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(54) **Mounting stand for construction props**

(57) The mounting stand comprises a minimum of three legs (1,2,3) connected to a single central mount (4) in such a way that at least two of them (1,3) are articulated to said mount (4) so as to adopt a spatial disposition in which the mount (4) is supported by the ends

of said legs (1,2,3), the body of the mount (4) being attachable to the upright of the prop (12) by means of a sliding wedge device (15) capable of applying pressure to the external surface of the upright of the prop (12), the body of the device being attached to the legs thereof in its service position.

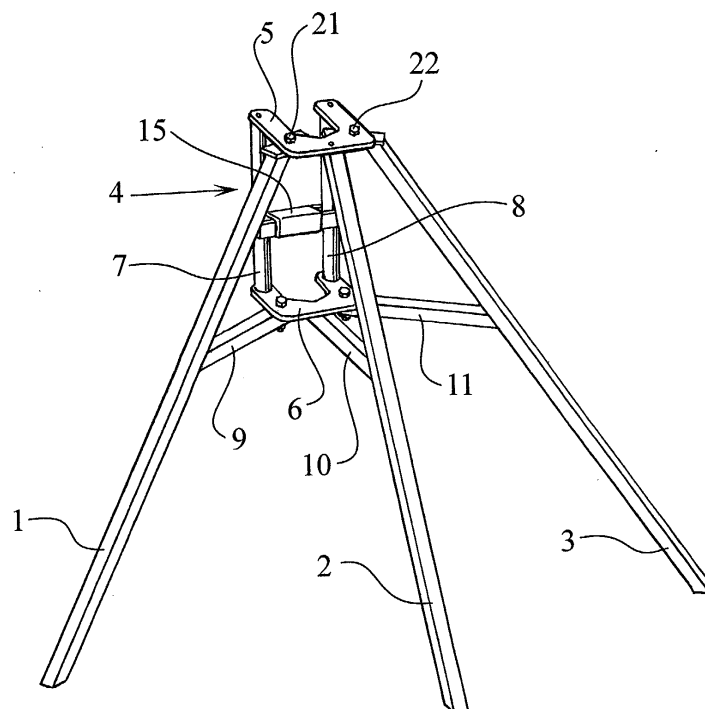


FIG. 2

Description

[0001] The present invention relates to a mounting stand for construction props having substantial novelty and inventive step over the prior art.

[0002] As known, said props in the form of adjustable uprights which serve to carry various types of load, for example, formwork boards, light façade scaffolding, etc. which are widely used in construction work. Said props are normally supported on the ground on a small support shim or shoe, which is why, given the considerable height thereof, problems frequently arise with respect to lateral stability, stability to sliding or slipping on the ground or to inclination in the case of slightly off-centre loads.

[0003] To solve the aforementioned problems and obtain mounting stands for props which have high stability, the inventor has carried out experiments and tests which have led to the production of the mounting stand for props forming the subject of the present invention, which enables the above-mentioned drawbacks to be overcome very easily.

[0004] To achieve this object, the present invention relates to the production of a mounting stand for props which has a tripod structure with three legs of which at least two are articulated to a central mount having two guides which are oblique with respect to the prop, with a block which slides along them and acts as a wedge-type fixing device when it acts on the external surface of the upright of the prop, the block fastening the mounting assembly and three articulated legs which have been pivoted prior to introduction of the prop, with uniform spacing, in other words at angles of 120 in a horizontal projection. In this way, the actual support of the prop is formed by the three legs of the mount and by the actual prop, rather than a single point of support of the prop on the ground, with the characteristic that the mutual spacing of the articulated legs of the mount provides a wide area of support.

[0005] At their upper end, the articulated legs of the mount have short arms disposed at an angle to the leg and having straight zones which, once the leg has been placed in its intended angular position, will be tangential to the external surface of the prop, thus preventing the legs from folding accidentally once the mount is assembled on the prop.

[0006] The invention will be explained by the accompanying figures which shows embodiments of the present invention by way of non-limiting explanatory examples and in which

Fig. 1 is a perspective view of a mount according to the present invention in folded position.

Fig. 2 shows the actual mounting stand, partially unfolded.

Fig. 3 is a perspective view of a detail of the mount forming the subject of the present invention.

Fig. 4 is a view similar to Fig. 3, showing a detail of

the assembly of the mount on a prop of smaller diameter.

Fig. 5 is a perspective view from the part corresponding to the wedge-type fixing block.

Fig. 6 shows a detail of the top ends of the legs.

Fig. 7 shows a version of the invention for assembly in the vicinity of a wall.

[0007] As shown in the figures, the mount forming the subject of the present invention comprises a minimum of three legs 1, 2 and 3 in the form of straight elements of variable length, at least two of which are articulated to a central mount 4 which, in a preferred version, has an upper base part 5 and lower base part 6 joined by rails 7 and 8 in such a way that said legs 1, 2 and 3 are directly articulated rotatably to the upper base 5 while similarly being articulated via respective cross bars 9, 10 and 11 to the lower mount 6.

[0008] In the preferred case illustrated, said mounts will have a general U-shaped structure with a central space therebetween for passage of the upright 12 of the prop (Fig. 3 onwards).

[0009] As shown, the body 4 has two preferably tubular rails 7 and 8 which act as guides, are disposed at a certain angle to the vertical, in other words to the axis of the upright 12, and along which there slides a block which serves as a wedge 15 and, by moving on the guides, will approach the external surface of the upright 12 until it makes contact therewith at the necessary point, depending on the diameter of said upright, and perform a wedging action thereon to allow easy immobilisation of the mount assembly 4 on said upright 12.

[0010] In said position, which is illustrated in Fig. 2, the legs 1, 2 and 3 will be disposed with uniform spacing so that, in a plan view thereof, they will form angles of 120, creating a support for the upright 12 which is supplemented by the lower ends of said legs 1, 2 and 3 which, in view of their mutual spacing, will provide a very wide supporting base to greatly increase the stability of the prop.

[0011] It will be appreciated that the structure of the mount 4 can differ from that shown, providing that it furnishes means for fixing the ends of the articulated legs and the guides 7 and 8 which, instead of being simple tubes, as shown, can be profiles of another shape or can even consist of straight edges of a piece of metal plate along which there can travel a block equivalent to 15, with the same function and technical characteristics.

[0012] The sliding block 15 may be produced, as shown in this concrete example, in the form of a U-shaped element in which is inserted one of the tubular elements 7 of the guides and which, at its end, receives the other tubular element 8 between the legs 16 of said U, and also has a plate 17 intended for the striking of the block 15 to achieve effective wedging. It will also be appreciated that the constitution of said block 15 may vary greatly, providing that it has the ability to slide on the inclined guides and to make wedging contact with

the upright 12 of the prop.

[0013] Although the mount forming the subject of the present invention will be adaptable to different diameters of the prop 12, Fig. 4 shows that it allows a disposition for props 18 having smaller diameters which consists of the disposition of the block 15 linked with one of the guides 7 and disposed between the other inclined guide 8 and the upright 18. This allows the use of the device with props having much smaller diameters.

[0014] To prevent accidental folding of the legs of the device once it has been assembled with the upright, the legs are disposed, as shown in Fig. 6, in such a way that they have terminal arms such as the arms 19 and 20 on the legs 1 and 3 the arms being articulated by means of respective bolts 21 and 22 to the mount 5 and having respective straight edges 23 and 24 which, once said legs have pivoted to adapt their stable position, will remain in contact with the external surface of the upright 12, thus preventing accidental rotation thereof.

[0015] In the illustrated embodiment, the mount may have one of the legs, for example the leg 2, connected rigidly to the mount 5, in other words without the need for an articulation, only the legs 1 and 3 being articulated.

[0016] With the described construction, it is possible to obtain a mount or stand for props which is highly stable, can easily be folded, and can be stored and transported in a small space, can be used in its situation and assembled without using tools.

[0017] On the other hand, the mount forming the subject of the present invention has characteristics of high security since the limitation of the opening of the tripod legs to 120 ensures protection against collapse, and maximum security in use may be achieved owing to the special disposition which prevents accidental folding.

[0018] Although the typical use of the mount will be with the three legs in a uniformly spaced disposition, in other words the embodiment shown in the figures, it will also be possible to assemble of the device next to a wall by leaving one of the legs folded. This case, which is illustrated in Fig. 7, shows two of the legs 25 and 26 in the supporting position and the other leg 27 folded, so that correct supporting of the upright 28 is achieved so as to guarantee the stability of the mount.

Claims

1. Mounting stand for construction props, **characterised in that** it comprises a minimum of three legs connected to a single central mount in such a way that at least two of them are articulated to said mount so as to adopt a spatial disposition in which the mount is supported by the ends of said legs, the body of the mount being attachable to the upright of the prop by means of a sliding wedge device capable of applying pressure to the external surface of the upright of the prop, the body of the device

being attached to the legs thereof in its service position.

2. Mounting stand for construction props according to claim 1, **characterised in that** the body of the device is formed by a U-shaped laminar upper base and a U-shaped laminar lower base which are substantially aligned with one another and are capable of receiving the upright of the prop in the interior of the U, said body having inclined guides with a body which slides along the guides and is capable of wedging itself on the external surface of the upright of the prop.
3. Mounting stand for construction props according to claim 1, **characterised in that** one of the legs of the mount is stationary and the two adjacent legs are rotatable at the ends with which they are secured to the mount.
4. Mounting stand for construction props according to claim 1, **characterised in that** the legs, which are joined to the mount by their upper end, are similarly joined by cross bars to the lower base of the actual mount in an articulated manner in the case of the articulated legs and in a rigid manner in the case of the stationary leg.
5. Mounting stand for construction props according to claims 1 and 2, **characterised in that** the sliding wedging block is formed by a U-shaped laminar part equipped with a transverse striking bridge for the wedging and is capable of sliding on one of the two guide rails of the body of the mount through the zone immediately at the base of the U and capable of sliding along the other vertical guide through the interior of the ends of the arms of the U or through the exterior thereof in the case of props of small diameter.
6. Mounting stand for construction props according to claim 1, **characterised in that** the upper ends of the articulated legs have extension arms dimensioned in such a way that a straight side thereof is tangential to the external surface of the upright of the prop to fix and limit the open position of the legs thereof.

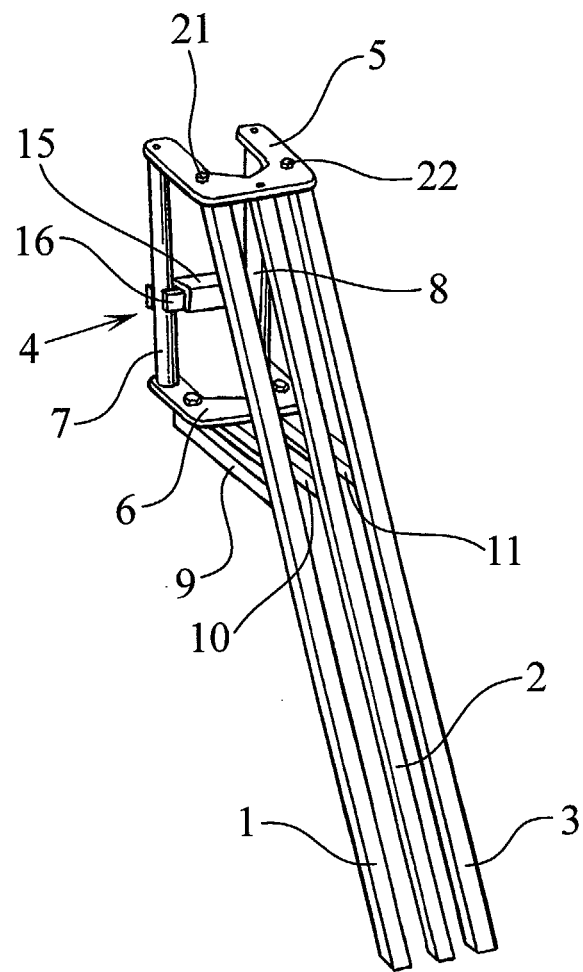


FIG. 1

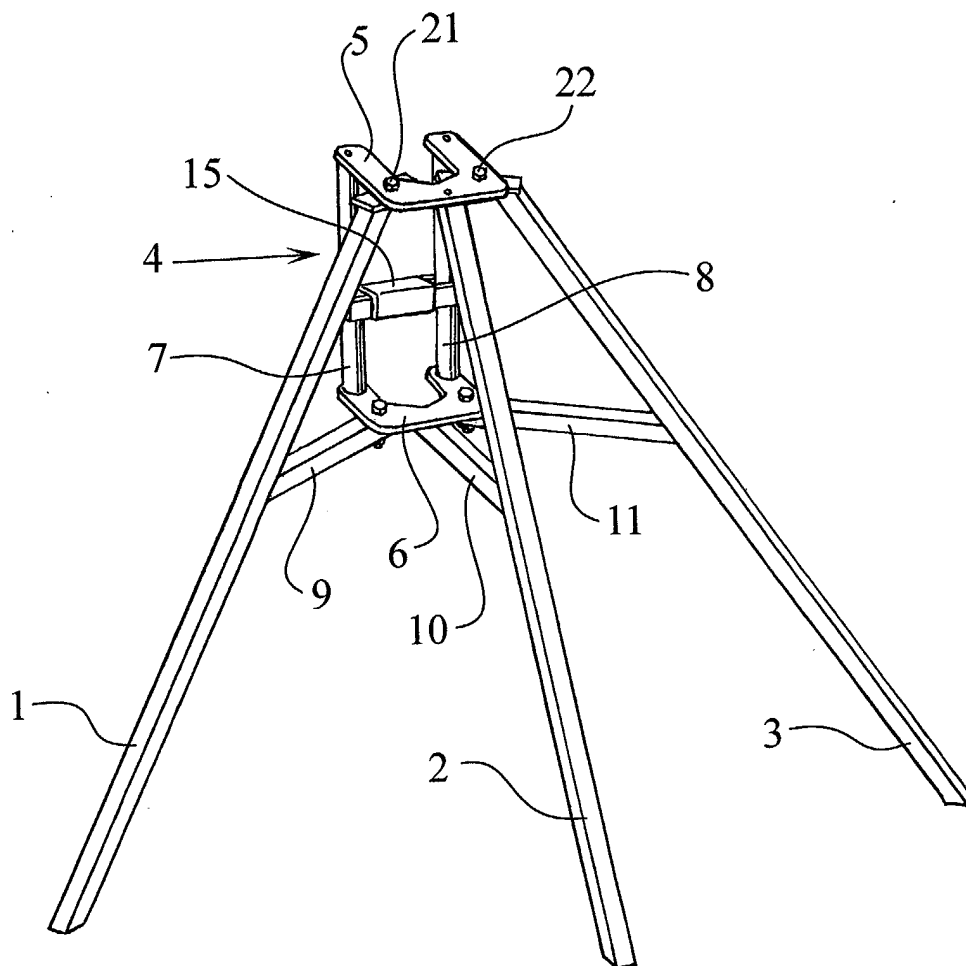


FIG. 2

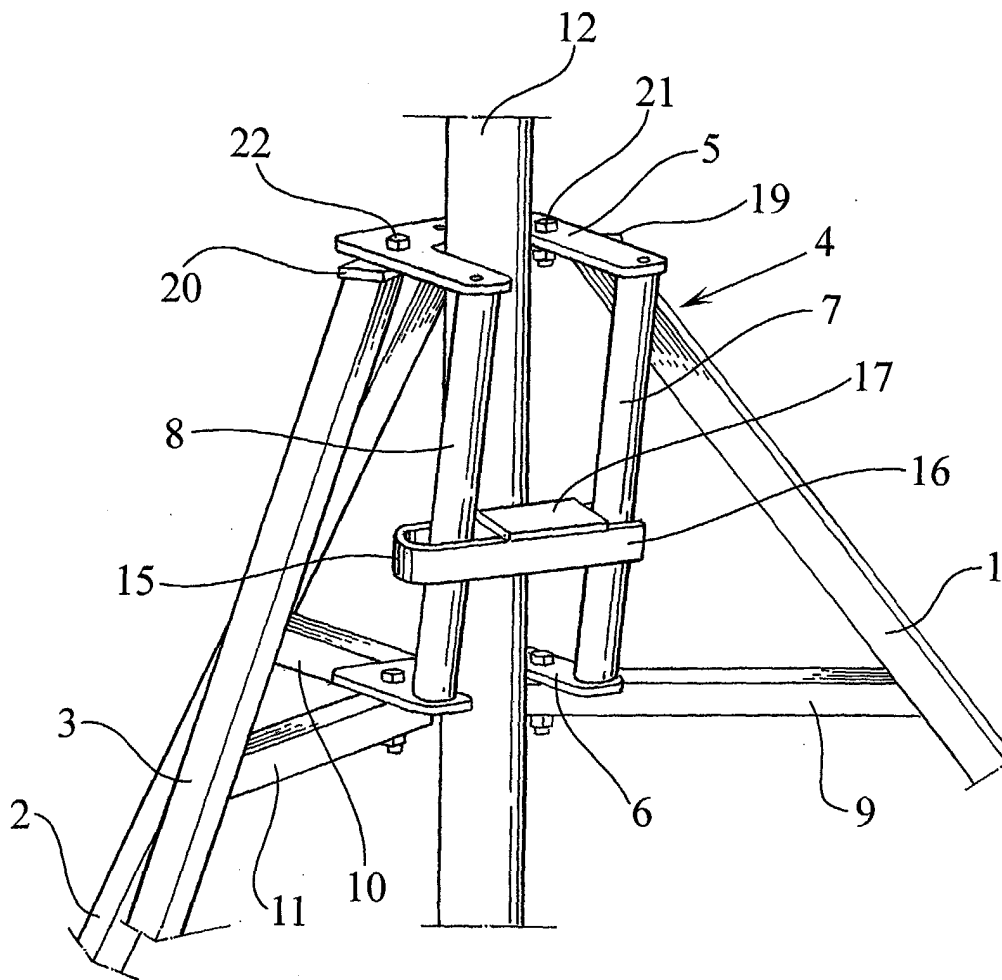


FIG. 3

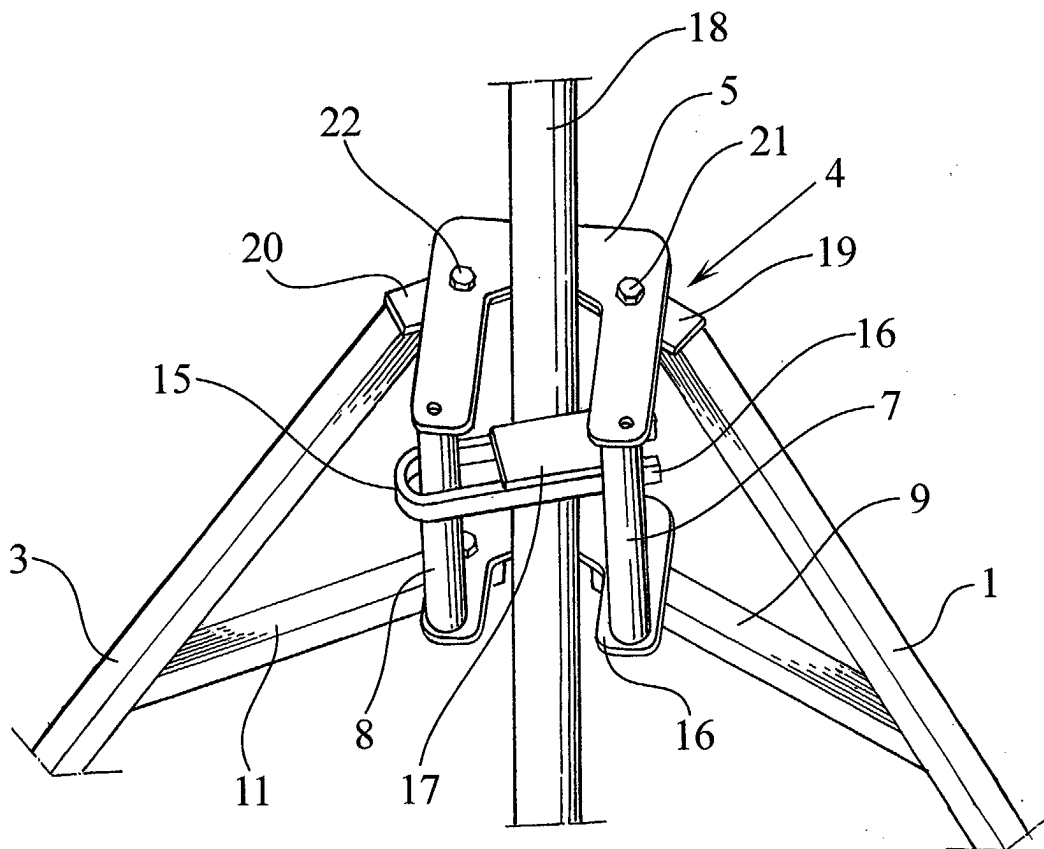


FIG. 4

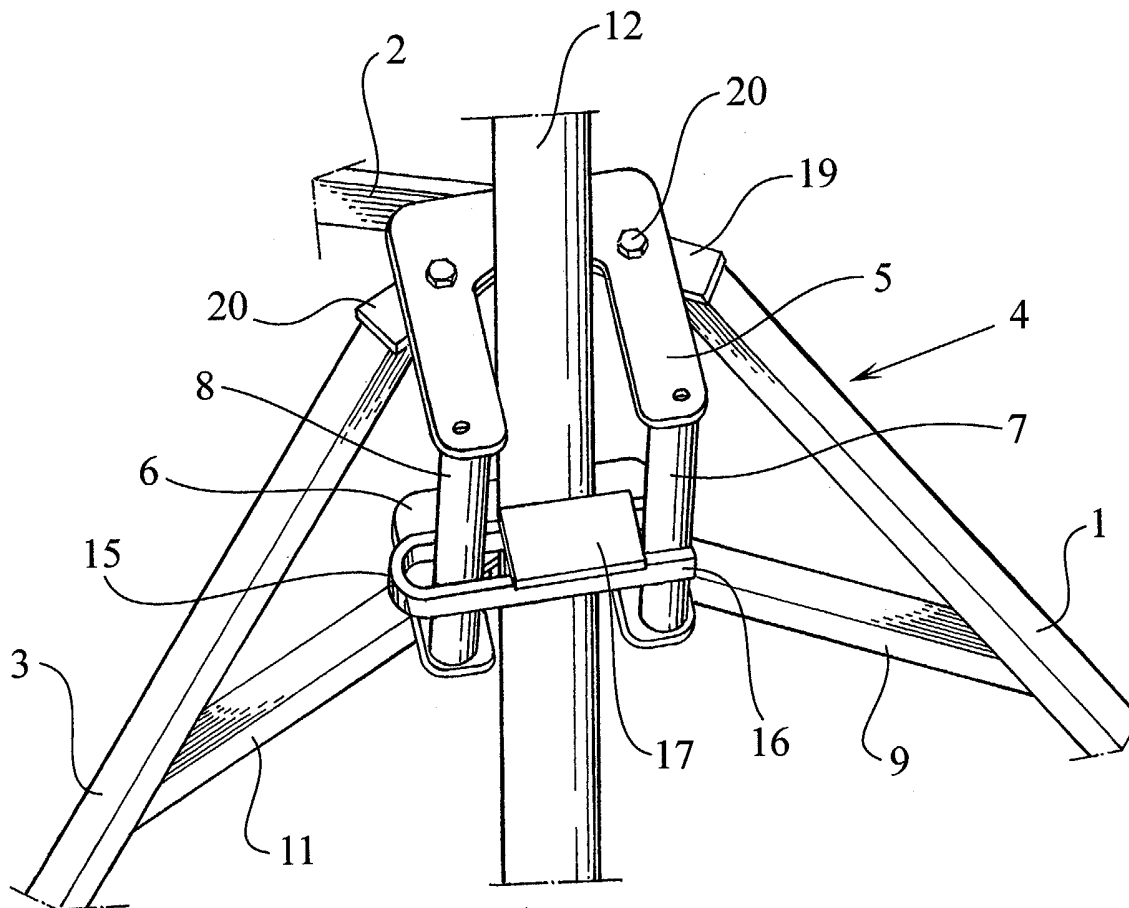


FIG. 5

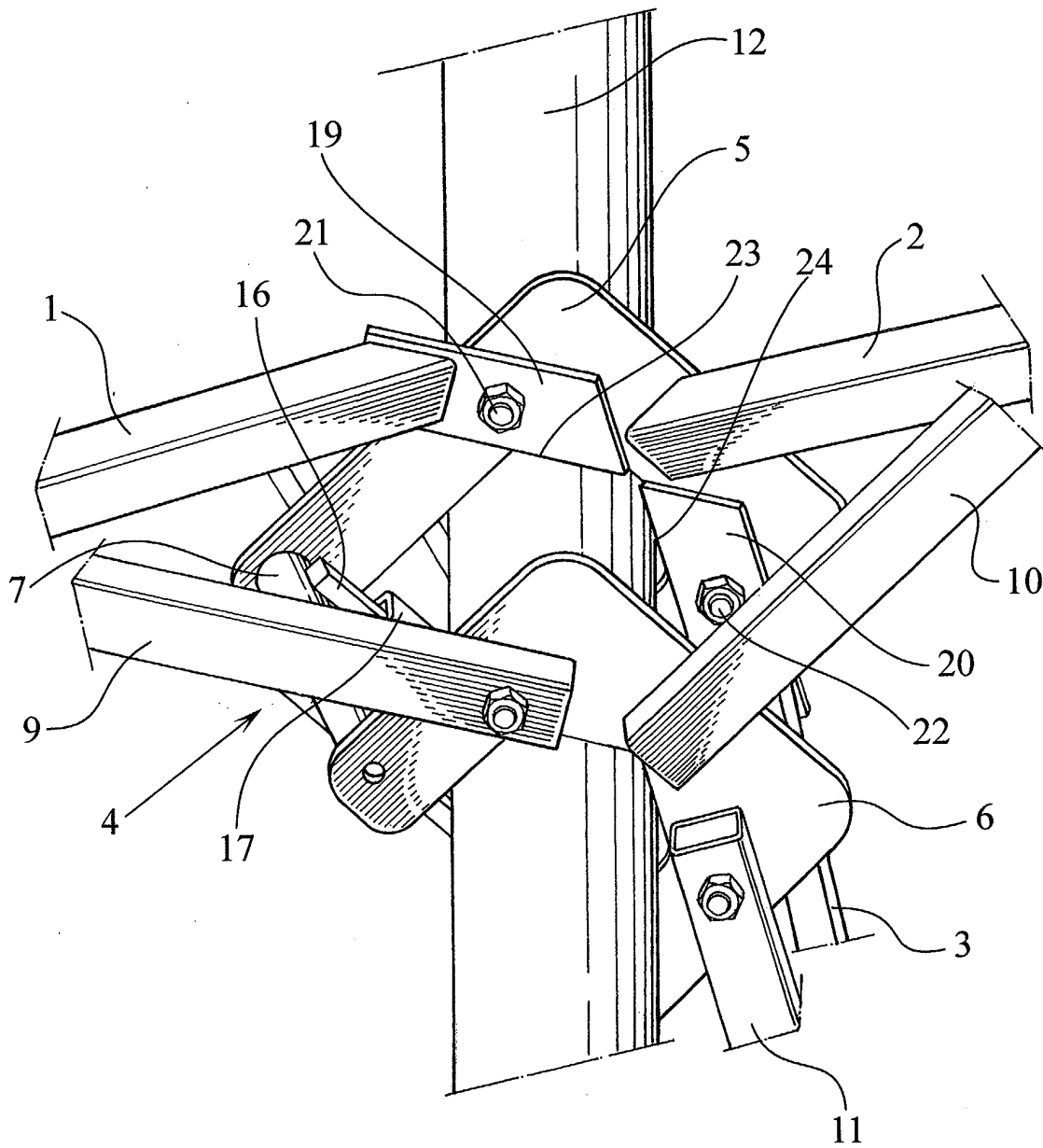


FIG. 6

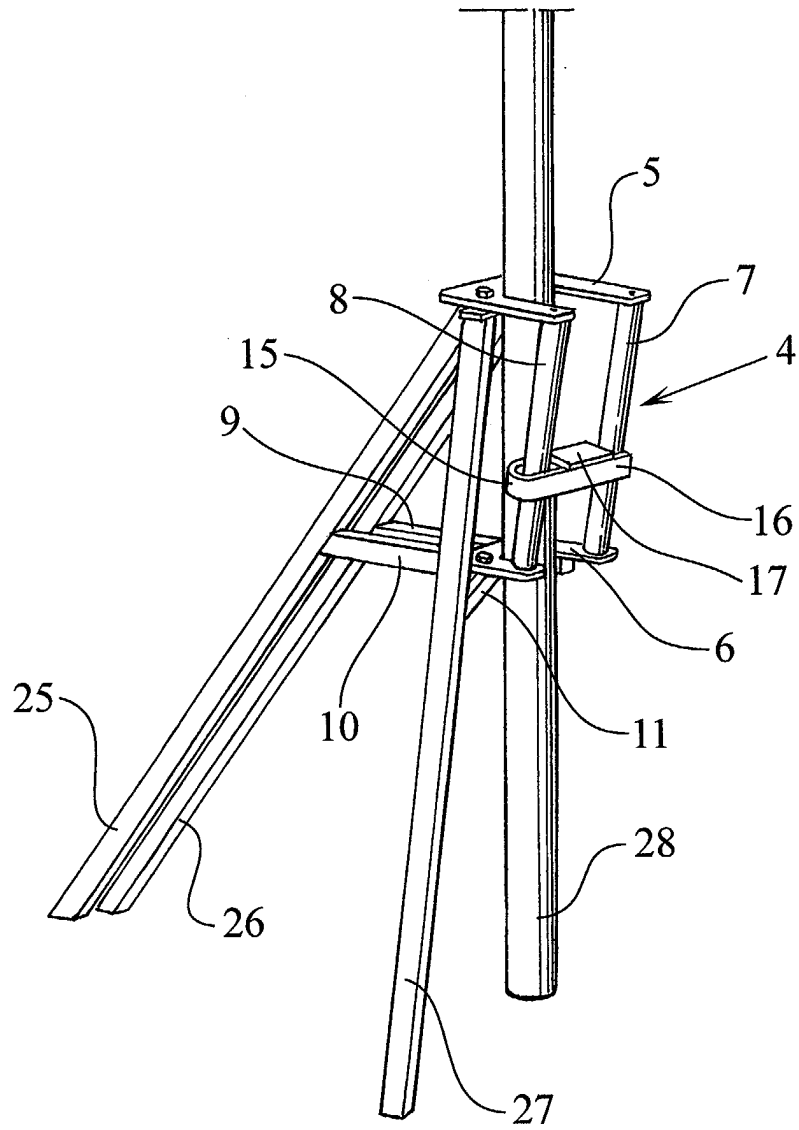


FIG. 7