United States Patent [19]

Nasmith

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[54] SUPPORTING DEVICE

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[52] **U.S. Cl.** **248/167**

[51] **Int. Cl.** **F16m 11/22**

[58] **Field of Search** 248/168, 170, 436, 166, 163, 248/95, 370

[56] **References Cited**

UNITED STATES PATENTS

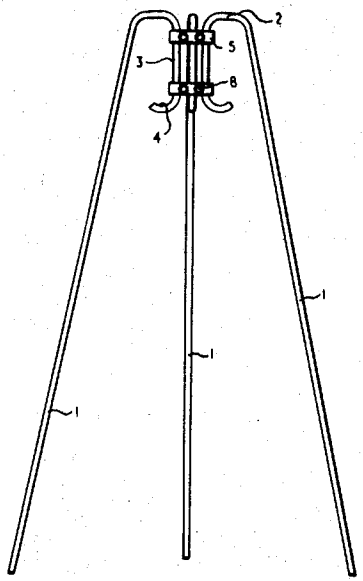
1,236,292	8/1917	Griggs	248/167
1,310,638	7/1919	Summers	248/166
1,971,642	8/1934	Champlin	248/167
2,544,615	3/1951	Raymond	248/167
2,720,770	10/1955	BiBeau	248/168
2,730,388	1/1956	Roberton	248/188.1

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[57] **ABSTRACT**

A supporting device, which I term a "Litter-Gard," being a tripod type structure suitable for removably suspending centrally within the legs, one or more polyvinyl garbage bags or comparable articles, that will prove stable on uneven ground and capable of supporting a maximum load by equalizing the burden on the three legs. Each leg is formed with the upper end bent inwardly, turned downwardly and terminally rounded up outwardly in a holding hook. The downward reaches of the legs, between the top inward extension and the hook, being hingedly connected by a clamping bracket to allow of the tripod being folded flat for compact and convenient storage when not in use.

5 Claims, 5 Drawing Figures



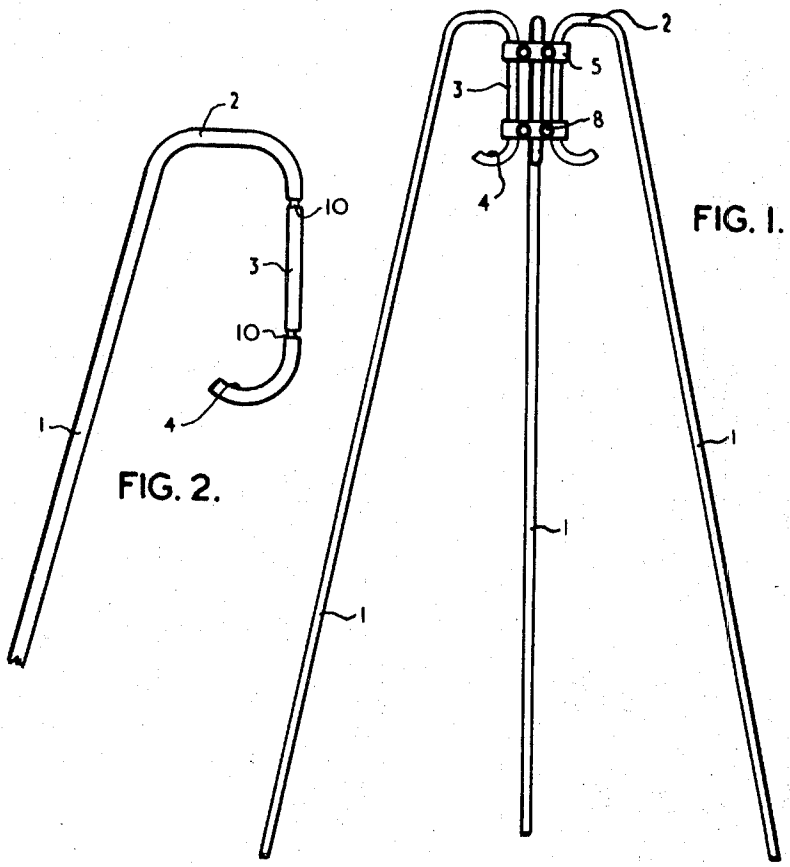


FIG. 1.

FIG. 2.

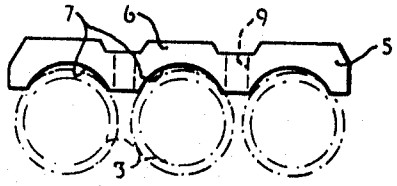


FIG. 3.

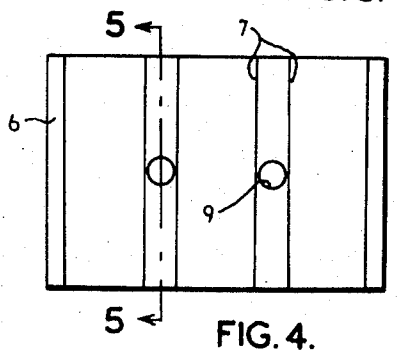


FIG. 4.

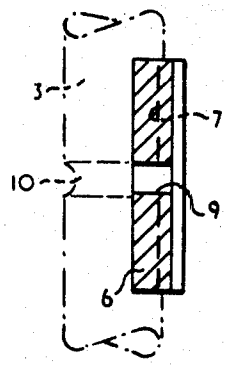


FIG. 5.

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SUPPORTING DEVICE

This invention relates to improvements in a supporting device and appertains particularly to a structure in the form of foldable tripod for removably suspending an article, such as a bag or the like, centrally within the legs.

An object of the invention is to provide a simple, sturdy, lightweight support that will prove stable under maximum load and on uneven ground.

A further object is to provide such a support in which the article is suspended centrally to equalize the load on the legs.

A further object is to provide such a support in which the article is held clear of the ground to lessen the chance of being pawed and/or scattered by small animals.

A further object of the invention is to provide a support of tripod design, the legs of which are hingedly connected so that they may be folded flat for compact and convenient storage when not in use.

A still further object of the invention is the provision of a tripod type of support which is suitable for removably suspending one or more polyvinyl garbage bags, the upper end of each leg being bent inwardly, turned downwardly and terminally rounded up outwardly in a bag holding hook, with the downwardly extending reach hingedly connecting with the other legs.

To the accomplishment of these and related objects as shall become apparent as the description proceeds, the invention resides in the construction, combination and arrangement of parts as shall be hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the claims hereunto appended.

The invention will be best understood and can be more clearly described when reference is had to the drawings forming a part of this disclosure wherein like characters indicate like parts throughout the several views.

In the drawings:

FIG. 1 is a perspective elevation of a preferred embodiment of the device;

FIG. 2 is an enlarged elevational detail of the upper end of one of the legs of the tripod;

FIG. 3 is a further enlarged plan view of one part of the leg-connecting hinge bracket;

FIG. 4 is an inside elevation thereof; and

FIG. 5 is a transverse vertical section on line 5—5 of FIG. 4.

This tripod type supporting device utilizes three legs 1 preferably of tubular stock arranged to stand at an appropriate incline converging toward the top to impart substantial load-bearing strength to the holder and to afford stability even when set up on rough or rolling ground.

As it is desired to suspend articles such as food parcels, garbage bags, and the like from the inside peak of the assembled tripod so that they hang centrally within the legs and at a safe elevation, the upper end of each leg 1 is provided at the top with a horizontal inward extension 2 that continues in a downturned vertical reach 3, the lower end of which terminates in an outwardly rounded up hook 4 that may lie in the same vertical plane as the horizontal inward extension 2.

The tripod legs 1 are suitably joined at or near the top, and for this purpose a variety of connectors could be employed. However, as it is desired that the tripod be foldable for storage when not in use, the connector here shown is in the form of a clamping bracket 5 consisting of a pair of companion plates 6 both having three leg-accommodating troughs 7 on their confronting inner faces and this bracket is applied to the reach portions 3 of the tripod legs, with the two plates 6 tightly secured together by transverse fasteners 8 passing through registering perforations 9 in the plates 6 between the troughs 7 to frictionally engage the respective vertical reaches of the legs 1 and yet permit such legs to pivot. One such clamping bracket disposed midway of the said reach portions might suffice in some cases but I prefer to employ a vertically spaced pair of brackets, as shown in FIG. 1, located near the top and bottom of the reaches respectively. To maintain the hinge brackets 5 in such predetermined position, each leg reach has a pair of annular grooves 10 cut therein at the desired locations and the bracket plates 6 and the leg-accommodating troughs 7 are so proportioned that the transverse fasteners 8, such as rivets, passing through the registering plate perforations 9, nest at least in part, midway of their length in said annular grooves 10.

Various changes in the size, shape and arrangement of parts may be made to the form of invention herein shown and described, without departing from the spirit of the invention or scope of the claims.

What is claimed as new is:

1. A supporting device for removably suspending articles, such as food parcels, garbage bags and the like, comprising a tripod, each leg of which is designed to stand at an angle to the vertical converging toward the top, with a horizontal inward extension continuing in a downturned vertical reach having an outwardly rounded up hook on the lower end thereof and a hinge bracket clampingly engaging the downturned vertical reach of each of the legs of the tripod wherein the said legs may pivot from open, circumferentially spaced tripod form into flat arrangement for compact storage.

2. A supporting device according to claim 1, wherein the bracket consists of a pair of companion plates each with three leg-accommodating troughs arranged in confronting relation and secured together by transverse fasteners.

3. A supporting device according to claim 1, wherein two spaced brackets are secured to the legs of the tripod at the top and bottom respectively of the said downturned vertical reaches.

4. A supporting device according to claim 1, wherein two spaced brackets are secured to the legs of the tripod at the top and bottom respectively of the said downturned vertical reaches, each of said brackets consisting of a pair of companion plates with three leg-accommodating troughs arranged in confronting relation and secured together by transverse fasteners that lie between said confronting, leg-accommodating troughs.

5. The supporting device according to claim 4, wherein each tripod leg has an annular groove at both upper and lower ends of said downturned vertical reach and wherein the bracket plate connecting fasteners nest in part in said grooves to maintain said brackets in the desired vertically spaced relation.

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