

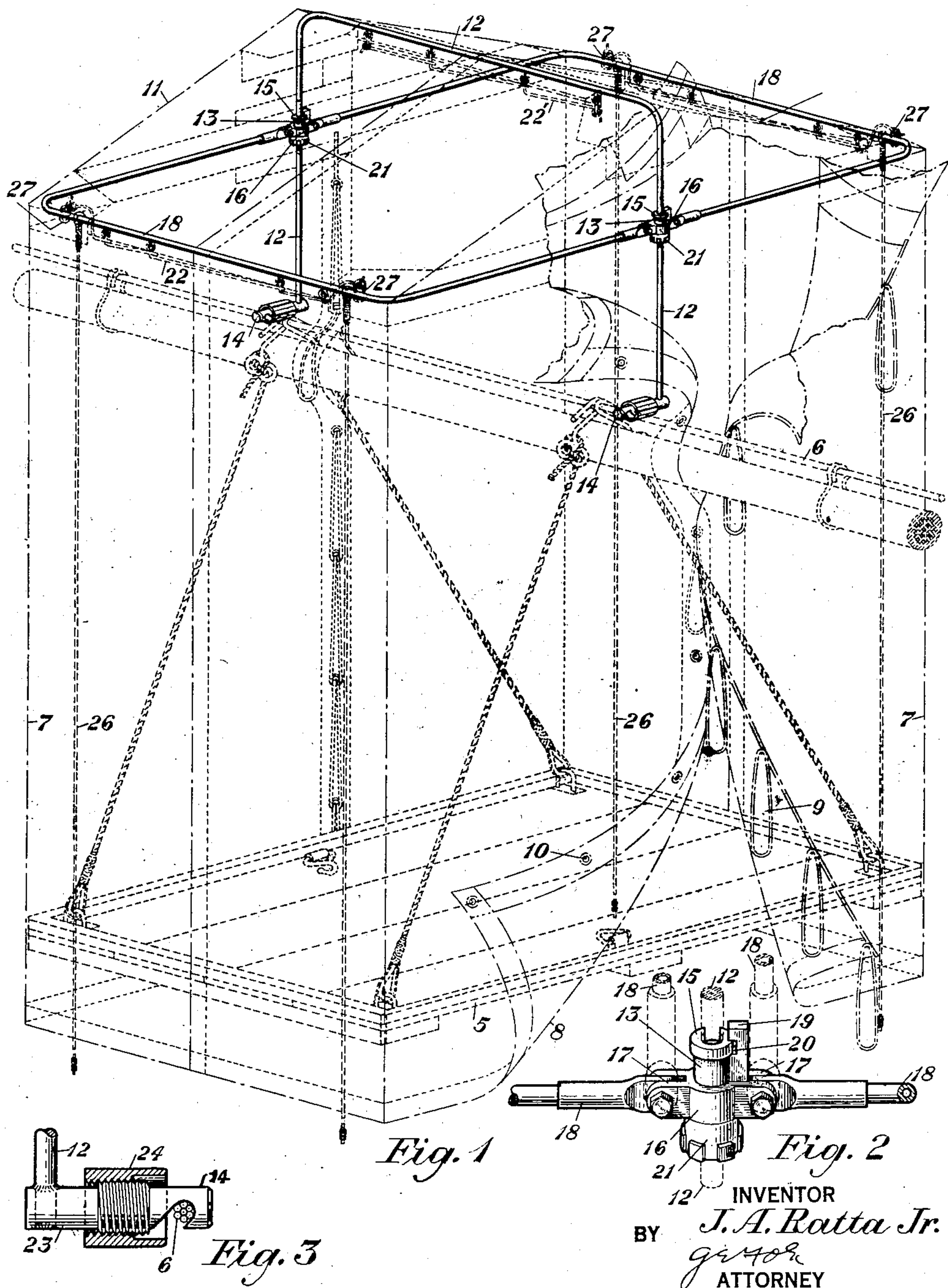
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TENT

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TENT

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8 Claims. (Cl. 135—4)

This invention relates to tents which are particularly adapted for use in inclement weather to form a protective covering.

In the maintenance of power transmission lines, it is necessary that certain inspection and repairs be made in inclement weather and protective coverings or tents are used at such times for the protection of workmen engaged in these operations and also for the protection of the lines upon which work is being performed, such as open splices, and further for the protection of equipment which is being used in the course of such work.

It is one of the objects of this invention to provide a tent of the above character.

Another object consists in the provision of framework for such tent which may be readily attached and detached from its supports.

Another object is to provide a tent which may be readily erected and placed in an extended and operative position and taken down and folded into a collapsed position.

A further object consists in the provision of clamping mechanism for rigidly holding the tent in position.

These and further objects will be apparent from the following description when considered in connection with the accompanying drawing in which one embodiment of the invention is illustrated.

Referring to the drawing, Figure 1 is a perspective view of the improved tent showing it in position over an elevated platform with the platform and tent supported on a messenger wire which also supports a transmission line cable. The frame is shown in full lines, while the tent walls are indicated by dash-dot lines, and the platform, cable and supporting messenger wire appear in dotted lines. Fig. 2 is a detail of one of a pair of members which slidably engages the main frame whereby a collapsible frame on each side of the main frame is adjusted, and Fig. 3 is a detail showing one of the clamping elements by which the frame and tent are secured in position on the messenger wire.

The improved device is shown for the purpose of illustration as being associated with an elevated platform 5. This platform may be secured to a messenger wire 6 which also supports a cable, and the messenger wire and cable are strung along a series of poles in a well known manner. The platform may be positioned along transmission lines at points where the cable terminal boxes appear and at other places on

the lines which require the services of linemen.

While the improved tent is shown and described in connection with an aerial line, it will be understood that it is adapted for use in other connections. For instance, it may be attached to manhole guards for the protection of workmen engaged in underground construction.

The improved tent is provided with walls of canvas 7 about its sides and the end walls have flap portions 8. These flap portions may be tied together in any suitable manner such as by loops of rope 9 engaging with grommets 10 arranged along the selvage of the flaps. The top wall of the tent is provided with inclined portions 11 which engage with the frame to be presently described. The sections forming the top and side walls of the canvas are securely sewed together.

The main elements of the frame for the improved device may be made from galvanized steel pipe. The central leg 12 of said frame is shown as being of generally U-shape formation, and when in position is inverted and its horizontal bar while the legs of the main frame are attached to the messenger wire in a manner to be presently described forms a ridge piece for the tent. It will be understood, however, that the member 12 may assume other formations than that disclosed, such for instance as a "D" formation. A cylindrical sleeve portion 13 is slidably and rotatably mounted on each of the vertical portions of the central leg 12 and is adapted to be moved thereon between the clamping and locking means 14, 14 secured to the ends of said legs and the slotted collars 15, 15 welded to the vertical portions of said leg. A casting having a circular portion 16 which loosely surrounds each of the cylindrical sleeves 13 is provided with a pair of bifurcated portions 17, 17 as more clearly shown in Fig. 2. An extension frame 18, 18 is mounted on each side of the central frame 12, and these frames are of substantially the same formation and dimension as the central main frame. The side frames have flattened extremities which are pivotally engaged between the bifurcated portions 17, 17 so that said frames may be moved from their raised and extended positions as indicated in Fig. 1, to a collapsed position, in which position they will lie parallel to the central frame 12.

The sleeve portion 13 moves with the side frames between the limits of the locking means 14, 14 and the slotted collars 15, 15, as previously referred to. The slidable sleeves are provided with a vertical extension 19 having therein a

slot 20, and said sleeves may be rotated on the vertical legs of the central frame 12 by a hand-knob 21. The circular portion 16 of the casting is maintained in a position between the extension 19, which is adapted to rotate on the top surface of said portion, and the hand-knob 21, which abuts the lower surface of said portion, so that the casting and collar 13 slide together as a unit on the vertical legs of the main frame 12. The extension 19 has a hooked end portion which may register with the slot in the collar 15 when the sleeve portion has been rotated to that point, permitting the hooked end to pass through the slot in the collar. Stops (not shown) may be provided on the circular portion 16 to guide the engagement of the extension 19 with the slot in the collar. Further rotation of the extension 19 at this time causes its hooked end to engage over and ride upon the upper surface of the collar 15 with the periphery of said collar registering in the slot 20 of the extension. When in this position the ends of the side frames 18 are locked to the collar 15 on the central frame 12, and the closed ends of cross-bars of said side frames are enclosed in pockets 22. These pockets are provided by flaps stitched to the canvas and are formed at the intersections of the top walls 11 and side walls 7 of the tent. The flaps may be formed into pockets in any suitable manner; for instance, grommets may be provided and lacing introduced therethrough. When the side frames are extended they cause the walls of the tent to assume the formation shown in Fig. 1. An additional pocket 22' is also formed at the ridge of the canopy and encloses the cross-bar of the main frame 12. When the cross-bars of the main and side frames are thus enclosed in the pockets, the top wall of the canopy assumes a spread position and the side walls extend vertically therefrom to or below the platform, as indicated in Fig. 1. When the side frames are collapsed by an operation reverse to that above described the walls of the canopy assume a folded position. The provision of the pockets 22, 22' also serves to limit the downward movement of the side frames and maintains the cross-bars of the main frame and side frame in definite relation to each other when the canopy is in spread position. Ropes 26 are shown as being attached to the cross-bars of the side frames, and these ropes may be tied at their other ends to the platform 5 to more rigidly hold the frame structure in position.

The tent frame is attached and supported on the messenger wire 6 by means of the clamps 14, 14 which lock the central frame 12 thereto. These clamps are provided with cylindrical arms 23 which are securely welded or otherwise attached to the vertical extremities of the central frame in any suitable manner and extend in a perpendicular direction therefrom. The arms 23 cause the main frame 12 to be positioned in offset relation to the messenger wire when placed thereon. The positioning of the frame in this offset manner prevents interference with guard arms on poles when the improved tents are used adjacent to poles equipped with this construction. The outer ends of the sleeves 23 are provided with transverse slots in which the messenger wire 6 is adapted to be placed, and the central portions of said sleeves are threaded, as may be seen by reference to Fig. 3, to engage with an interiorly threaded tubular nut 24. This nut is adapted to be moved along the sleeve

to engage the messenger wire and clamp the frame in locked relation thereto.

The top walls of the canvas for the canopy are stretched over the cross-bars of the frame, as previously pointed out, and assume an inclined position to shed moisture, and the side walls extend downwardly from the frame structure and below the platform, thus providing a complete enclosure for the protection of a workman.

What is claimed is:

1. In a tent, a collapsible frame including a main member having supporting legs, the cross-bar portion of which supports the central portion of a canopy, side members of U-shape having the ends of their legs adjustably mounted on the legs of the main member, said side members being adapted to be folded against said main member or to be extended sidewise therefrom, said canopy extending over the cross-bar of the main member to the cross-bars of the side members so that when the side members are extended the canopy will be in operative position.

2. In a tent, a collapsible frame including a main member of inverted U-shape, the horizontal bar of which supports the central portion of a canopy, side members of U-shape having the ends of their legs adjustably mounted on the legs of the main member said side members being adapted to be folded against said main member or to be extended sidewise therefrom, said canopy extending over said horizontal bar of the main member to the cross-bars of the side members so that when the side members are extended the canopy will be in operative position, and means for supporting said frame in locked position above the surface over which the tent is mounted.

3. In a tent, a collapsible frame including a main member of inverted U-shape, the horizontal bar of which supports the central portion of a canopy, side members of U-shape having the ends of their legs adjustably mounted on the legs of the main member said side members being adapted to be folded against said main member or to be extended sidewise therefrom, said canopy extending over the horizontal bar of the main member to the cross-bars of the side members and having side walls extending downwardly therefrom, said canopy being in operative position when the side members are extended.

4. In a tent, a collapsible frame including a main member of inverted U-shape, the horizontal cross bar of which supports the central portion of a canopy, side members of U-shape having the ends of their legs adjustably mounted on the legs of the main member, said side members being adapted to be folded against said main member or to be extended sidewise therefrom, said canopy extending over the cross-bar of the main member to the cross-bars of the side members so that when the side members are extended the canopy will be in operative position, and pockets in said canopy for the reception of the cross-bars of the main member and side members.

5. In a tent, a collapsible frame including a main member of inverted U-shape, the horizontal cross bar of which supports the central portion of a canopy, side members of U-shape having the ends of their legs adjustably mounted on the legs of the main member, said side members being adapted to be folded against said main member or to be extended sidewise there-

from, means for locking the side members to the main member, said canopy extending over the cross-bar of the main member to the cross-bars of the side members so that when the side members are extended the canopy will be in operative position, pockets in said canopy for the reception of the cross-bars of the main and side members and coacting therewith in the folding and spreading of said canopy, and means for supporting said frame in locked position above the surface over which the tent is mounted.

6. In a tent, a collapsible frame including a main member of inverted U-shape, the horizontal cross bar of which supports the central portion of a canopy, side members of U-shape having the ends of their legs adjustably mounted on the legs of the main member said side members being adapted to be folded against said main member or to be extended sidewise therefrom, means for locking the ends of the legs of the side members to the legs of the main member in the extended position of the side members, said canopy extending over the cross-bar of the main member to the cross-bars of the side members, and having side walls extending downwardly therefrom, said canopy being in operative position when the side members are extended, and pockets in said canopy and engaging the cross-bars of the side members whereby said members are held in extended position.

7. In a tent, a collapsible frame adapted to be supported upon a horizontally extending wire or bar, said frame including a main member of substantially inverted U-shape, the horizontal cross bar of which supports the central portion

of a canopy, side members of U-shape having the ends of their legs adjustably mounted on the legs of the main member, said side members being adapted to be folded against said main member or to be extended sidewise therefrom, said canopy extending over the cross-bar of the main member to the cross-bars of the side members so that when the side members are extended the canopy will be in operative position, and means for clampedly connecting said frame to the horizontally extending wire or bar in offset relation to its point of support.

8. In a tent, a collapsible frame including a main member of inverted U-shape, the horizontal cross bar of which supports the central portion of a canopy, side members of U-shape having the ends of their legs adjustably mounted on the legs of the main member said side members being adapted to be folded against said main member or to be extended sidewise therefrom, means for locking the ends of the legs of the side members to the legs of the main member in the extended position of the side members, said canopy extending over the cross-bar of the main member to the cross-bars of the side members, and having side walls extending downwardly therefrom, said canopy being in operative position when the side members are extended, pockets in said canopy and engaging the cross-bars of the side members whereby said members are held in extended position and means for clampedly locking the main frame in offset relation to its point of support.

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