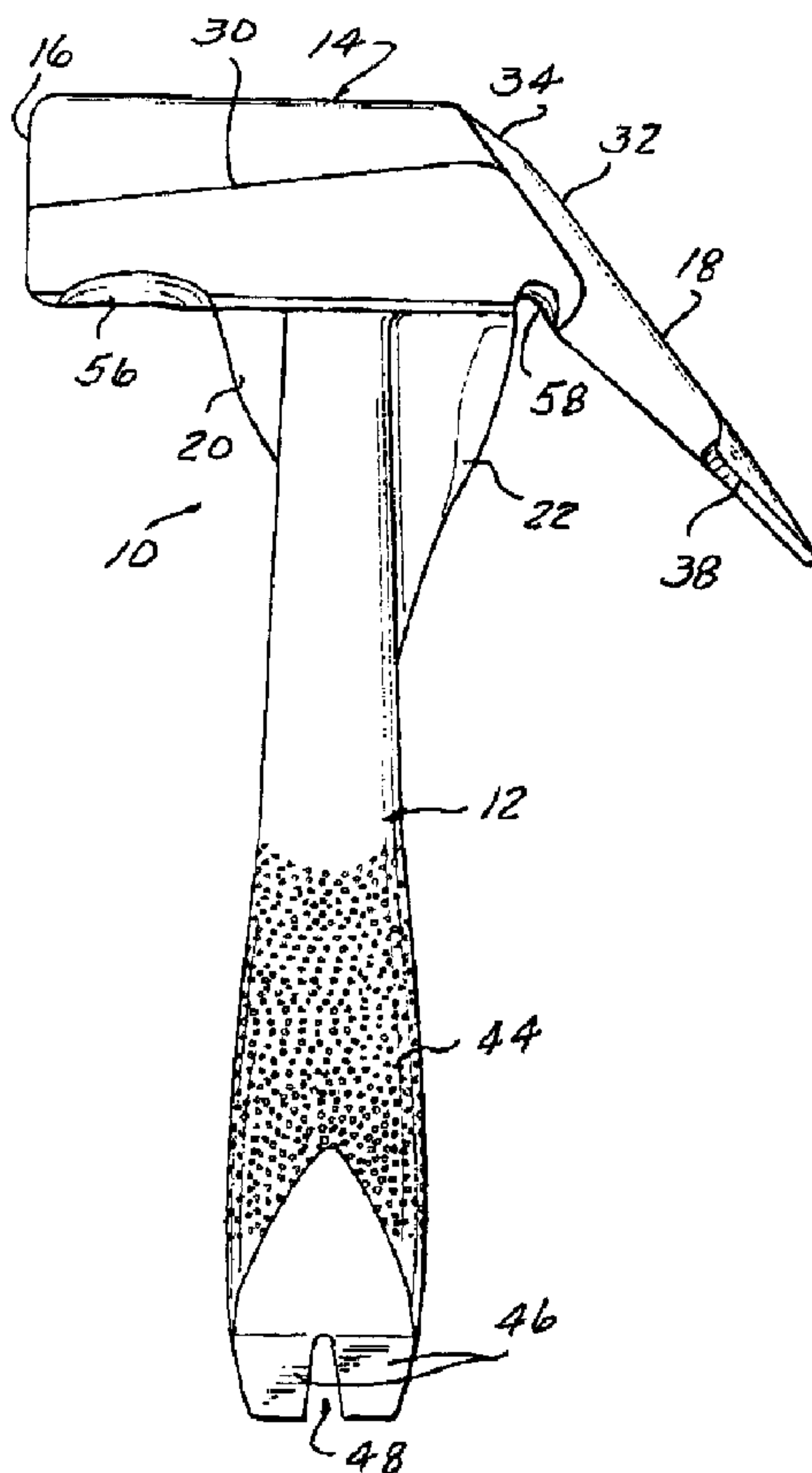
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(54) Title: MULTIPLE USE HAMMER



(57) Abrégé/Abstract:

A multiuse hammer having multiple pry features of varying configurations as well as a striking face on an enlarged head portion. One feature is formed on the handle end, another long length straight but angled claw on the head portion, and a pry tooth projects to one side of the claw.

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MULTIPLE USE HAMMER

Abstract of the Disclosure

A multiuse hammer having multiple pry features of varying configurations as well as a striking face on an enlarged head portion. One feature is formed on the handle end, another long length straight but angled claw on the head portion, and a pry tooth projects to one side of the claw.

MULTIPLE USE HAMMER**Cross Reference to Related Application**

This application is a continuation-in-part of U.S. serial no. 09/881,364, filed June 14, 2001.

Background of the Invention

This invention concerns hammers and more particularly hammers suited for multiple use as by a roofer in carrying out nailing, striking, prying and/or nail removal tasks of the type typically encountered when roofing.

A standard carpenter's hammer has a curving claw projecting back from the striking face. Such a standard claw is often awkward to use for prying, as the handle must be tilted forward, and forward clearance is sometimes not available. The hammer head configuration does not create a great deal of leverage, such that excessive effort is required, even for extracting nails.

Further, the standard hammer claw is not well suited to a variety of prying applications encountered by a roofer, as when inserting the same under shingles, trim, flashing, siding, etc., and a roofer usually must carry other pry tools in addition to a hammer.

Another roofer need is convenience in carrying the hammer, as the roofer is usually working on his knees or stooped over, such that a belt holder makes removing the hammer awkward or necessitates standing up. Since a roofer must use his hammer frequently, even a slight hindrance is burdensome over the course of a work day.

1 It is now the usual practice to use a nailing gun for nailing the shingles, and a
2 person usually would prefer to reach for a holstered nailing gun with the same hand as he reaches
3 for a hammer.

4 It has heretofore been proposed to provide a leg holster for hammers as shown in
5 U.S. patent 5,605,263, but that holster is complex and costly as it has a number of mechanical
6 parts, and some effort is required in seating the hammer in the holder.

7 It is an object of the present invention to provide a hammer having multiple pry
8 and extraction features which are configured to be particularly effective for roofers for striking as
9 well.

10 It is another object to provide a hammer which can be held in simple and
11 convenient belt loop holder.

12
13 Summary of the Invention

14 The above recited objects and others which will be understood upon a reading of
15 the following specification and claims are achieved by a tool comprising a hammer having
16 multiple pry features. The hammer is preferably of one piece metal construction including an
17 extra heavy striking head having an integral tubular handle attached at one end to the head and
18 formed at its free end with slightly angled chisel prongs separated with a V-shaped slot. A
19 bulging shape of the handle end together with a slight angling of the prongs allows a powerful
20 mechanical advantage to be developed when grasping the head and using the handle length for
21 leverage. The slight angle of the prongs allow the handle to extend away from a nail or shingle at
22 a shallow angle to allow easy, convenient prying and extraction.

1 An extraction claw is also provided on one end of a head portion, which is of
2 longer length than standard hammers, and which is flattened and extends from an angled surface
3 of the striking head end to allow great leverage when prying or extracting a nail by a downward
4 push on the handle to pull the nail partially out. This makes it easier to pull the nail the rest of
5 the way out by pulling up on the handle in the conventional manner.

6 A pry tooth is also provided projecting from the outer side of at least one prong of
7 the claw, which is upturned slightly to be effectively engageable with a vertical siding piece to
8 slightly pry the same away from a vertical wall adjacent a roof surface by a force exerted with the
9 tool handle.

10 This feature is useful to loosen siding to allow roof flashing to be inserted under
11 the siding.

12 The hammer is also designed to be held in a simple belt loop holster. The head
13 has sloping sides with a chamfer along the lower edges to be easily pulled past a nailer gun
14 without catching. A pair of scallop features receive the belt holder strap, and a pair of integral
15 webs each extending from the head to the handle locate and stabilize the hammer in the belt loop
16 holder.

17 The webs also serve to increase the mass of the large head for increased striking
18 power.

19 The scallop closer to the striking face is larger to function as a finger grip when
20 extracting the hammer from the belt loop holder.

21
22 Description of the Drawings

1 Figure 1 is a front view of the multiple use hammer according to the invention,
2 inserted in a holder according to the invention.

3 Figure 2 is a fragmentary end view of the hammer shown in Figure 1, showing the
4 pry tooth with siding shown in phantom lines.

5 Figure 3 is a fragmentary reverse end view of the roofer's hammer shown in
6 Figure 2.

7 Figure 4 is an enlarged side view of the lower end of the hammer handle, shown
8 engaging a nail being extracted.

9 Figure 5 is a side view of the hammer shown in Figure 1 depicting the start of a
10 nail extraction, the hammer handle pushed down as shown in phantom lines.

11 Figure 6 is a fragmentary front view of the multiple use hammer in a belt loop
12 holder.

13
14 Detailed Description

15 In the following detailed description, certain specific terminology will be
16 employed for the sake of clarity and a particular embodiment described in accordance with the
17 requirements of 35 USC 112, but it is to be understood that the same is not intended to be
18 limiting and should not be so construed inasmuch as the invention is capable of taking many
19 forms and variations within the scope of the appended claims.

20 Referring to the drawings and particularly Figure 1, the roofer's hammer 10 is
21 shown, preferably of one piece construction and of forged steel, with the handle 12 formed
22 integrally with the head 14. The handle 12 is preferably formed by a hollow tube, as seen in

1 Figures 2, 3, 4 and 6 to minimize shock when using the hammer as a striking tool.

2 The head 14 has a flat striking face at one end, at a straight relatively long
3 extraction claw 18 downwardly extending from the other end. A pair of webs 20, 22 are
4 provided each extending between the handle 12 and head 14 which also insure a centered
5 retention in a conventional belt loop holder 24, shown in Figure 6.

6 The head has sloping sides 26, 28 (Figure 2) angling along a parting line 30 to
7 present a trim contour to enable easy withdrawal from the holder 24 and clearance to minimize
8 interference with a holstered nailer gun (not shown).

9 The head 14 has an opposite face 32 angled down and blending into the elongated
10 tapered thickness claw extraction 28 extending outwardly and downwardly from the opposite
11 face 32. An angled corner 34 provides an effective fulcrum point.

12 A V-shaped slot 36 (Figure 3) is formed into the end of the extraction claw 18.
13 The corner 34 of the angled face 38 forms a fulcrum point when using the claw 18 for completing
14 nail extraction or prying. The long length of the claw 18 makes it effective for loosening
15 shingles without breakage. The claw 18 can also be used effectively to punch a hole in plywood,
16 siding, etc., and is designed to be sufficiently sturdy for that purpose.

17 A pry tooth feature 38 projects laterally from prong of the claw 18 adjacent the
18 end thereof.

19 The pry tooth feature 38 is angled up slightly to be effective in loosening siding
20 on a vertical wall 40 intersecting the roof. With the hammer is angled slightly away from the
21 wall 42, and with the handle 20 extending alongside the wall, the feature 44 can be engaged with
22 the bottom edge of the siding 40. When the handle 20 is pulled to the side, with the head 14

1 engaging the roof surface, the pry tooth feature 38 exerts a pry force on the siding, enabling it to
2 be loosened. This allows flashing pieces to be inserted under the siding 40.

3 The handle 12 has a knurling or dimple pattern 44 for a secure grip is formed with
4 a chisel. Pry-extraction prongs 46 separated by a V-shaped slot 48 are formed on the lower end
5 of the handle 12. The prongs 46 are integral with the handle end and are angled out slightly from
6 the handle axis (Figure 6). The handle 20 has a bulge 50 at the end adjacent an inclined face 52
7 blending into the prongs 46. The bulge 50 creates a fulcrum when prying using the prongs 46, or
8 when extracting a nail 54. Since the entire length of the handle 12 is available as a lever arm
9 acting on the short distance from the bulge 50 to the slot 48, considerable force can be exerted.
10 This pry feature can more easily be used in many situations than a standard hammer claw, and
11 allows the use of the knee to apply a force to the handle.

12 The head 14 is also formed with a large finger grip scallop 56 on each side at one
13 end, and a smaller scallop 58 on each side at the other end. The allows the head 14 to receive the
14 belt loop holder 24 and be located therein. The larger scallop 56 provide easier gripping when
15 removing the hammer from the belt holder 24. The length and straightness of extraction claw 18
16 allow it to be used to advantage when removing nails, as seen in Figure 5. The nail extraction is
17 started by pushing down on the handle 12, a much quicker motion, which exerts a powerful
18 upward pull on the nail 54 as indicated. The handle 12 can then be pulled up to complete
19 extraction, as necessary.

20

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1 Claims

2 1. **A multiuse hammer comprising:**

3 **an elongated handle;**

4 **a head portion at one end of said handle having a striking face;**

5 **said handle having a chisel pry edge formed on an end portion opposite said head**
6 **portion, said end portion inclined slightly out from a longitudinal axis of said handle;**

7 **an inclined end face on said handle end portion blending into said pry feature; said**
8 **handle end portion having an enlarged portion closely spaced from said pry feature to form a**
9 **fulcrum;**

10 **a straight long claw formed on said head portion on an end thereof opposite said**
11 **striking face extending downwardly and outwardly from said head portion, a V-shaped slot**
12 **formed in from an outer edge thereof.**

13
14 2. **The multiuse hammer according to claim 1 wherein said head portion end**
15 **thereof has a sloping end face blending into said claw, formed a corner defining a fulcrum.**

16
17 3. **The multiuse hammer according to claim 1 wherein said chisel pry edge**
18 **has a V-shaped slot extending thereinto.**

19
20 4. **The multiuse hammer according to claim 2 further including an upwardly**
21 **angled pry tooth projecting laterally from one side of said claw.**

22

1 5. A multiuse hammer according to claim 4 further including a web formed
2 between said head and one side of an upper portion of said handle.

3

4 6. A multiuse hammer according to claim 5 wherein a web extending
5 between said head and handle is formed on both sides of said upper portion of said handle.

6

7 7. The multiuse hammer according to claim 1 further including a scallop on
8 the lower edge of said head and each side and an either side of said handle.

9

10 8. The multiuse hammer according to claim 7 wherein said hammer head
11 portion has tapering sides extending out from the top and bottom thereof.

12

13 9. The multiuse hammer according to claim 1 wherein said handle is a
14 hollow tube spring blade formed with a lip projecting over said receptacle.

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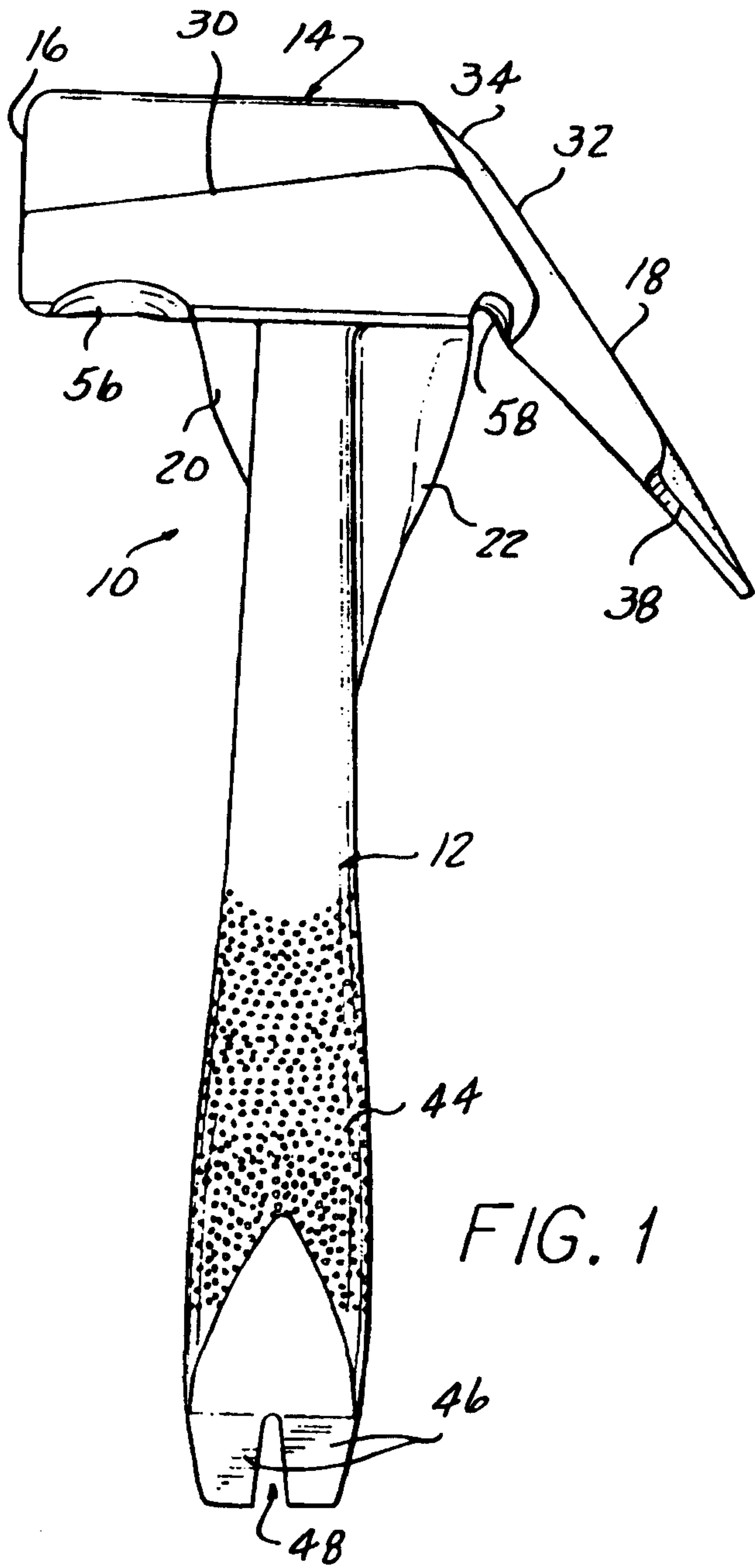


FIG. 1

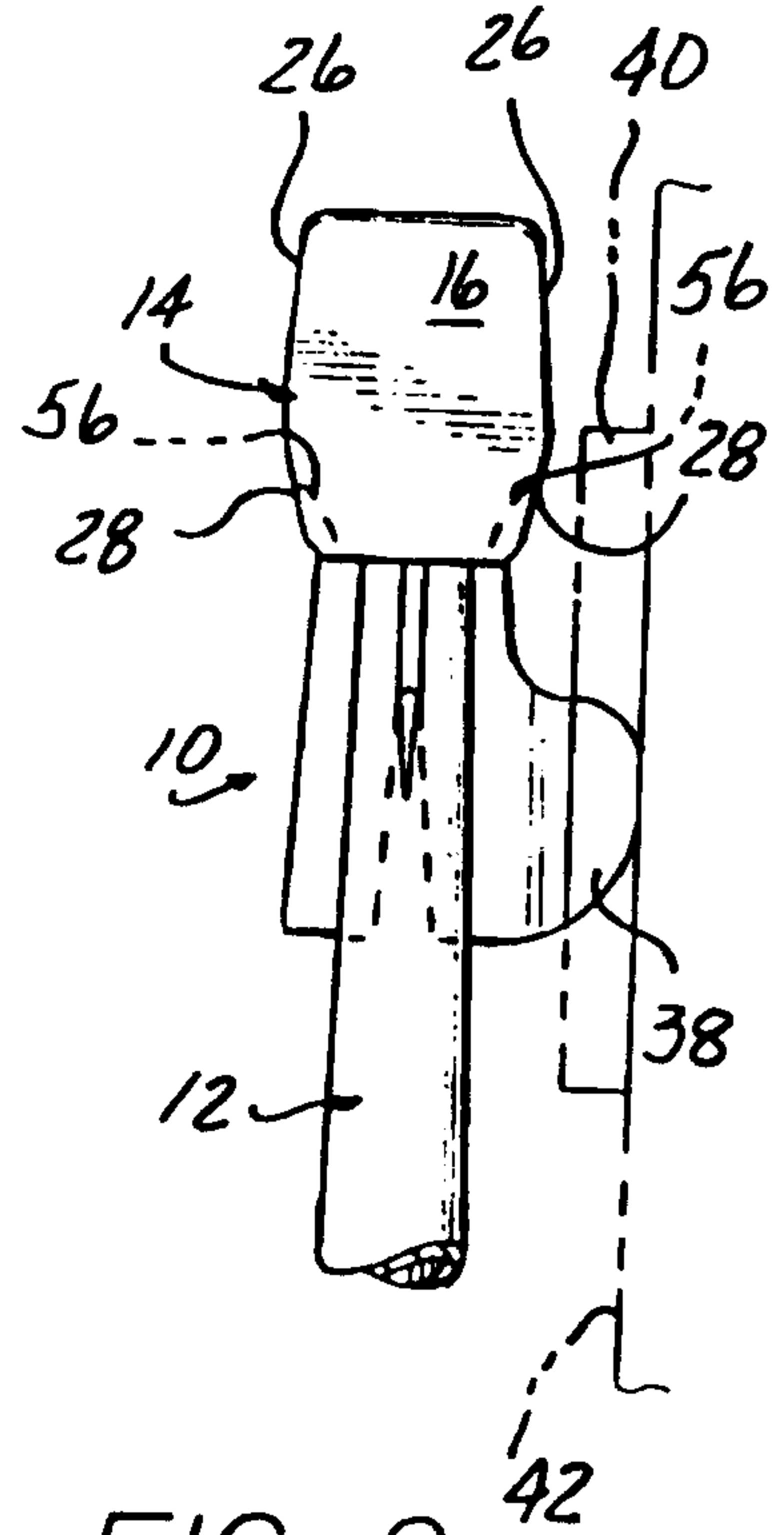


FIG. 2

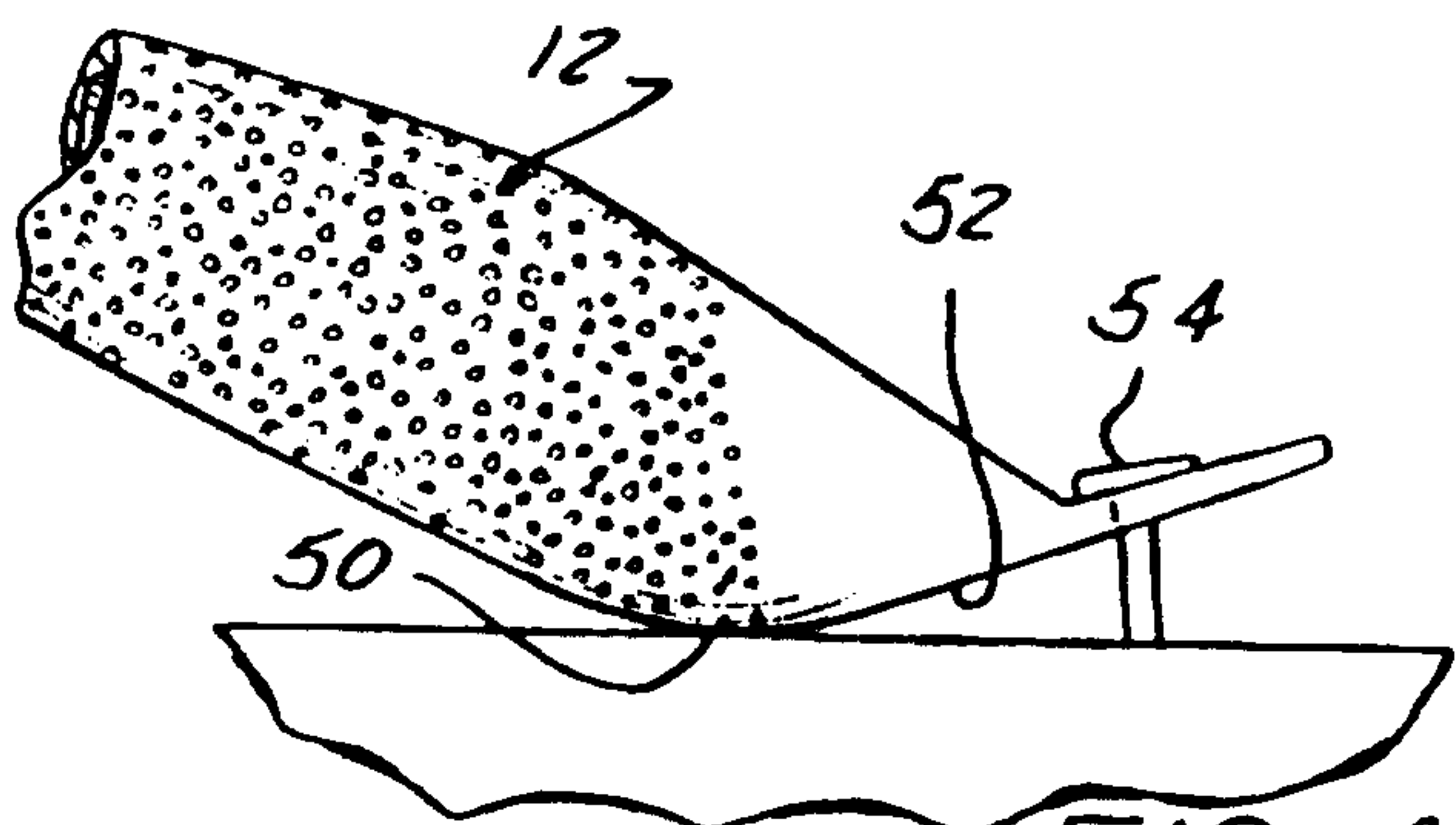


FIG. 4

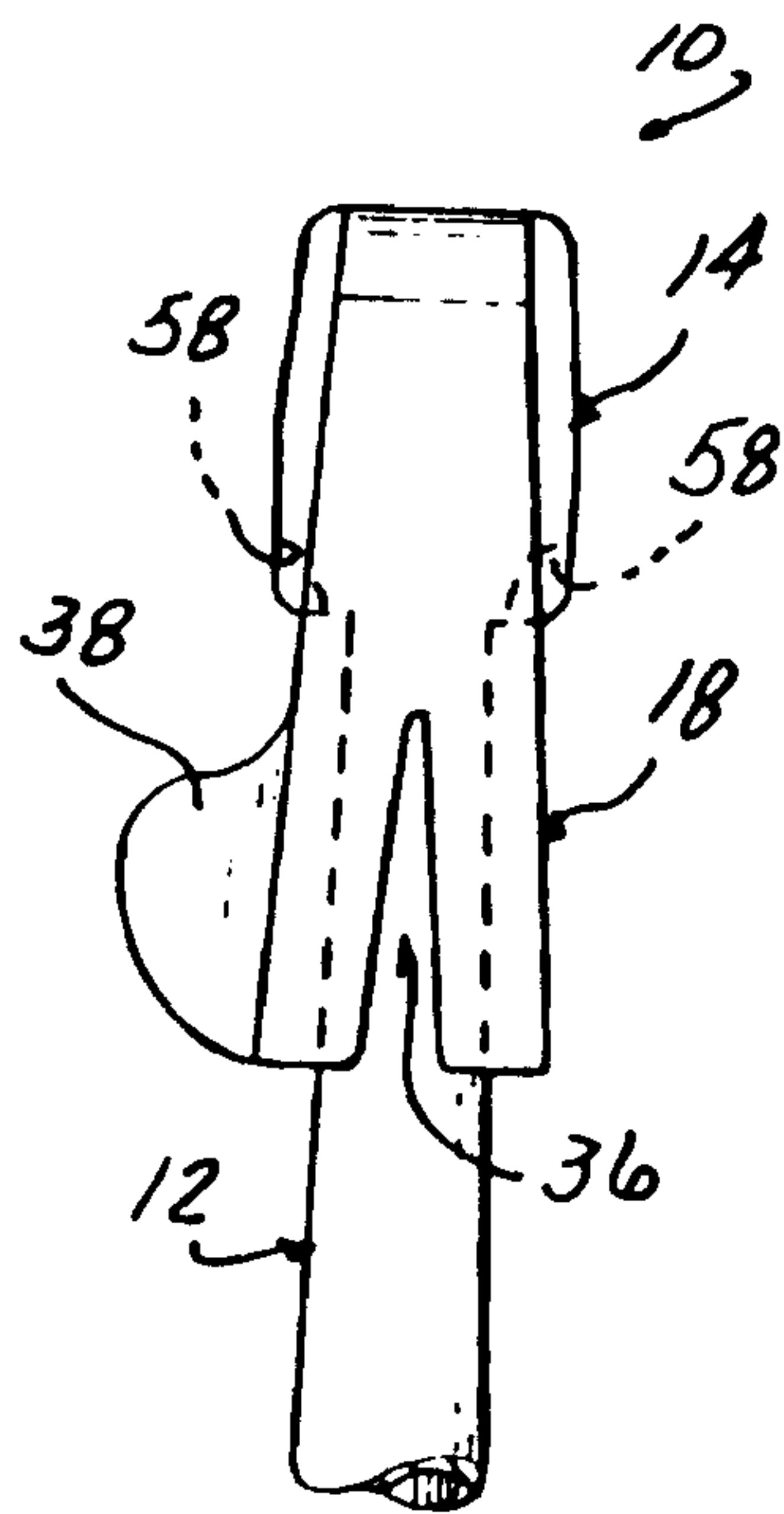


FIG. 3

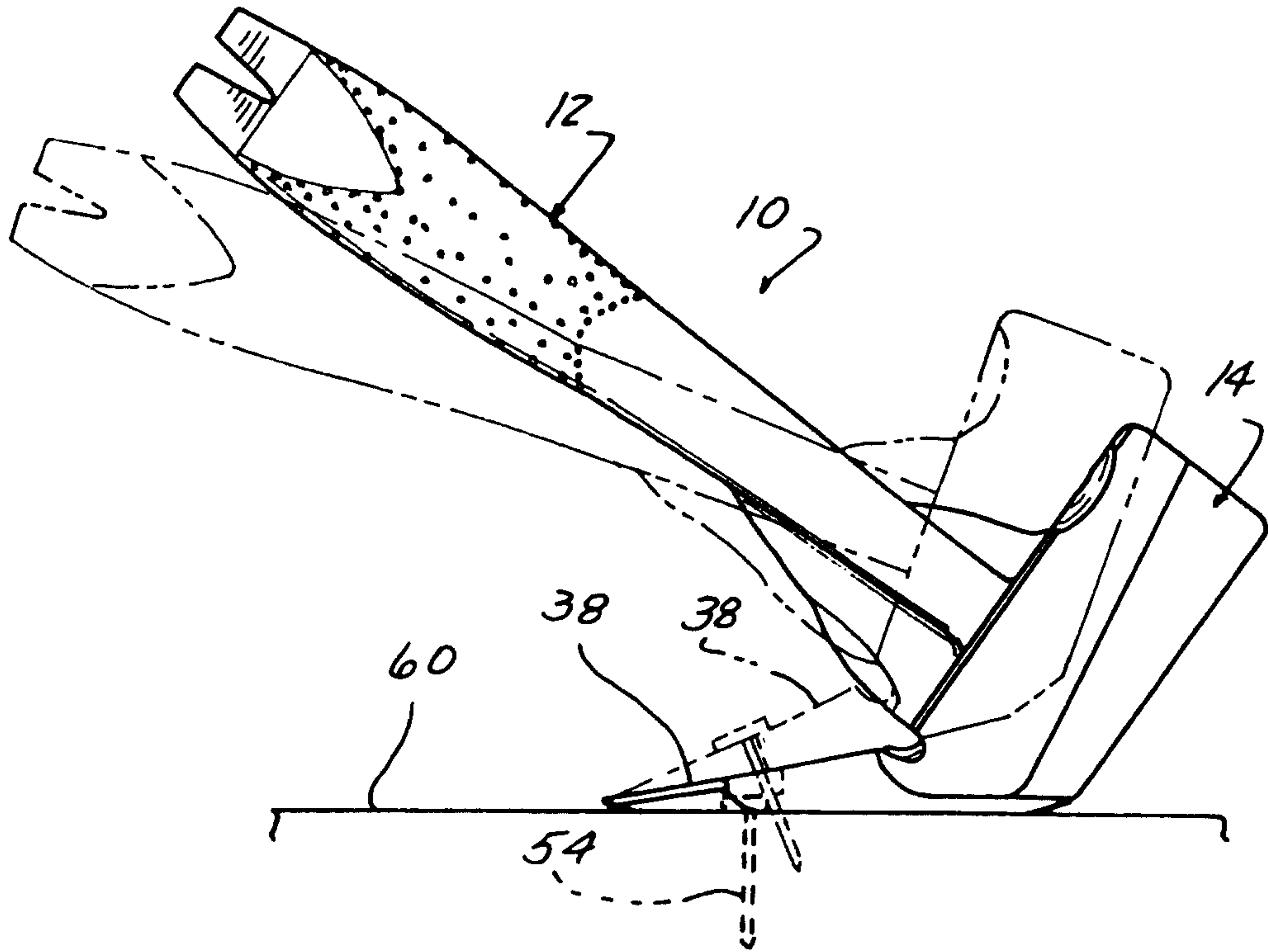


FIG. 5

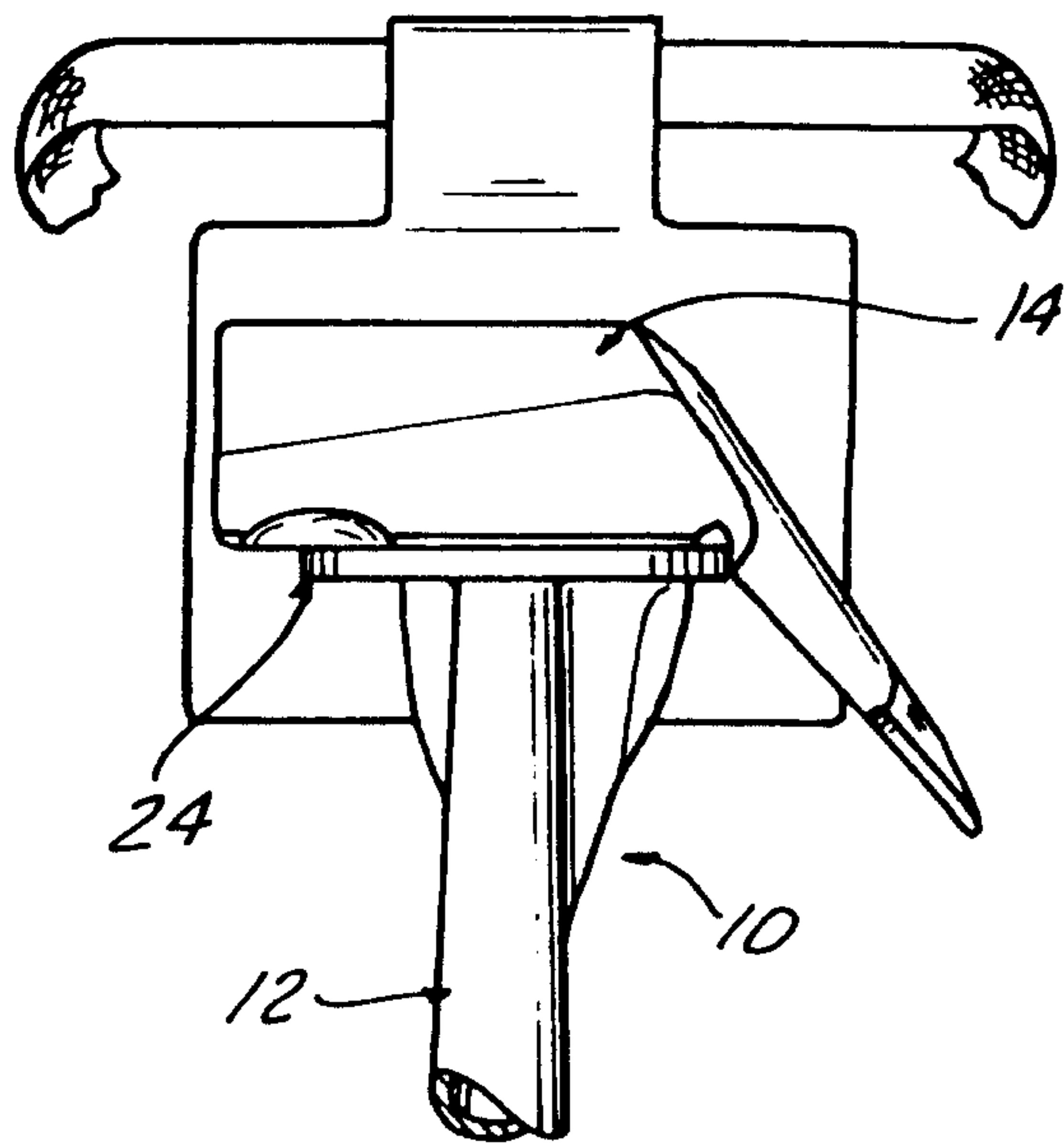


FIG. 6

