

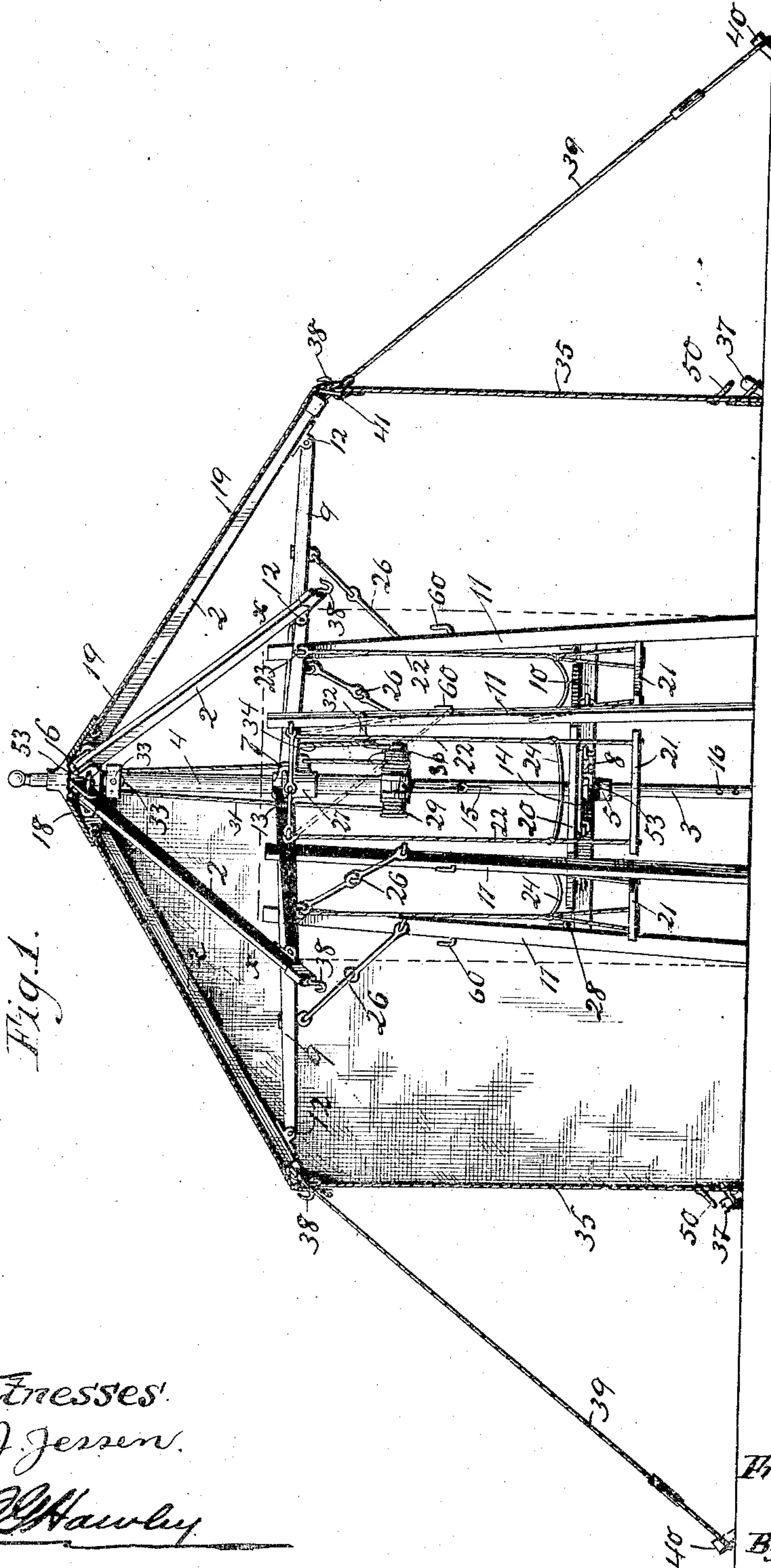
(No Model.)

3 Sheets—Sheet 1.

F. H. J. KAUFERT.  
FOLDING TENT.

No. 465,084.

Patented Dec. 15, 1891.



Witnesses:

J. Jensen.

O. Hawley

Inventor.

Frank H. J. Kaufert.

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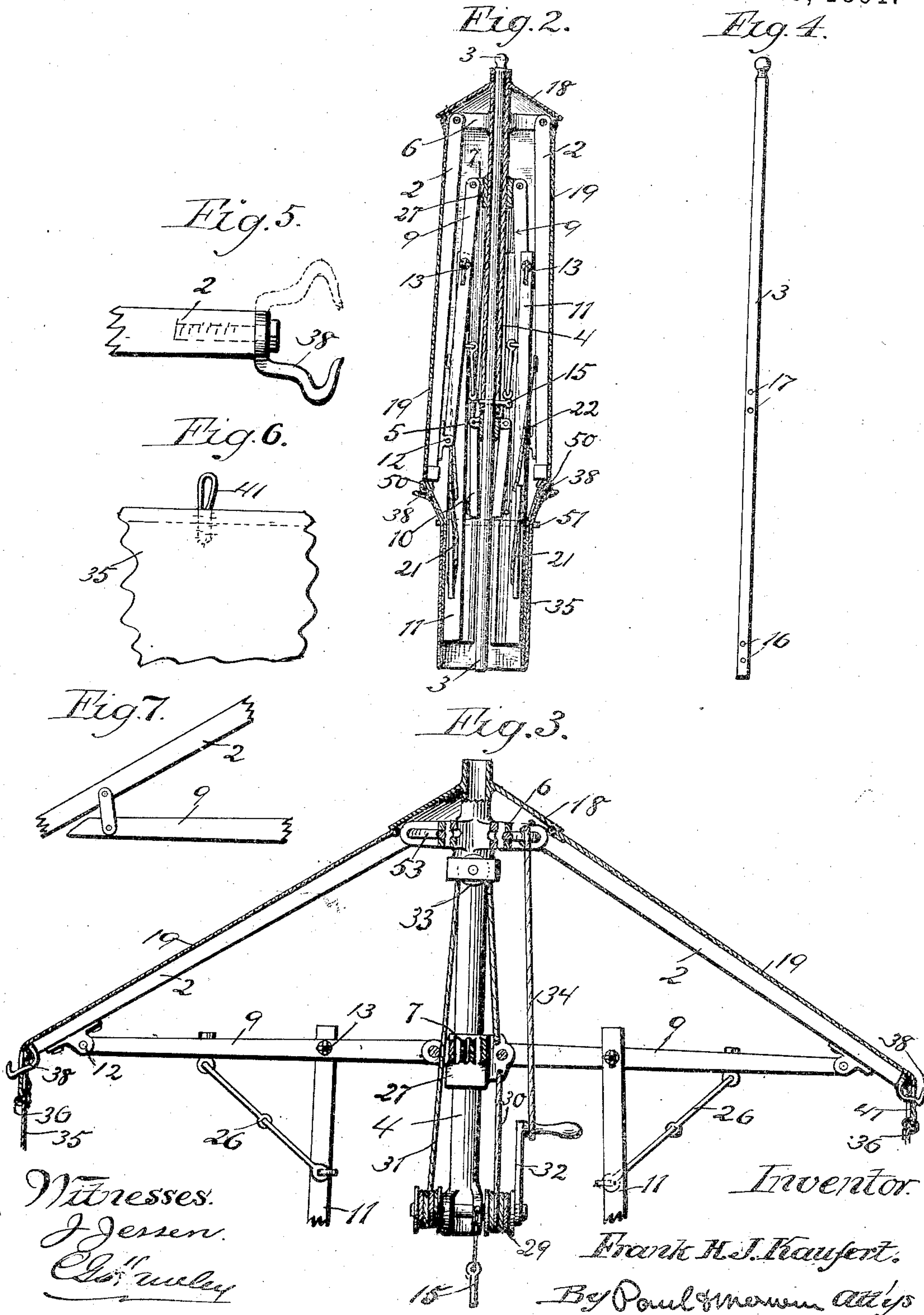
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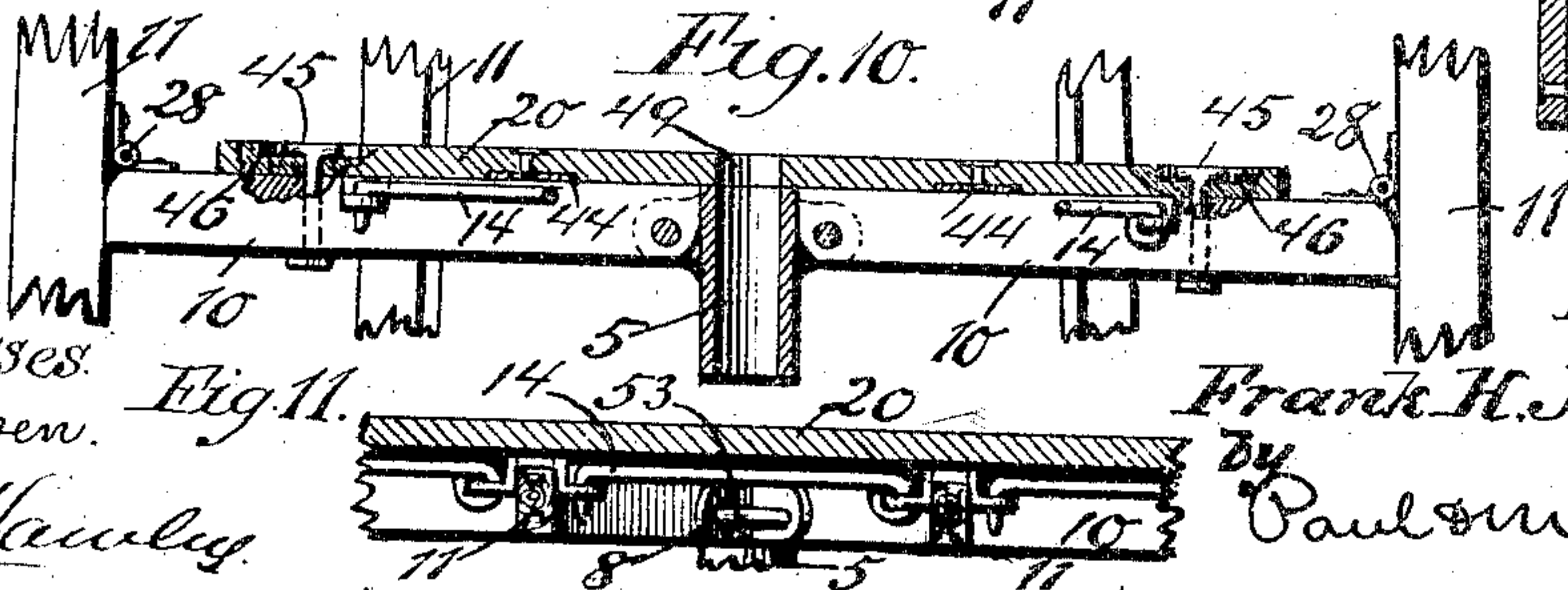
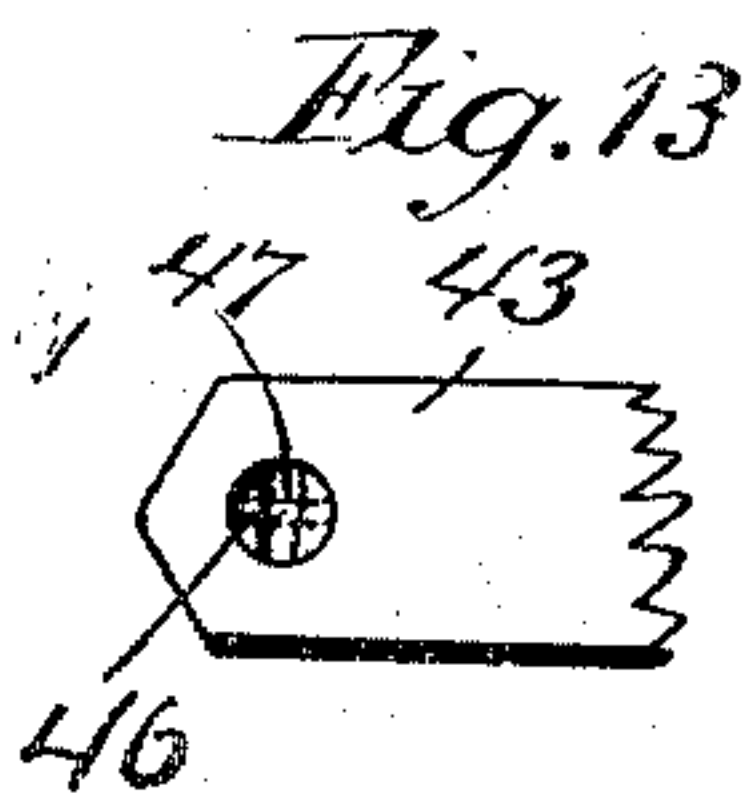
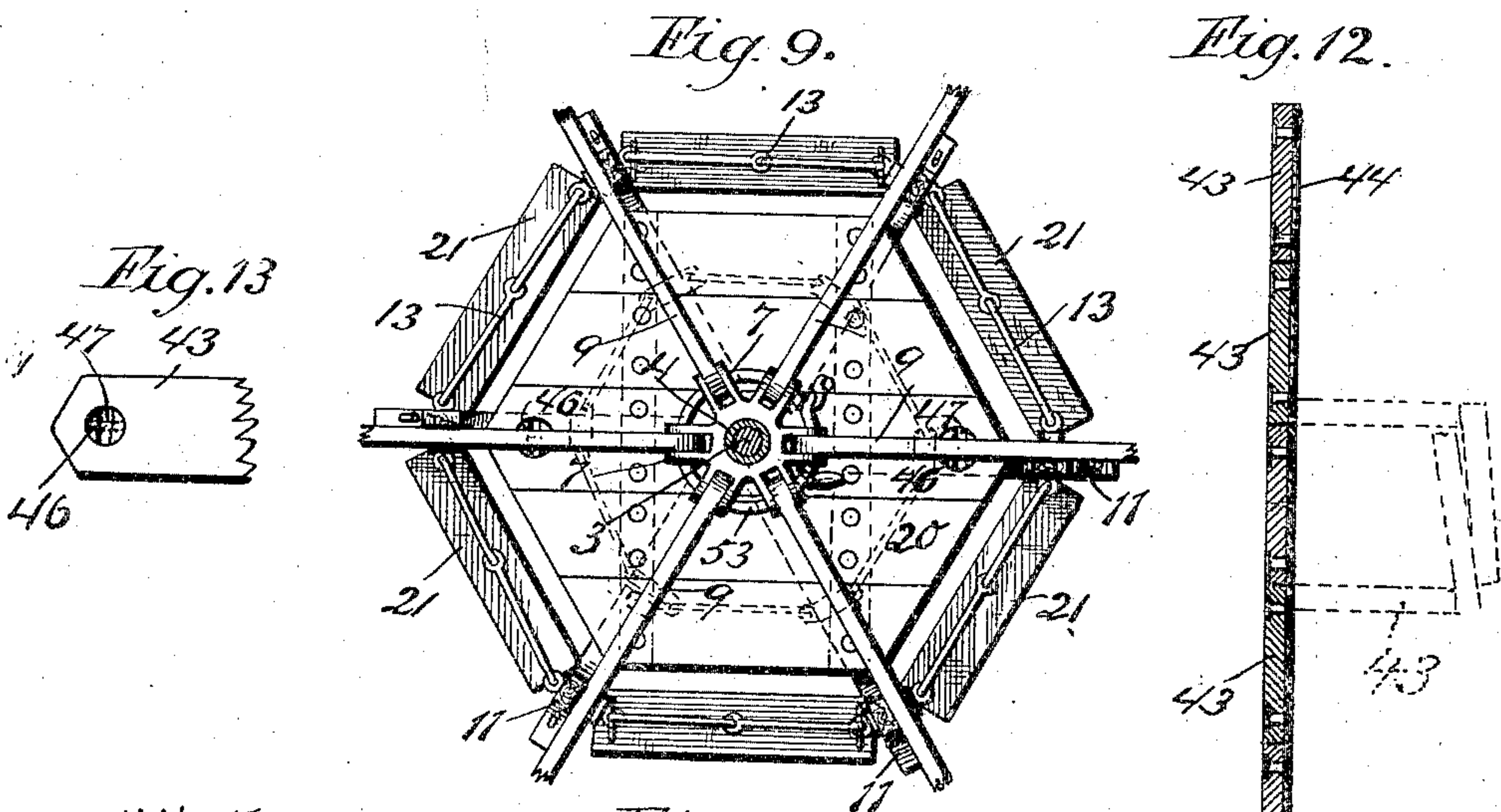
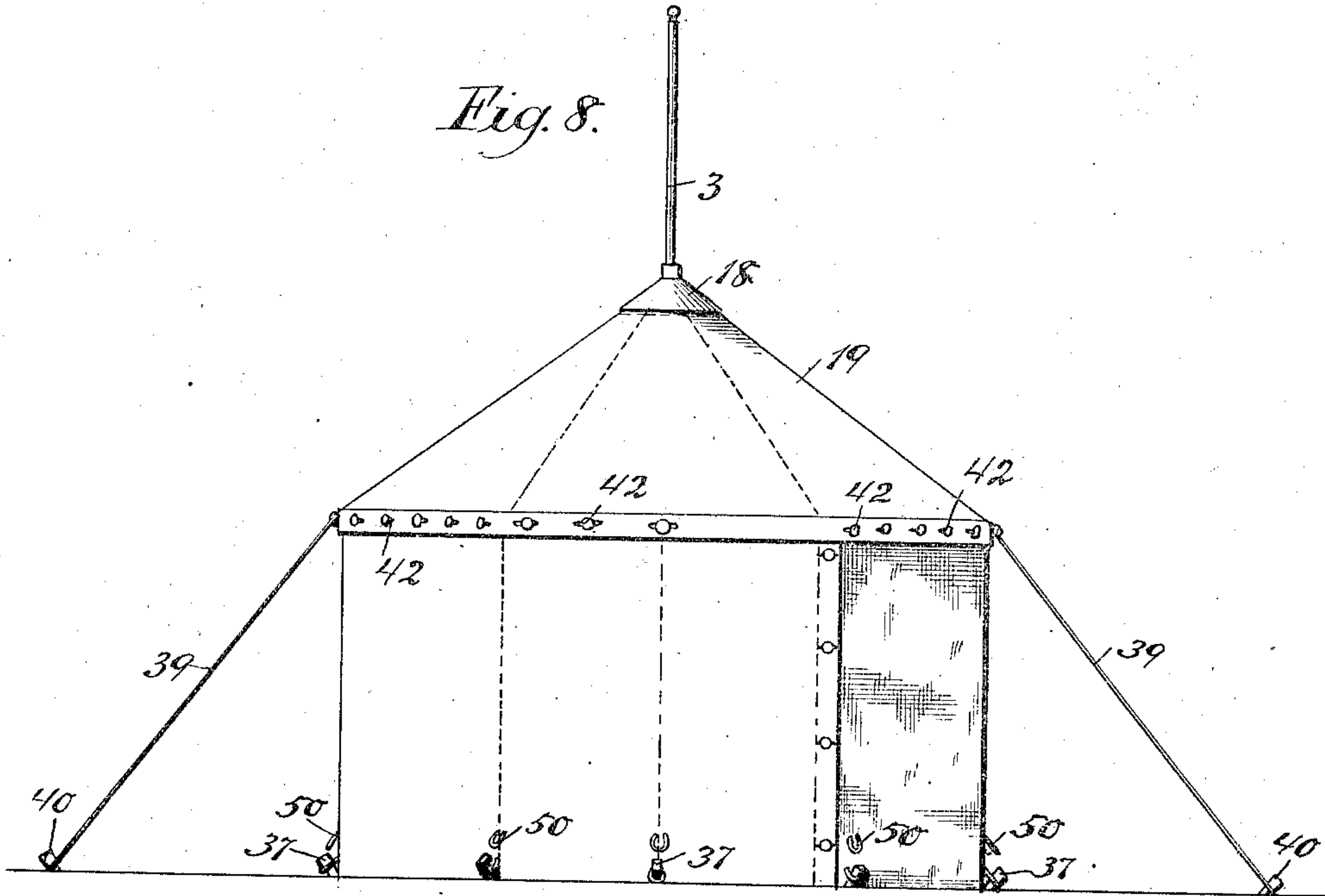
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*Al. Hawley*

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# UNITED STATES PATENT OFFICE.

FRANK H. J. KAUFERT, OF MINNEAPOLIS, MINNESOTA.

## FOLDING TENT.

SPECIFICATION forming part of Letters Patent No. 465,084, dated December 15, 1891.

Application filed February 24, 1891. Serial No. 382,335. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK H. J. KAUFERT, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain Improvements in Folding Tents, of which the following is a specification.

My invention relates to camping-tents adapted to be neatly and compactly folded and packed for transportation.

The object of my invention is to provide a tent which may be folded into the smallest possible space, which may be folded as one single piece, so that the parts thereof cannot be lost, and which shall have a table and seats arranged in connection with the center pole and other central supports; and to this end it consists in various constructions and in combinations hereinafter described, and particularly pointed out in the claims.

My invention will be more readily understood by reference to the accompanying drawings, in which—

Figure 1 is a transverse sectional elevation of a folding tent embodying my invention. Fig. 2 is a view thereof folded up. Fig. 3 is a sectional detail showing the upper part of the tent. Figs. 4, 5, 6, and 7 are details. Fig. 8 is an exterior view of the tent. Figs. 9, 10, 11, 12, and 13 are details showing the table and seats arranged around the center pole.

As shown in the drawings, my tent is of that class which are arranged about a central pole or support. Tents of this class usually have their tops upheld by guy-ropes; but as the object of this invention is to provide a tent which is self-supporting, I arrange inclined bars 2 in connection with the central support and corresponding to the ribs of an umbrella. In my device the center pole 3 is not generally relied upon for support, but may be kept in the position shown in Fig. 1 or pushed up through the long sleeve 4 for use as a flag-pole. The principal use of the pole 3 is as a vertical guide for the sleeves 4 and 5, bearing the spiders 6, 7, and 8, between the arms of which the ends of the bars 2, 9, and 10 are respectively fastened.

The actual support of the tent consists in the upright beams 11, arranged around the center pole. There may be any convenient number of these rods so long as the number exceeds two. Each rod 11 is secured at its

upper end to a corresponding cross-bar 9, the outer ends of which are secured in turn by suitable hinges, links, or eyes to the lower ends of the inclined roof poles or bars 2. The lower ends of the rods 11 are held in position by the bars or braces 10. Chains, rods, cords, or links 13 14 extend between the several bars 9 and the cross-beams 10. After all these are secured tightly between their respective bars it will be seen that a rigid tent-frame is provided. The lower connecting-links 14 are detachable at one end from the braces, so that they may be loosened when desired. The center pole 3 may be locked in place (either raised or lowered) by the pin 15, provided in connection with the lower end of the sleeve 4, suitable holes 16 17 being provided therein, through which the pin is adapted to be inserted. I provide a cap 18 about the top of the tent, covering the spider 6 and the upper edges of the tent-cloth 19, as shown clearly in Figs. 1 and 2.

Fig. 2 shows the tent collapsed or folded about the center pole 3 and the whole tent compressed into a bundle no larger in diameter than the cap 18.

In connection with cross-braces 10 and the upright rods or poles 11 I provide the folding table 20, adapted to rest on the braces. A straight side is provided on the table between each of the cross-bars and a swing-seat 21 arranged in a convenient position in front of the same. The seats 21 are hung by ropes 22, fastened in the eyes 23, provided in the bars 9, and by which the chains or links 13 are also secured. Short ropes 24 are provided between the swing-ropes 22 to form backs for the swing-seats. I provide small hooks in the rods 11, upon which the swing-seats may be hung preparatory to folding the tent. Tie-chains or linked ropes 26 are provided between the outer portions of the bars 9 and the rods 11 to prevent the spider 7 from sinking too low down on the long sleeve 4, around which it is loosely secured by means of the short sleeve 27.

As shown in Fig. 10, hinges or links 28 are provided on the top surfaces of the cross-beams 10 and secured to the rods 11. The inner ends of the cross-beams are pivoted on the spider 8 in any suitable manner, but preferably so that when the frame is pressed



down the ends of the bars 10 engage the same and prevent its sinking too low. Light iron rods may be employed, if desired, in place of the brace-rods 10, as very little stress is placed upon the same.

A small double-drum windlass 29 is provided on the lower end of the hollow sleeve 4. This windlass is adapted to be operated to wind up or loosen the ropes 30 and 31 by means of the crank 32. The rope 30 is fastened in a lug provided in the sleeve 27, while the rope 31 passes up over the sheave 33, provided beneath the spider 6, the end of the rope being thence brought down and secured to the sleeve 27 or spider 7. By turning the crank 32, which is normally secured by a short link or rope loop 34, the spider 7, and therewith the inner end of the bars 9, may be raised or lowered to fold or erect the tent. The side curtains 35 are preferably made separate from the top 19, and are buttoned or hooked beneath the lower overhanging edges 36 thereof. The lower edges of the curtains 35 are fastened down to the ground with pins 37 in the usual manner.

I provide hooks 38 in the ends of the bars 2 for securing the top and sides of the tent. These hooks are swiveled therein and may be made so that they may be turned around in any direction, so as to make easy the fastening of the cloth thereon. Further, they have the long shanks, as shown in Fig. 5, so that the two thicknesses of cloth slip out of the outer hook, which is thus left free to receive the guy-ropes 39.

The side curtains 35 are provided with suitable eyes or loops 41 and are first hooked over the hook-pins 38, which are then turned up the other way and the corners of the top cloth 19 fastened down over the same. The guy-ropes 39 extend from the lower ends of the bars 2 to outside stakes 40, driven into the ground. Buttons are provided for holding up the edges of the side curtains.

As shown in Figs. 9 to 13, the table 20 is made up of narrow sections 43, all secured together by two or more flexible bands or hinges 44, extending transversely across the same, whereby the table is adapted to be folded up and placed around the lower end of the pole 3 when the tent is packed up. Turn-buttons or other suitable fastenings 45 are provided on opposite cross-beams 10, as shown, and adapted to engage countersunk portions 46 in the middle board of the table-top, which thus forms a stout brace for the bars 10, and at the same time secures the table-top firmly in place. Slots 47 are provided in the board for the admission of the buttons 45. A central opening 49, coincident with the opening in the sleeve 5, is provided in the table-top, so that the pole 3 may be lowered through the same, if desired. The spiders 6, 7, and 8, formed on the sleeves 4, 27, and 5 consist in the lugs or legs of the spiders arranged in parallel pairs for the reception of the ends of the several cross-bars. The bars are inserted

between the same and a strong wire 53 passed around through the openings in the ends of the lugs and through the ends of the rods, the ends of the wire being then twisted together to fasten all firmly, as shown in Fig. 9. If desired, shallow notches may be employed in the ends of the lug to hold the wire, thereby doing away with the necessity of threading the same through the openings in the ends of the lugs.

When it is desired to fold the tent, the table-top is removed and the stakes 37 and 40 all pulled out of the ground. The brace-rods, chains, or hooks 14, extending between the braces 10, are then unfastened and the crank 32 made free. By pushing up the sleeve 5 with the spider-arms thereon the lower part of the tent is collapsed, and by turning the crank 32 the inner ends of the bars 9 are raised to fold down the upper portion of the tent.

Prior to the collapsing of the frame it is preferable to fold up the side curtains and put the loops 50 thereon over the hooks 38, so that the curtain, when the tent is folded, will not extend below the pole 3. After the tent is folded it may be bound together by one or more ropes 51, as shown in Fig. 2. As shown in Fig. 2, the end of the center pole 3 extends below the end of the upright rod 11, so that when the tent is first stood upon the ground it will stand upon the pole 3, and thus make it easier to move out those numbered 11.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, in a folding tent, of the central pole 3, with the long sleeve 4 arranged thereon, the spider 6, provided on the upper end of said sleeve, the roof-bars 2, having their upper ends pivoted at the base of said spider and adapted to support the roof of the tent, the weather-cap 18 to close the opening over the spider, a sleeve 7, slidably arranged on the long sleeve 4, the cross or link bars 9, having their inner ends pivotally secured on the lower ends of the roof-bars 2, whereby when the tent is extended the ribs occupy substantially horizontal positions, means for locking said sleeve on the long sleeve 4, upright bars 11, having their upper ends secured on said rods or bars 9 at points between the ends thereof, and means for securing the lower parts of said upright bars, substantially as described.

2. The combination, in a folding tent, of the central pole, with the long sleeve 4 arranged on the upper part thereof, a sleeve 7, slidably arranged on the sleeve 4, the roof-bars 2, having their upper ends pivotally secured on the upper end of the long sleeve 4, the bars 9, adapted to normally occupy a horizontal position and having their outer ends pivotally secured on the bars 2 and their inner ends similarly secured on the sleeve 7, the windlass provided on the lower end of the sleeve 4, ropes passing from the same and se-



cured upon the sleeve 7, one branch of the rope passing therefrom over a pulley arranged on the sleeve 4, whereby the sleeve 7 may be raised to close the tent, the upright bars 11, secured at intermediate points on the bars or rods 9, ties arranged between the same and the outer parts of the bars 9, foldable ties arranged between the bars 9 to hold the same in the proper position, a brace connecting and bracing the lower parts of the upright bars 11, and means for securing said central pole in the raised position, the weight of the tent being supported on the upright bars 11, substantially as described.

3. The combination, in a folding tent, of the central pole, with the long sleeve 4 arranged thereon, the slidable sleeve 7 on said sleeve 4, the roof-bars 2, having their upper ends pivotally secured on the upper end of the sleeve 4 and their lower ends pivotally connected with the sleeve 7 by the bars 9, adapted to normally occupy horizontal positions, means for securing the same in such positions, the upright bars 11, having their upper ends secured at intermediate points on the bars 9, cross rods or bars 10, hinged on the lower parts of the upright bars 11 and having their inner ends secured upon a common spider, whereby the same are held horizontal, and a table part adapted to be arranged on said cross-bars, whereby a center table is formed in the lower part of the tent, substantially as described.

4. The combination, in a folding tent, of the roof-bars thereof pivoted upon a central support for the upper ends thereof, with normally-horizontal brace-bars 9, having their inner ends pivotally and slidably secured on a depending part of the support for the upper

ends of the roof-bars, the tent-covering arranged thereon and hung therefrom, upright bars 11, having their upper ends secured at intermediate points on said brace-bars, means for securing said parts in the positions described, the cross-bars 10, hinged on the lower parts of the said upright bars, the spider pivotally connecting and bracing the inner ends of said cross-bars, the folding table made up of the sections, locking devices for securing the same on said cross-bars 10, and swing-seats suspended by ropes 22 from said brace-bars and upright bars, substantially as described.

5. The combination, with the upright bars 11, of the cross-bars 10, hinged thereto, the sleeve 5, provided with a spider, wherein the inner ends of the said bars 10 are pivoted and arranged to be braced so as to be held horizontal, detachable links 14, extending between said bars 10, a table to be laid thereon, and a rigid part centrally arranged above said table, substantially as described.

6. The combination, with the roof-bars for supporting the roof of the tent, of the curtains 35 of the tent, the double curved hooks pivoted on the ends of the bars 2, and loops in the lower edge of the roof-cloth and in the upper edges of the side curtains, said loops adapted to admit said double hooks, which hooks are adapted to be turned to most readily admit the attachment, substantially as described.

In testimony whereof I have set my hand this 18th day of February, 1891.

FRANK H. J. KAUFERT.

In presence of—

T. S. LYON,

C. G. HAWLEY.