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(57) A retaining member to retain wood in a saw horse comprises two loops or rings 22 connected by a chain or strap 30 attached to spacing member 26, 16 attached to the loops. In use the loops fit over upright posts 6, 4. The spacing members may be angled at 45 degrees with respect to the plane of the loops such that, in use, they are not perpendicular to the posts, aiding retention of the wood. The saw horse may comprise a base and two fork members comprising a horizontal post (36, Figure 2), which may be toothed, on which wood or other material can rest and two upright posts 4, 6. The upright posts may have telescopic portions secured by thumb screws (44, Figure 3). The base may comprise a wooden block or log (30, Figure 2) in which the user may drill holes to define the spacing between forked members, or may comprise a trailer (figure 5). Work surfaces (70, 72, Figure 6) may be attached to the forked portions.



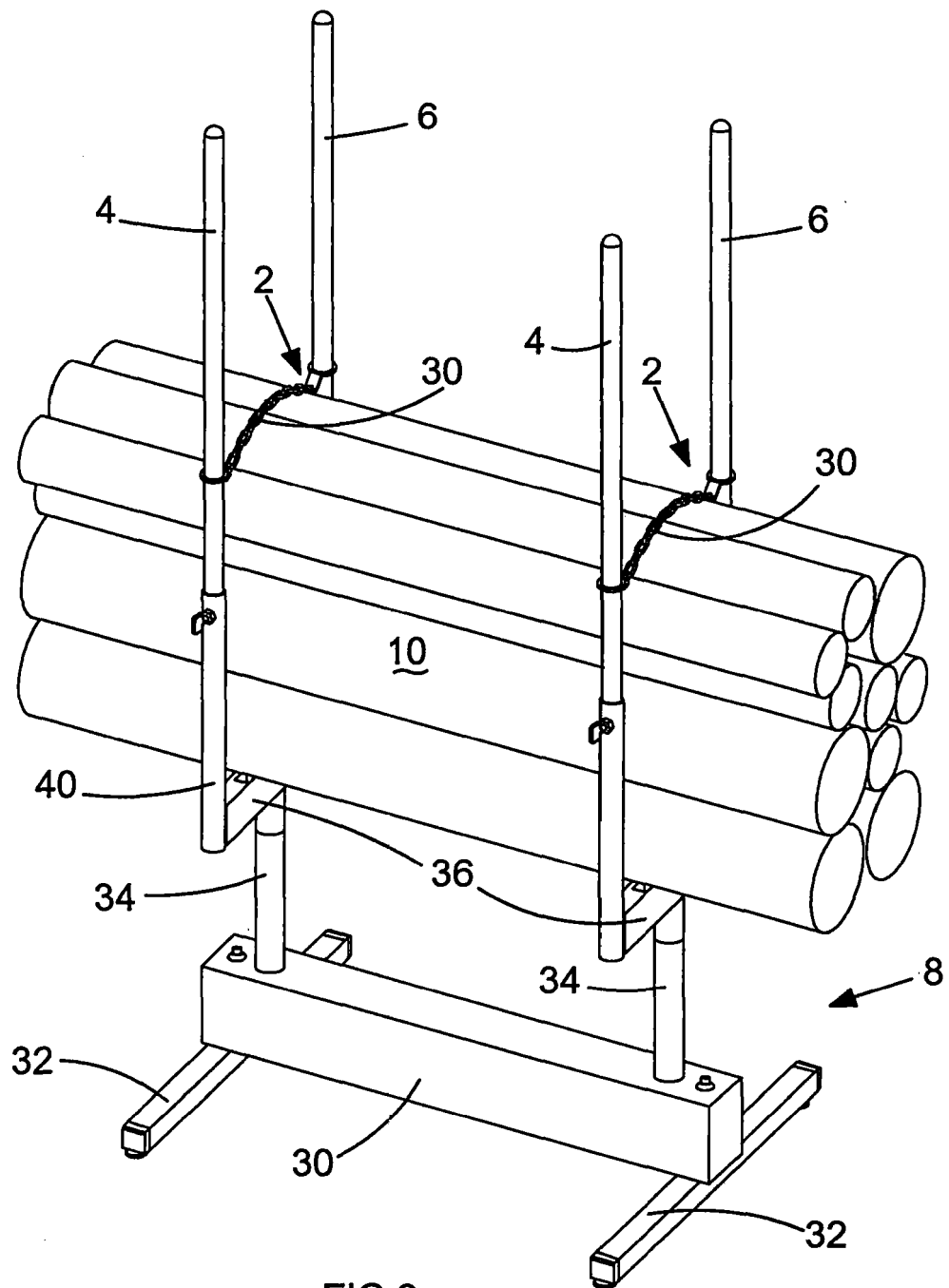


FIG.2

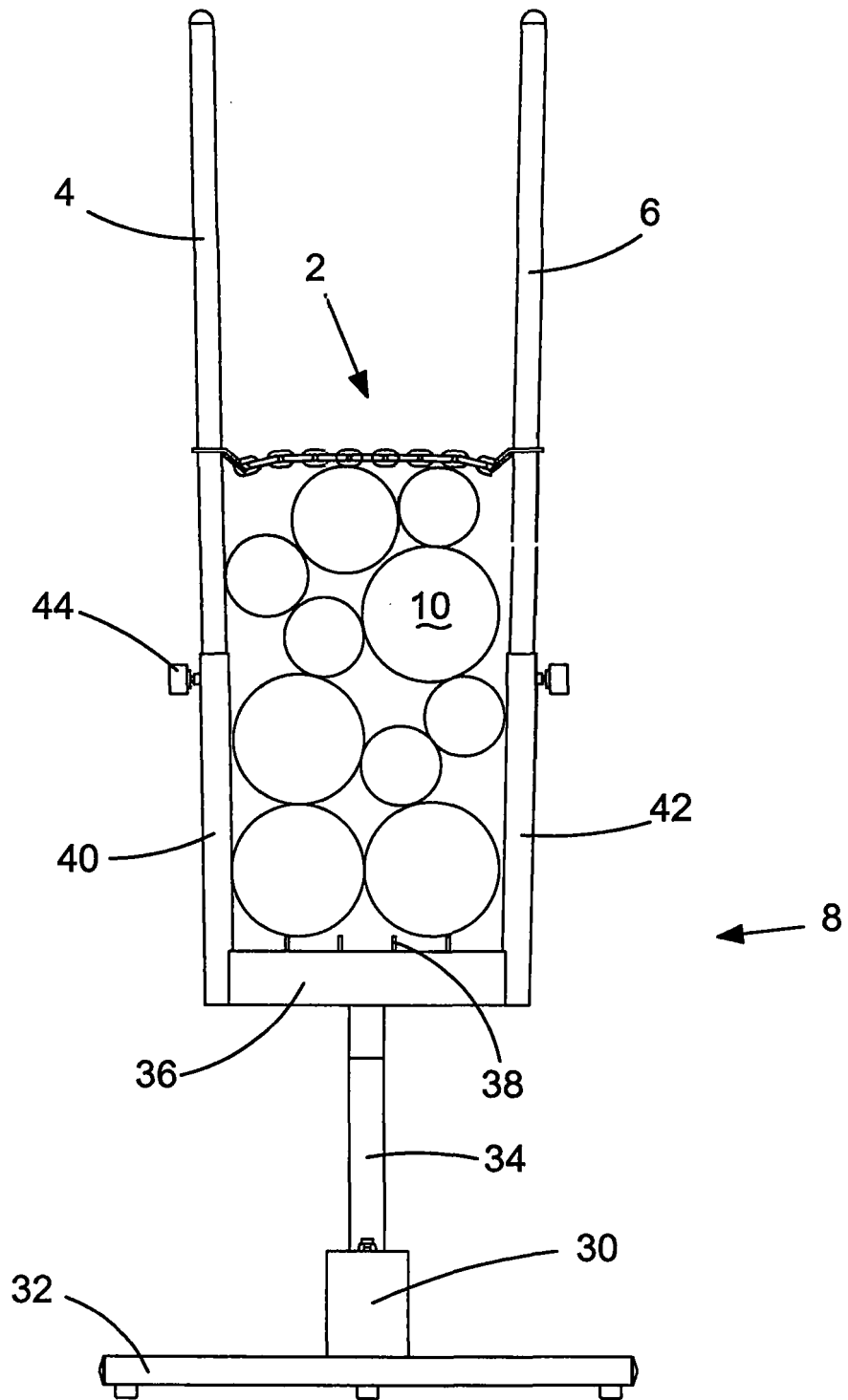


FIG.3

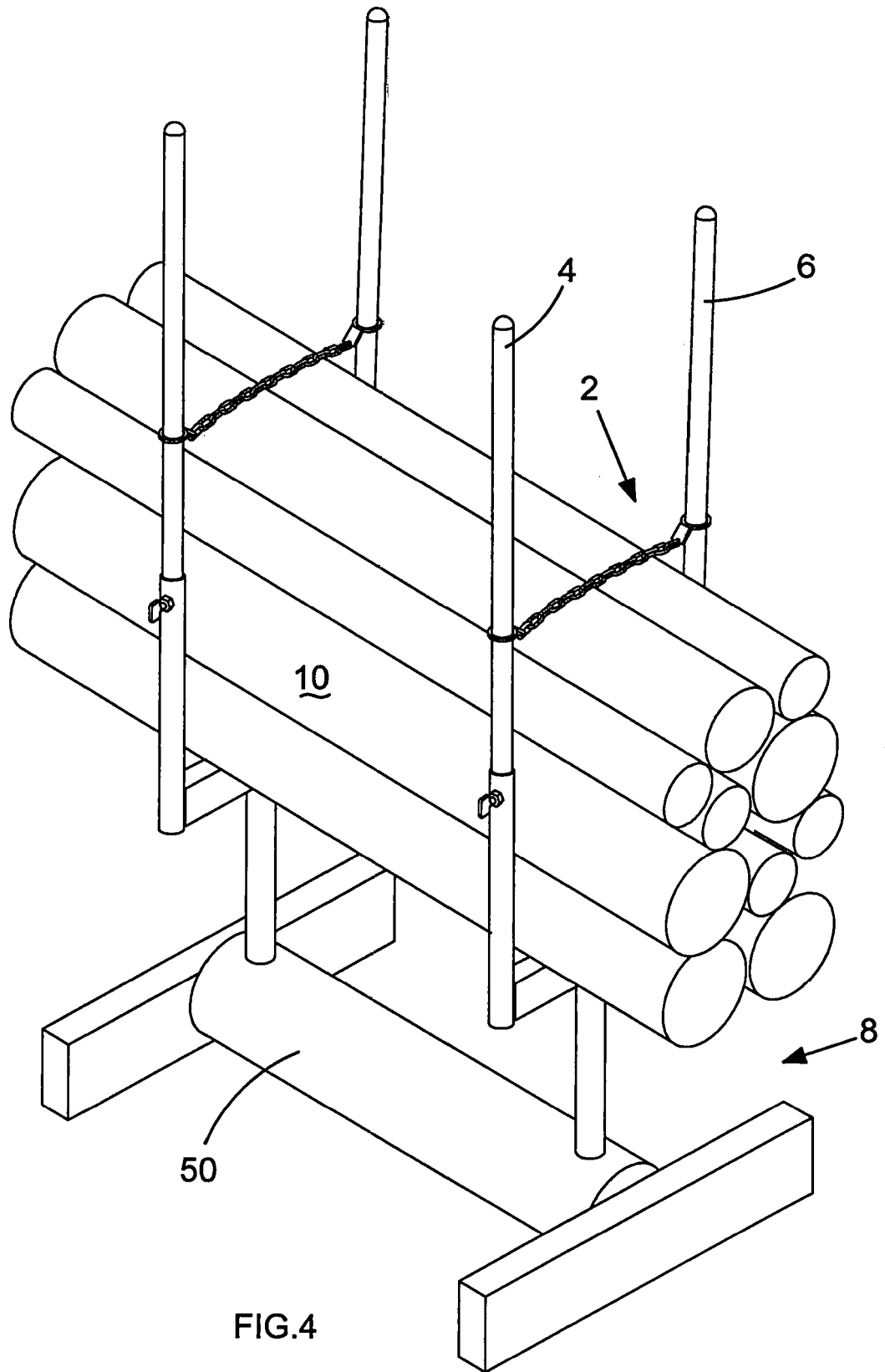
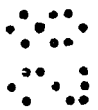
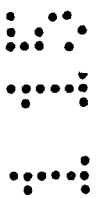


FIG.4



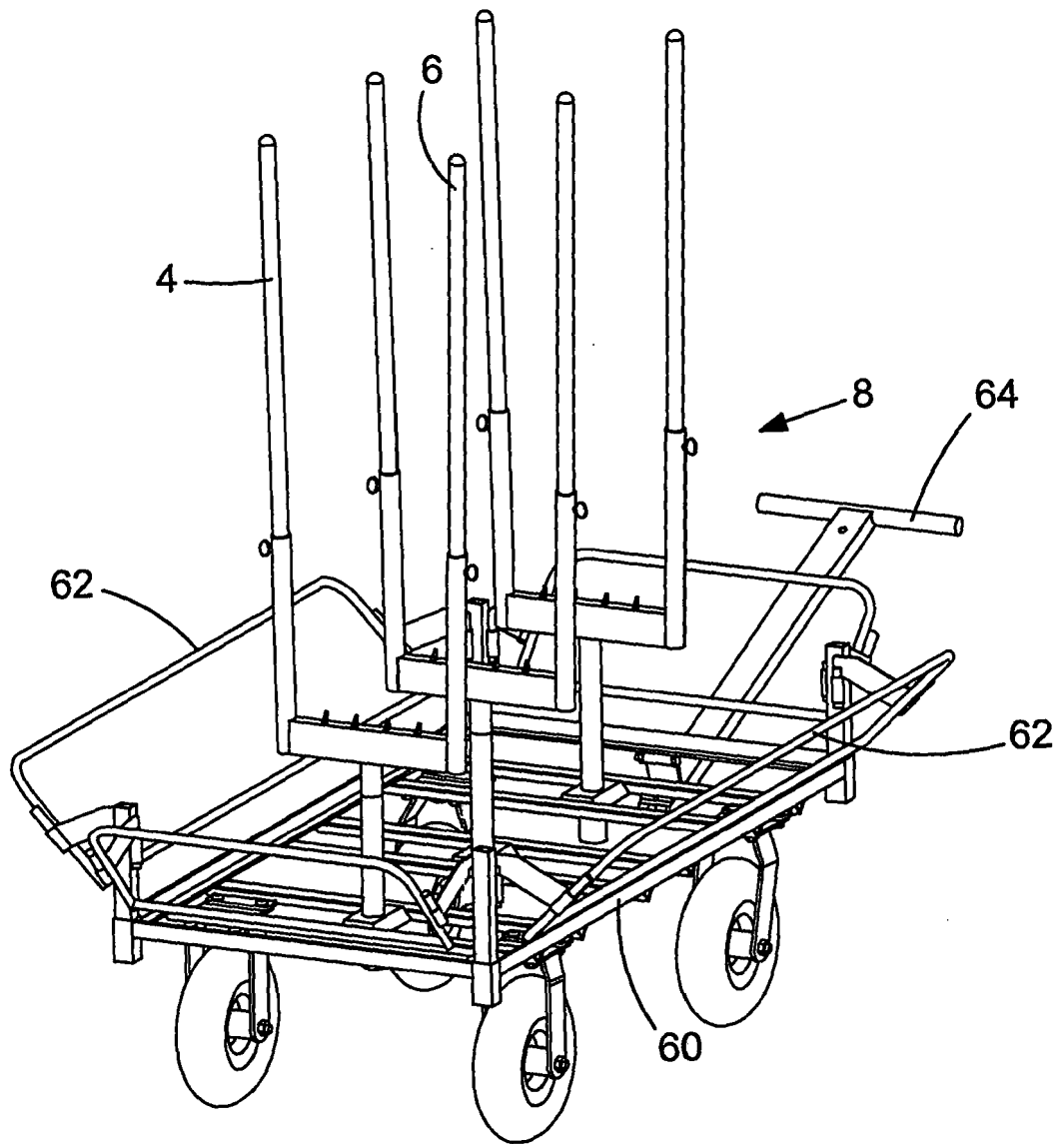
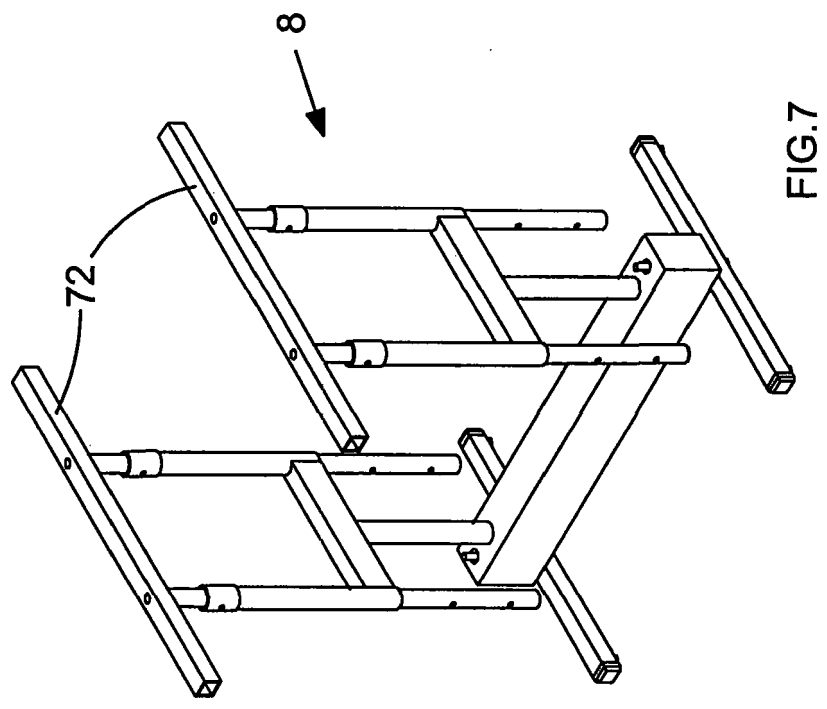
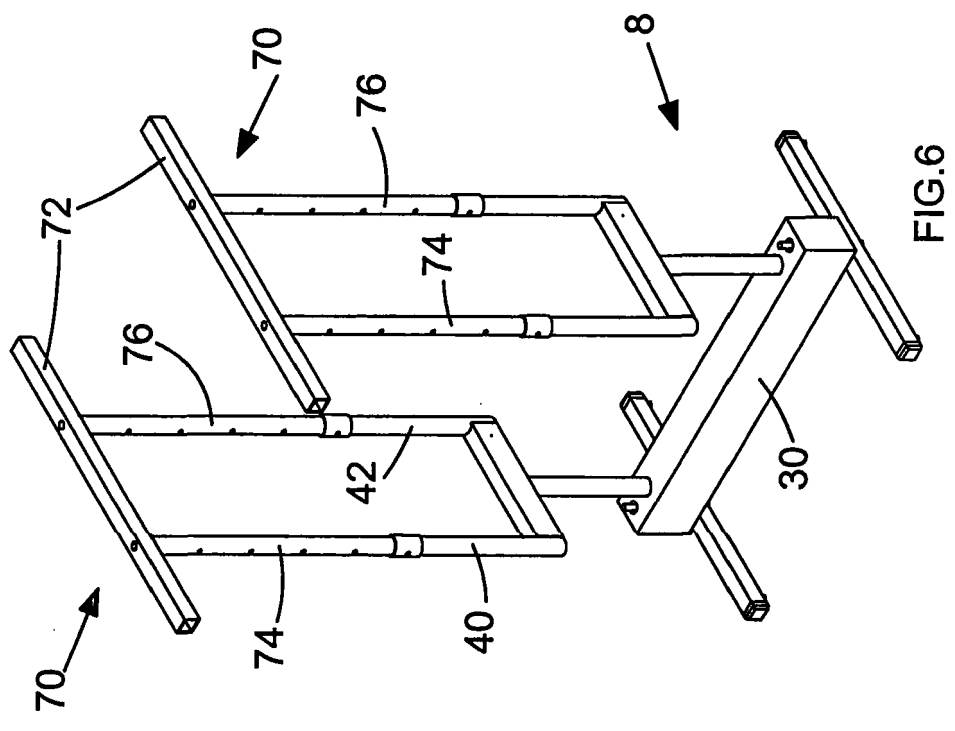


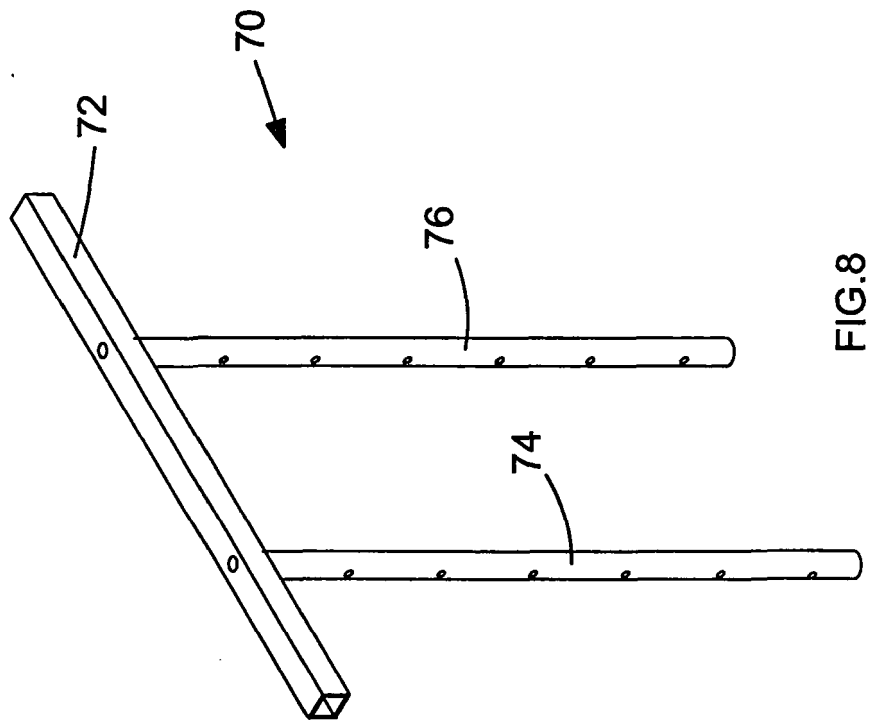
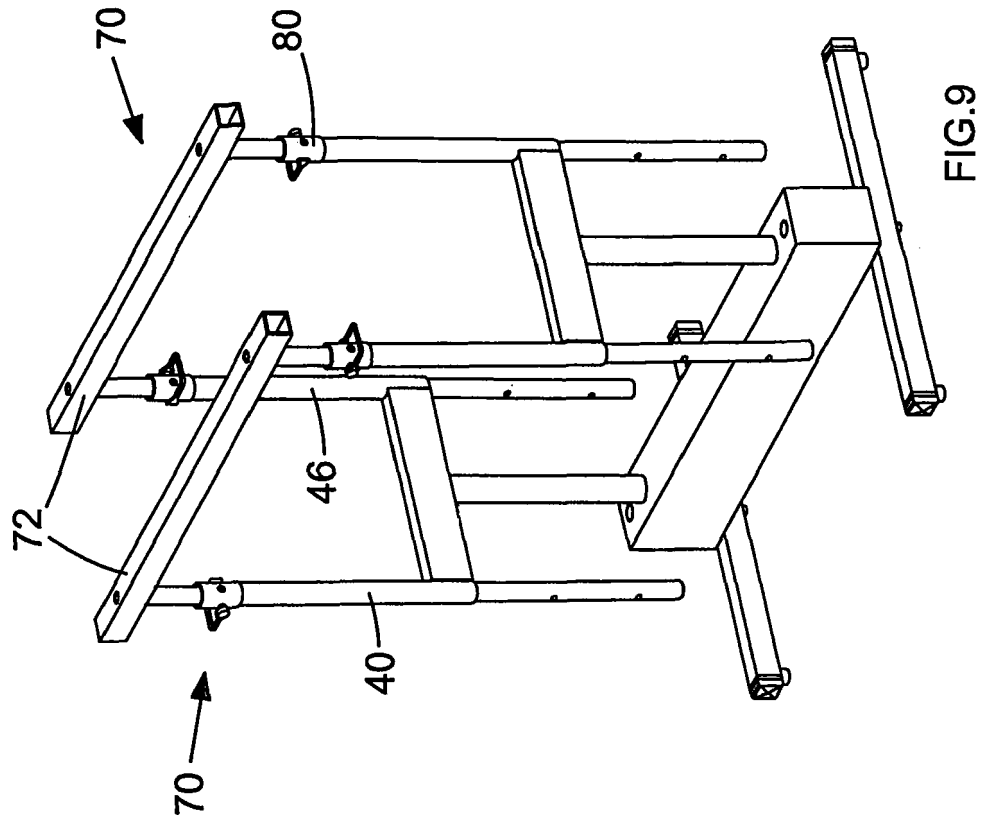
FIG.5



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**Retaining Member and Saw Horse Assembly comprising a
Retaining Member**

5 The present invention relates to a retaining member arranged to be placed over two substantially upright posts to retain wood or other material between the posts, and relates particularly, but not exclusively, to a saw horse assembly comprising such a retaining member.

10

It is desirable to provide a saw horse that is able to hold logs or other pieces of wood above the ground to enable cutting of the logs with a chainsaw or other cutting apparatus. However, many saw horses only enable a single log
15 to be cut at one time and also do not enable multiple logs of different sizes to be cut at the same time.

Also, many saw horses comprise moving mechanisms that are required to retain logs which can increase the cost and
20 complexity of the saw horse. One such apparatus is disclosed in EP2334478. This apparatus comprises a saw horse having a plurality of upright fork members between which logs can be held. A sliding toothed bar is provided to retain the logs held in the saw horse which rest on V-shaped base portions.
25 The upright posts are pivotally mounted to connecting boards which enable the saw horse to be folded flat.

The saw horse of EP2334478 suffers from the drawback that the bar used to hold the logs can slide upwardly if for example a
30 chainsaw becomes stuck in a log and an attempt is made to pull the chainsaw free. Additionally, heavy or large logs can cause the upright posts to spread apart. This can prevent the sliding toothed bar from freely sliding and engaging with

and retaining the logs. Also, wood chips and sawdust may become stuck in the moving parts which might prevent the saw horse from being folded flat.

- 5 Preferred embodiments of the present invention seek to overcome the above disadvantages of the prior art.

According to an aspect of the present invention, there is provided a retaining member arranged to be placed over two
10 substantially upright posts to retain wood or other material between the posts, the retaining member comprising:

a first loop member defining a first aperture through which a first post in use is slidably receivable, the first loop
15 member further comprising a first spacing member defining a first end portion disposed remote from said first aperture;

a second loop member defining a second aperture through which a second post in use is slidably receivable, the second loop
20 member further comprising a second spacing member defining a second end portion disposed remote from said second aperture;
and

a strap member mounted between said first and second end
25 portions such that when said first and second loop members are dropped over said first and second posts respectively, the strap member is arranged lie over wood or other material held between the posts and resist upward movement of said wood or other material.

30

This provides the advantage of a retaining member that can be placed over the upright posts of a saw horse that automatically prevents logs and wood from being lifted out of

the saw horse. By providing loop members having spacing members which space an end portion from the loop members, this causes the loop members to become skewed relative to the posts on which they are mounted if wood is pushed upwardly
5 against the strap member. This causes the strap member to prevent the wood from being moved upwardly and helps the saw horse using the retaining member to hold wood in a secure manner for cutting.

10 Also, by providing a strap member mounted between the first and second end portions the retaining member is able to freely descend and lie over the logs even if the uprights are caused to spread apart or are bent by the weight of or impacts from logs.

15

In a preferred embodiment, said first spacing member is arranged along an axis which is non-perpendicular to a longitudinal axis of said first post when said first loop portion is mounted over said first post.

20

This provides the advantage of reducing the amount of upward movement of wood in the saw horse required to skew the loop members against the posts to prevent movement of wood.

25 In a preferred embodiment, said second spacing member is arranged along an axis which is non-perpendicular to a longitudinal axis of said second post when said second loop portion is mounted over said second post.

30 This provides the advantage of reducing the amount of upward movement of wood in the saw horse required to skew the loop members against the posts to prevent movement of wood.

Said strap member may comprise a length of chain.

According to another aspect of the present invention, there is provided a saw horse assembly comprising:

5

a base member;

a first fork member mountable to the base member, the first fork member comprising a pair of posts and a cross member
10 disposed between said posts on which wood or other material can be placed such that it is held between said posts;

a second fork member mountable to the base member, the second fork member comprising a pair of posts and a cross member
15 disposed between said posts on which wood or other material can be placed such that it is held between said posts and rests on the respective cross member of both the first and second fork members; and

20 at least one retaining member according to any one of the preceding claims.

This provides the advantage of a saw horse assembly that is relatively inexpensive to manufacture and is less vulnerable
25 to malfunction which reduces maintenance cost and complexity.

In a preferred embodiment, each said post is tubular and is arranged to receive an extension tube portion arranged to move telescopically in or over the respective said tube.

30

This provides the advantage of enabling the amount of wood to be held by the saw horse to be increased or decreased as

required. Additionally, this provides for a more compact size and therefore easier storage.

Each said post may further comprise locking means arranged to
5 lock said respective extension tube portion to prevent
telescopic movement relative to the respective post in or on
which the extension tube is mounted.

The assembly may comprise one or more further fork members.

10

Said base member may comprise a trailer.

This provides the advantage of a relatively inexpensive
movable saw horse that can be used to both transport and cut
15 logs or other pieces of wood.

According to a further embodiment of the present invention,
there is provided a saw horse assembly comprising:

20 a base member;

a first fork member mountable to the base member, the first
fork member comprising a pair of tubular posts and a cross
member disposed between said tubular posts on which wood or
25 other material can be placed such that it is held between
said posts;

a second fork member mountable to the base member, the second
fork member comprising a pair of tubular posts and a cross
30 member disposed between said tubular posts on which wood or
other material can be placed such that it is held between
said posts and rests on the respective cross member of both
the first and second fork members; and

at least one trestle portion comprising a work surface
mounted between two legs, wherein each said leg is arranged
to be telescopically received in or over a respective tubular
5 post.

This provides the advantage of a saw horse assembly that can
also be used to provide a work bench on which joinery and
other tasks can be conducted.

10

Each said tubular post may further comprise locking means
arranged to lock said respective leg to prevent telescopic
movement relative to the respective tubular post in or on
which the leg is mounted.

15

The assembly may further comprise one or more further fork
members.

Said base member may comprise a trailer.

20

The assembly may further comprise a retaining member as
defined above.

25

Preferred embodiments of the present invention will now be
described, by way of example only and not in any limitative
sense, with reference to the accompanying drawings in which:

30

Figure 1 is a perspective view of a retaining member of the
first embodiment of the present invention mounted between the
posts of a saw horse;

Figure 2 is a perspective view of a saw horse of a second embodiment of the present invention comprising two retaining members of Figure 1;

5 Figure 3 is an end-on view of the saw horse of Figure 2;

Figure 4 is a perspective view of a saw horse of a third embodiment of the present invention in which the fork members are mounted to a log;

10

Figure 5 is a perspective view of a saw horse of a fourth embodiment of the present invention in which the fork members are mounted to a trailer;

15 Figure 6 is a perspective view of a saw horse of a fifth embodiment of the present invention in which trestle members are mounted to the upright posts of the saw horse;

Figure 7 is a perspective view of the saw horse of Figure 6
20 showing the trestle members at a different extension;

Figure 8 is a perspective view of a trestle member of Figures 6 and 7; and

25 Figure 9 is a perspective view of an alternative arrangement of trestle members in the saw horse.

Referring to Figures 1 and 2, a retaining member 2 is arranged to be placed over two substantially upright posts 4
30 and 6 of a saw horse 8 to retain wood 10 or other material between the posts 4 and 6. The retaining member 2 comprises a first loop member 12 defining a first aperture 14 through which a first post 4 is slidably receivable. The first loop

member 12 further comprises a first spacing member 16 defining a first end portion 18 disposed remote from the first aperture 14. A second loop member 22 defines a second aperture 24 through which the second post 6 is slidably
5 receivable. The second loop member 22 further comprises a second spacing member 26 defining a second end portion 28 disposed remote from the second aperture.

A strap member 30 is mounted between said first and second
10 end portions for example by engagement with a looped portion 20 of the respective spacing members 16 and 26. The strap member shown is in the form of a length of chain, although other material such as strong fabric, rope or webbing could also be used to form the strap member 30. When the first and
15 second loop members 12 and 22 are placed over the first and second posts 4 and 6, the strap member 30 is arranged to lie over wood 10 or other material held between the posts to resist upward movement of the wood 10.

20 This is achieved as a result of the fact that when wood 10 is pushed upwardly against strap members 30, the strap member pulls on spacing members 16 and 26 which skews the loop members 12 and 22 against the upright posts 4 and 6. This causes the inner edges of the loop members 22 and 26 to bear
25 against the upright posts 4 and 6 to prevent the loop members 22 and 26 sliding up the posts 4 and 6.

Consequently, when the wood 10 is being cut with a chainsaw or other cutting apparatus, cut wood is prevented from
30 swinging upwardly because the retaining members 2 are restrained from upward movement. This helps to retain the wood 10 in the saw horse 8 to provide safer and more efficient cutting.

The first and second spacing members 16 and 26 may be arranged along an axis which is non-perpendicular to the longitudinal axes of the respective posts 4 and 6. For example, in Figure 1 the angle between the spacing members 26 and the longitudinal axes of posts 4 and 6 when the loop members 16 and 26 are placed over the posts 4 and 6 is approximately 45°. As a result, this makes the loop members 16 and 26 more readily skew against the posts 4 and 6 when wood 10 is pulled upwardly. This increases the restraining force 30 of the strap member.

Referring to Figures 2 and 3, the saw horse assembly 8 comprises a base member 30 which is a piece of wood mounted to legs 32. First and second fork members 34 are mounted to the base member 30. Each fork member 34 comprises a cross member 36 disposed between respective pairs of posts 4 and 6. Teeth 38 may be disposed on the cross members 36 to assist in holding wood 10.

20

A retaining member 2 is provided between each set of posts 4 and 6 to retain the wood 10. It can be seen that the posts 4 and 6 may be formed from extension tubes which telescope in and out of respective tubular portions 40 and 42. A locking mechanism in the form of thumb screws 44 is provided which enables the user to control the amount to which the posts 4 and 6 telescope out of the tubular portions 40 and 42.

A user is able to drill holes in wooden base 30 to define the spacing between the respective fork members 34. This enables the spacing to be chosen to act as a guide width for logs to be cut, for example to match the width of cut log to the width of a stove. This eliminates the need for calculating

and measuring when cutting logs. This also enables further fork members to be mounted to the base 30.

Referring to Figure 4, the base member can be formed from a log 50. Alternatively, referring to Figure 5, the base member may comprise a trailer 60 which enables the saw horse assembly 8 to be mobile. Trailer 60 has wings 62 to enable more wood to be held. A handle 64 is provided to enable a user to pull the trailer 60. Alternatively, a hitch could be provided to enable the trailer to be mounted to a motor vehicle.

Referring to Figures 6 to 9, saw horse assembly 8 comprises a pair of trestle portions 70 which each comprise a work surface 72 mounted between tubular posts 40 and 42. Legs 74 and 76 telescope in and out of tubular portions 40 and 42 of the posts to enable the height of the work surfaces 72 to be adjusted. For example, referring to Figure 7, the height of work surfaces 72 is lowered compared to that of Figure 6.

Referring to Figure 9, an alternative orientation of the trestle members 70 is shown. A locking mechanism 80 is also provided on each tubular portion 40 and 46. This enables the height of the trestle members to be adjusted in a straightforward manner. The locking mechanism 80 could also comprise for example a thumb screw.

The above embodiments have been described by way of example only and not in any limitative sense, such that various alterations and modifications are possible without departure from the scope of the invention as defined by the appended claims.

CLAIMS

1. A retaining member arranged to be placed over two substantially upright posts to retain wood or other material
5 between the posts, the retaining member comprising:

a first loop member defining a first aperture through which a first post in use is slidably receivable, the first loop member further comprising a first spacing member defining a
10 first end portion disposed remote from said first aperture;

a second loop member defining a second aperture through which a second post in use is slidably receivable, the second loop member further comprising a second spacing member defining a
15 second end portion disposed remote from said second aperture;
and

a strap member mounted between said first and second end portions such that when said first and second loop members
20 are dropped over said first and second posts respectively, the strap member is arranged lie over wood or other material held between the posts and resist upward movement of said wood or other material.

25 2. A retaining member according to claim 1, wherein said first spacing member is arranged along an axis which is non-perpendicular to a longitudinal axis of said first post when said first loop portion is mounted over said first post.

30 3. A retaining member according to claim 1 or 2, wherein said second spacing member is arranged along an axis which is non-perpendicular to a longitudinal axis of said second post

when said second loop portion is mounted over said second post.

4. A retaining member according to any one of the
5 preceding claims, wherein said strap member comprises a length of chain.

5. A retaining member substantially as hereinbefore described with reference to the accompanying drawings.

10

6. A saw horse assembly comprising:

a base member;

15 a first fork member mountable to the base member, the first fork member comprising a pair of posts and a cross member disposed between said posts on which wood or other material can be placed such that it is held between said posts;

20 a second fork member mountable to the base member, the second fork member comprising a pair of posts and a cross member disposed between said posts on which wood or other material can be placed such that it is held between said posts and rests on the respective cross member of both the first and
25 second fork members; and

at least one retaining member according to any one of the preceding claims.

30 7. An assembly according to claim 6, wherein each said post is tubular and is arranged to receive an extension tube portion arranged to move telescopically in or over the respective said tube.

8. An assembly according to claim 7, wherein each said post further comprises locking means arranged to lock said respective extension tube portion to prevent telescopic
5 movement relative to the respective post in or on which the extension tube is mounted.

9. An assembly according to any one of claims 6 to 8, further comprising one or more further fork members.

10

10. An assembly according to any one of claims 6 to 9, wherein said base member comprises a trailer.

11. A saw horse assembly comprising:

15

a base member;

a first fork member mountable to the base member, the first fork member comprising a pair of tubular posts and a cross
20 member disposed between said tubular posts on which wood or other material can be placed such that it is held between said posts;

a second fork member mountable to the base member, the second
25 fork member comprising a pair of tubular posts and a cross member disposed between said tubular posts on which wood or other material can be placed such that it is held between said posts and rests on the respective cross member of both the first and second fork members; and

30

at least one trestle portion comprising a work surface mounted between two legs, wherein each said leg is arranged

to be telescopically received in or over a respective tubular post.

12. An assembly according to claim 11, wherein each said
5 tubular post further comprises locking means arranged to lock
said respective leg to prevent telescopic movement relative
to the respective tubular post in or on which the leg is
mounted.

10 13. An assembly according to claim 11 or 12, further
comprising one or more further fork members.

14. An assembly according to any one of claims 11 to 13,
wherein said base member comprises a trailer.

15

15. An assembly according to any one of claims 11 to 14
further comprising a retaining member according to any one of
claims 1 to 5.

20 16. A saw horse assembly substantially as hereinbefore
described with reference to the accompanying drawings.



Application No: GB1319722.3
Claims searched: 1-10, 16 in part

Examiner: Sally Vinall
Date of search: 24 March 2014

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

| Category | Relevant to claims | Identity of document and passage or figure of particular relevance |
|----------|--------------------|--|
| X | 1, 6 | DE20217429U U1 ZWICK, See Figure 3 |
| A | - | US2012/049429 A1 LINDBERG, See chain 43 with loop members 43a, 43b |
| A | - | US5975389 A BRAUN ET AL, See Figures noting strap 47 having loops on either end |
| A | - | FR2795991 A1 RINGARD, See Figures noting strap 7 |

Categories:

| | | | |
|---|---|---|--|
| X | Document indicating lack of novelty or inventive step | A | Document indicating technological background and/or state of the art. |
| Y | Document indicating lack of inventive step if combined with one or more other documents of same category. | P | Document published on or after the declared priority date but before the filing date of this invention. |
| & | Member of the same patent family | E | Patent document published on or after, but with priority date earlier than, the filing date of this application. |

Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^X:

Worldwide search of patent documents classified in the following areas of the IPC

B23D; B23Q; B25B; B25H; B27B

The following online and other databases have been used in the preparation of this search report

WPI, EPODOC, Internet

International Classification:

| Subclass | Subgroup | Valid From |
|----------|----------|------------|
| B27B | 0017/00 | 01/01/2006 |
| B27B | 0029/00 | 01/01/2006 |