March 25, 1969 E. H. TOPHAM 3,434,483

PORTABLE WINDBREAKER

Filed June 19, 1967

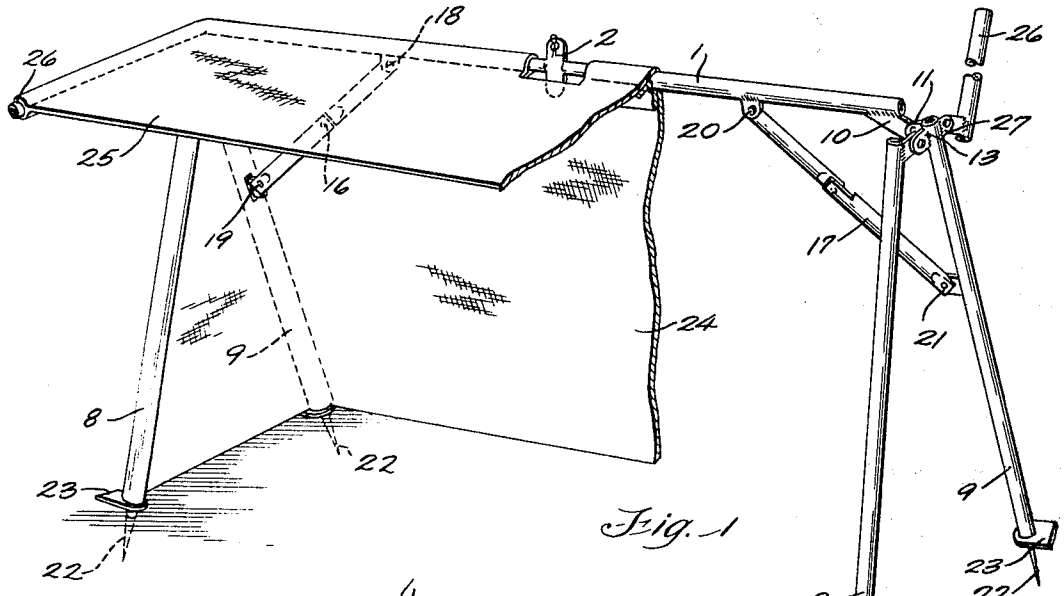


Fig. 1

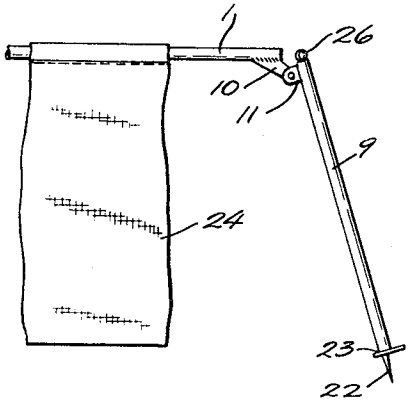


Fig. 2

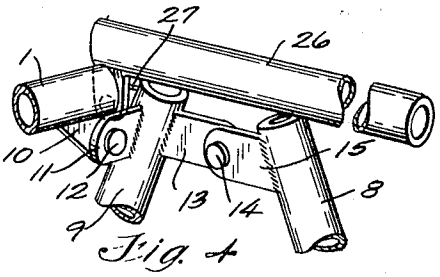


Fig. 4

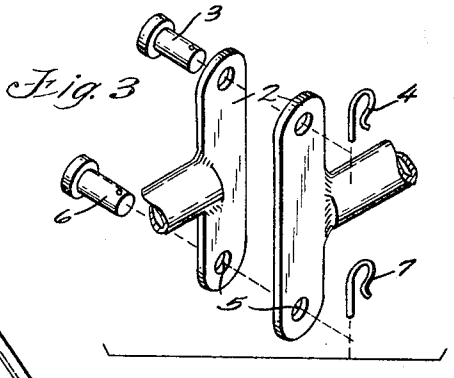
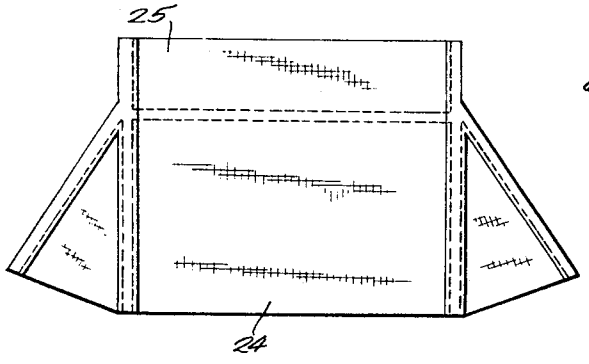


Fig. 3

Fig. 5



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PORTABLE WINDBREAKER

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ABSTRACT OF THE DISCLOSURE

A portable windbreaker with a frame having a cross rod and supporting legs. The cross rod is hinged at its center, and the legs are pivotable relative to each other and to the cross rod to fold the windbreaker up. Spikes on the lower leg ends secure the device in the ground, and tabs above the spikes may be engaged to hammer the spikes into the ground. A weatherproof cover is mounted on the frame, and may include an awning portion supported by pivotal end bars which rest on the upper leg ends.

This invention relates to a portable windbreaker, and more particularly to a windbreaker which can be used by hunters and the like for protection against the elements.

In accordance with the invention, the windbreaker is provided with a frame which is foldable at a plurality of joints, whereby the device can be easily carried and stored. An awning support may be utilized, as well as improved means for assisting driving the windbreaker into the ground.

The accompanying drawing illustrates the best mode presently contemplated by the inventor for carrying out the invention.

In the drawing:

FIGURE 1 is a perspective front view of a portable windbreaker constructed in accordance with the invention;

FIG. 2 is a fragmentary rear elevation thereof with parts removed;

FIG. 3 is a perspective view of the hinge and locking structure for the cross-rod;

FIG. 4 is a perspective view of the corner hinge structure; and

FIG. 5 is a plan view of the protective cover, laid out flat.

As shown in the drawing, the windbreaker embodies a suporting frame and covering therefore.

The supporting frame may be made of any suitable material, such as tubular metal, plastic, wood or the like; and comprises an elongated upper cross-rod **1** which is jointed and hinged approximately midway between its ends for folding the rod end portions together. As best shown in FIGS. 1 and 3, the hinge comprises a pair of elongated hinge plates **2** which are pivotally secured at one end as by a cotter pin **3** and cotter **4**. Plates **2** are secured to the respective central ends of rod **1**, and permit folding of the rod. Releasable locking means to secure rod **1** in open unfolded position are provided. For this purpose, a pair of openings **5** are disposed in the other ends of plates **2** and are aligned in rod-open position to receive a second cotter pin **6** with suitable cotter **7**.

A pair of front and rear legs, **8** and **9** respectively, are disposed to support rod **1** parallel to and above the ground. For this purpose, a lug **10** extends outwardly from rod **1** and is pivotally secured to a matching lug **11** extending from the upper end of each rear leg **9**, and in the plane of rod **1**, as by a rivet **12**. A second lug **13** is disposed approximately 90° from lug **11** and extends forwardly from leg **9** and is pivotally secured, as by a rivet **14** to a matching lug **15** extending rearwardly from the upper end of front leg **8**. These pivotal connections permit

folding pivoting action of each pair of adjacent legs **8** and **9** relative to each other transversely of rod **1**, and jointly in the plane of rod **1**.

Legs **8** and **9** are thus pivotable from a generally parallel position to the open stanced position shown in FIGURE 1 when the windbreaker is set-up for use. If desired, a pair of releasable centrally hinged braces **16** and **17** may be used to stabilize the windbreaker in open position. For this purpose, the ends of brace **16** are pivoted at **18** on rod **1** and **19** on left rear leg **9**. Similarly, the ends of brace **17** are pivoted at **20** on rod **1** and **21** on right rear leg **9**.

For purposes of anchoring the windbreaker in the ground, the lower ends of legs **8** and **9** terminate in terminate in spike-like projections **22**. Generally horizontal tabs **23** are disposed on the legs, preferably just above projections **22**, and may be engaged by a hammer or other instrument for driving projections **22** into the ground.

In accordance with the invention, a weatherproof cover is provided for the frame to protect the user against the elements. As shown in FIGS. 1 and 2, the cover **24** comprises a flexible sheet of canvas or other suitable wind and rain resistant material, which may be secured to rod **1** and legs **8** and **9** by providing channels in the sheet which can be slipped over the rod and legs. Other suitable securement means may be used.

Cover **24** extends downwardly from cross-rod **1** between rear legs **9**, and also wraps around to close the space between pairs of legs **8** and **9**. The front is left open. In addition, cover **24** provides a forwardly extending overhanging extension or awning **25** which fits over short support bars **26** disposed at the ends of rod **1**. Bars **26** are pivoted at one end in a suitable clevis **27** which extends rearwardly from the upper end of legs **9**. These bars **26** can thus be pivoted rearwardly and downwardly into parallelism with legs **9**, or can be pivoted upwardly and forwardly into a generally horizontal position resting on legs **8** and/or **9**, to properly position awning **25** for protection purposes.

FIG. 5 shows cover **24** in its flat laid-out position.

The invention provides a portable windbreaker of substantial utility, which can be easily folded for transporting and unfolded for use. In its folded position, the windbreaker is compact, with all of the frame elements being coextensive.

Various modes of carrying out the invention are contemplated as being within the scope of the following claims particularly pointing out and distinctly claiming the subject matter which is regarded as the invention.

I claim:

1. A portable windbreaker comprising:
   (a) an elongated cross-rod,
   (b) a pair of rear legs and a pair of front legs for supporting said cross-rod parallel to and above the ground,
   (c) means pivotally mounting the upper ends of said legs to the ends of said cross-rod for movement of the legs transversely of the rod,
   (d) means pivotally mounting the upper ends of each adjacent pair of front and rear legs for folding movement thereof in the plane of said rod,
   (e) and lockable releasable hinge means midway betwen the ends of said rod for folding the rod end portions together, said hinge means comprising:
      (1) a pair of elongated hinge plates pivotally secured together at one end with each plate being secured to an opposed central end portion of said cross-rod,
      (2) and releasable locking means disposed at the other end of said plates to secure said cross-rod in open unfolded position.

2. The windbreaker of claim 1 which includes: a weatherproof cover secured to said cross-rod and extending downwardly between said rear legs and between each pair of front and rear legs with the space between said front legs left open.

3. The windbreaker of claim 2 which includes an awning extending forwardly from said cross-rod, said awning comprising: an extension of said weatherproof cover, and support means for said extension and pivotally mounted to the upper ends of said rear legs, said support means having a forward pivoted generally horizontal position engaging the upper ends of at least several of said legs.

4. A portable windbreaker comprising:

(a) an elongated cross-rod,

(b) a pair of rear legs and a pair of front legs for supporting said cross-rod parallel to and above the ground,

(c) means pivotally mounting the upper ends of said legs to the ends of said cross-rod for movement of the legs transversely of the rod,

(d) means pivotally mounting the upper ends of each adjacent pair of front and rear legs for folding movement thereof in the plane of said rod,

(e) lockable releasable hinge means midway between the ends of said rod for folding the rod end portions together,

(f) spike-like projections on the lower ends of said legs,

(g) tabs disposed on said legs upwardly of said projections for engagement by an instrument to drive the projections into the ground,

(h) brace means extending between said rod and at least one of said legs,

(i) a weatherproof cover secured to said cross-rod and extending downwardly between said rear legs and between each pair of front and rear legs with the space between said front legs left open,

(j) and an awning extending forwardly from said cross-rod, said awning comprising: an extension of said weatherproof cover, and support means for said extension and pivotally mounted to the upper ends of said rear legs,

(k) said support means having a forward pivoted generally horizontal position engaging the upper ends of at least several of said legs.

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