

(No Model.)

2 Sheets—Sheet 1.

J. G. ORR.
PORTABLE FENCE.

No. 488,217.

Patented Dec. 20, 1892.

FIG. 2.

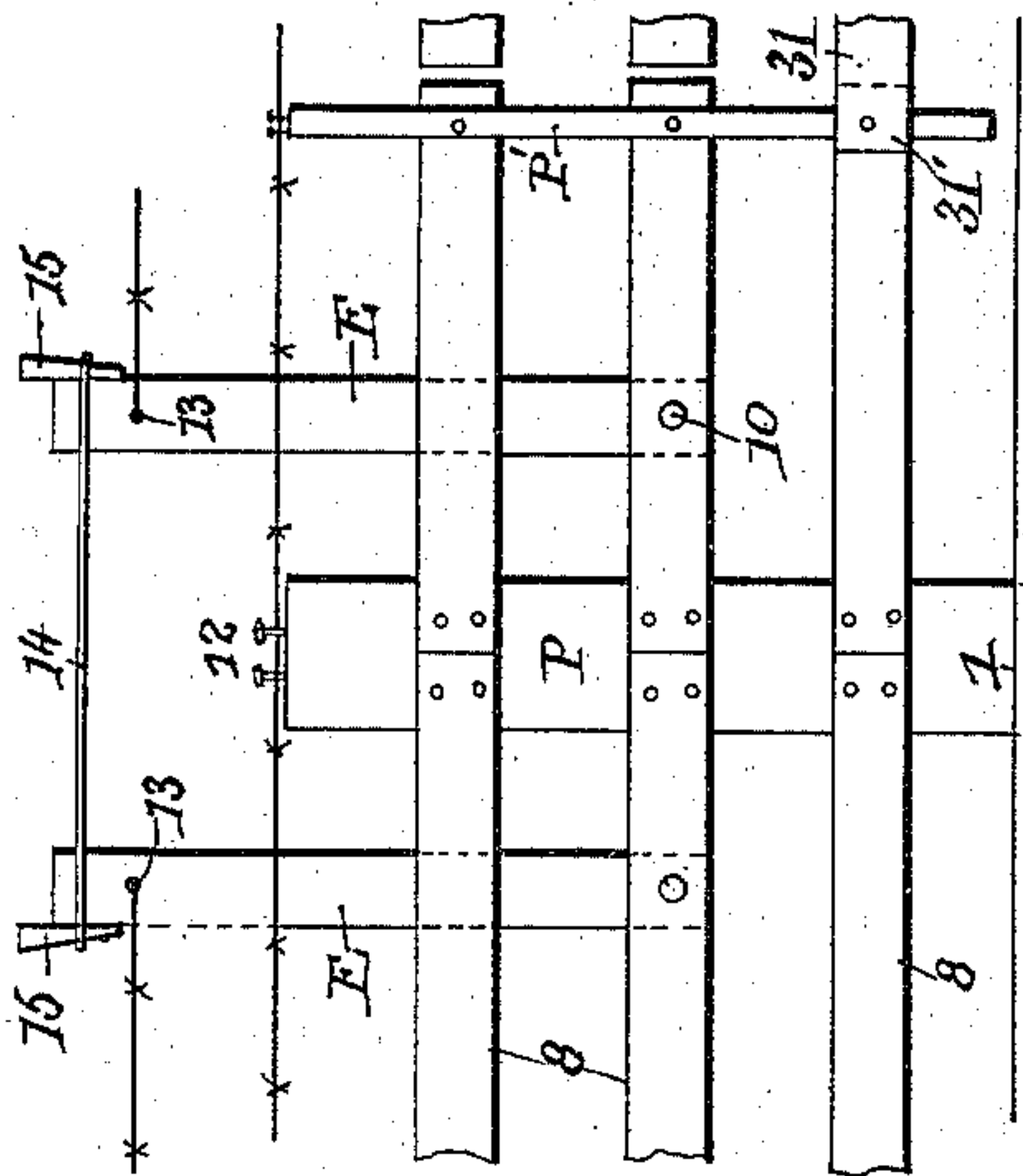


FIG. 5.

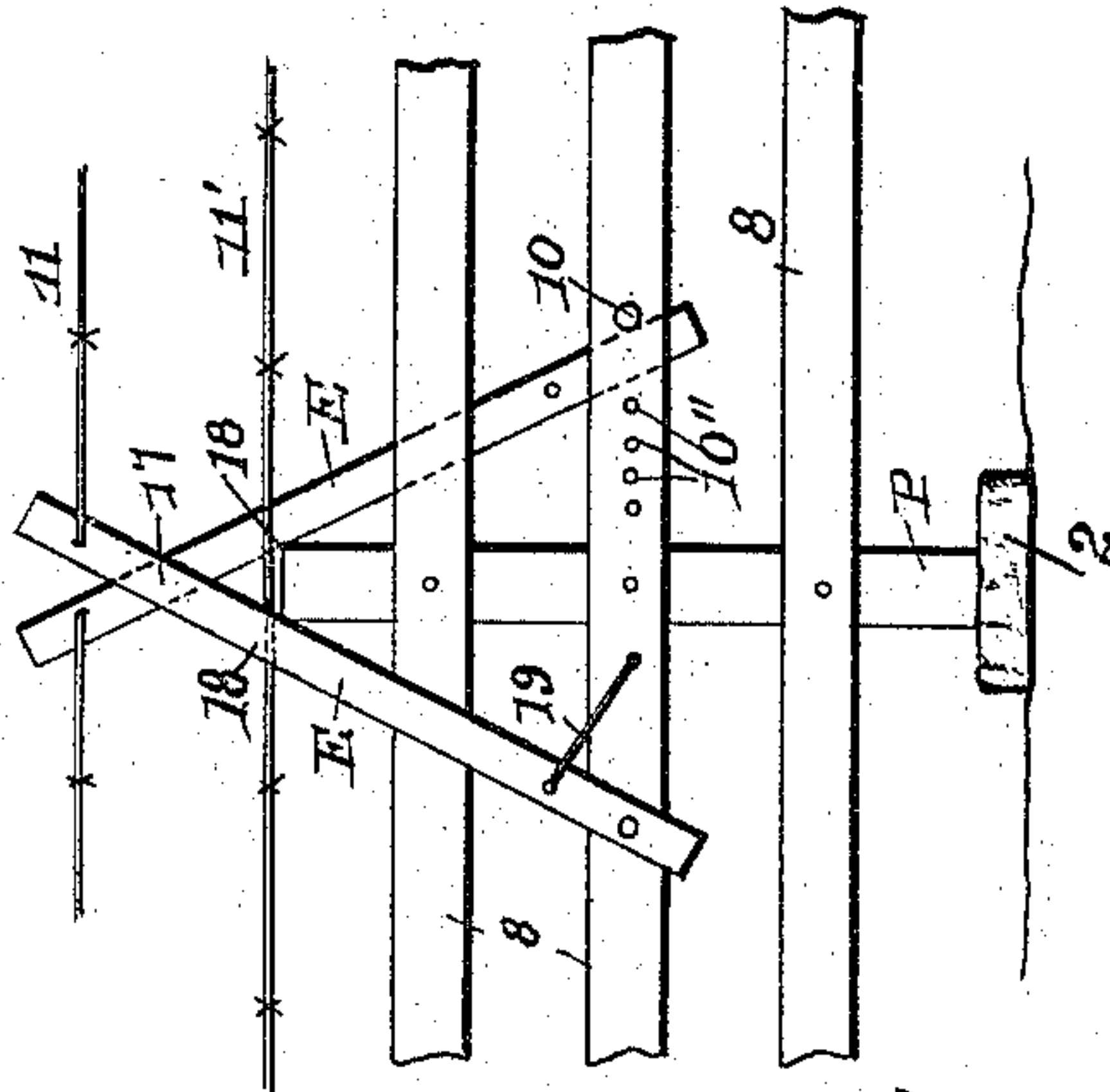


FIG. 1.

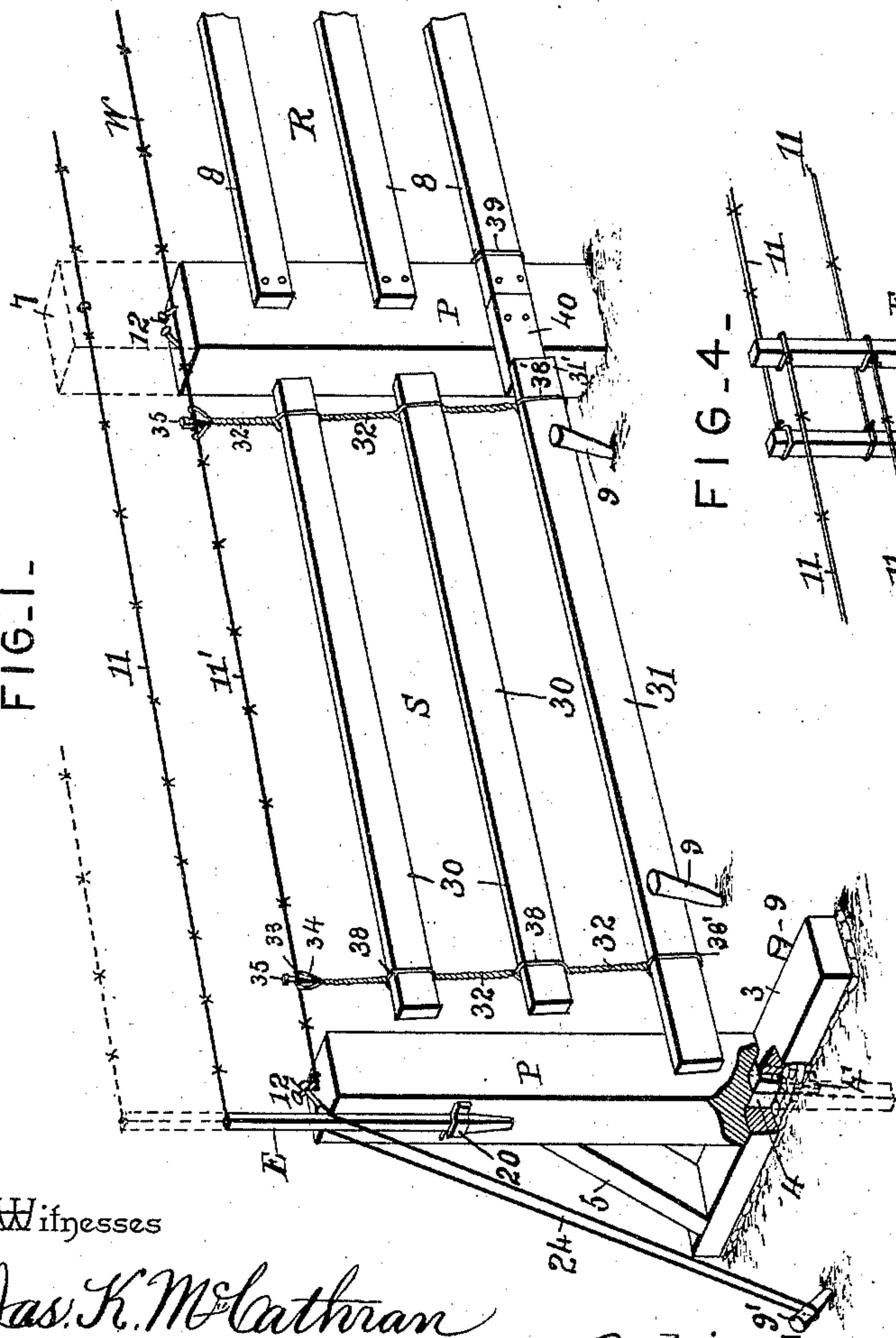


FIG. 4.

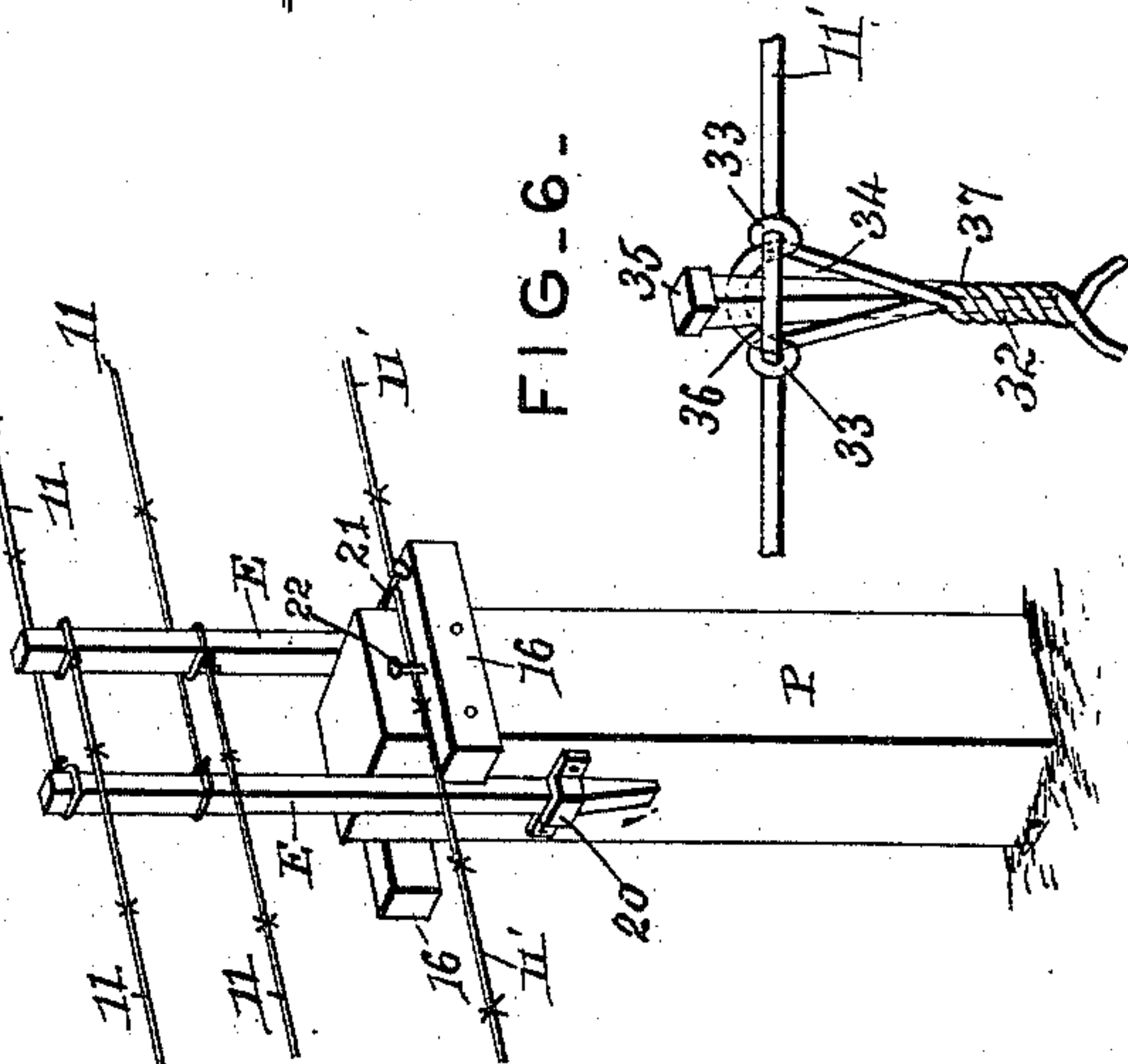


FIG. 6.

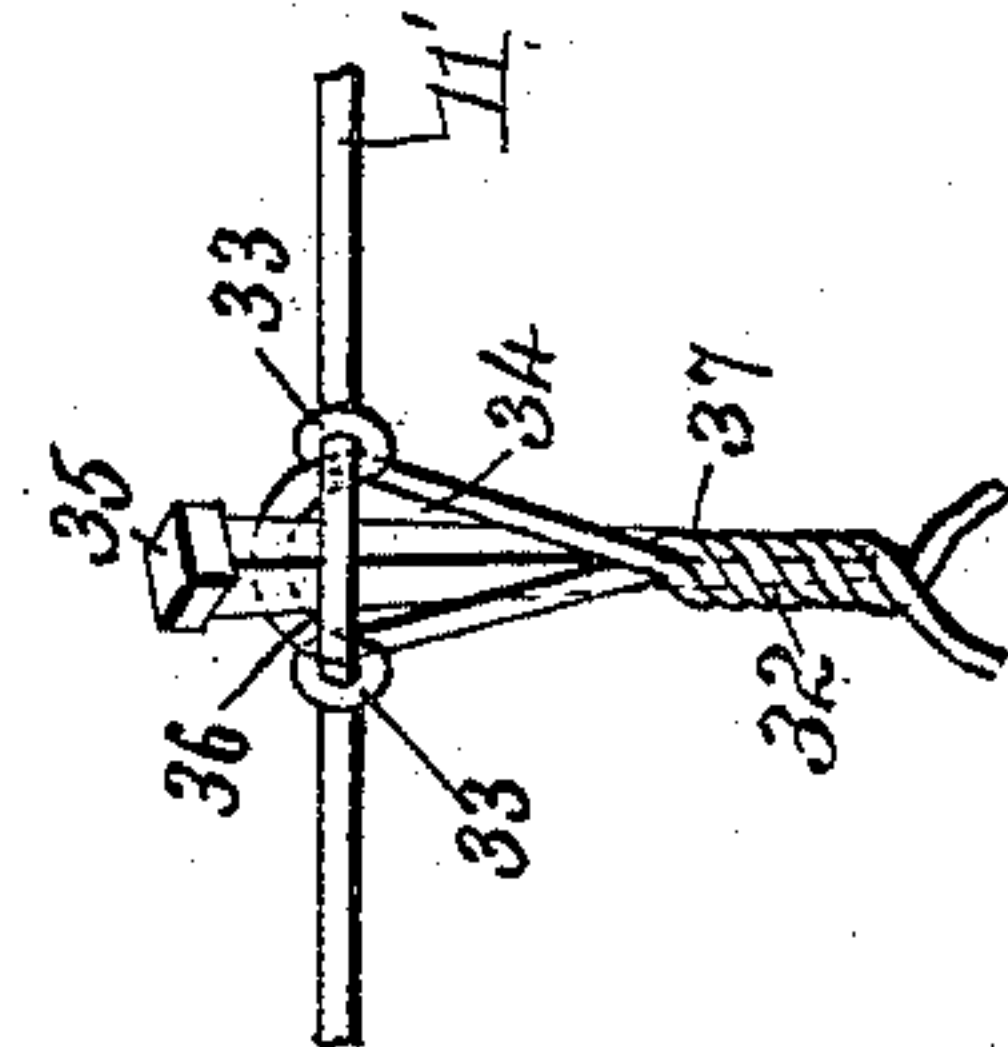
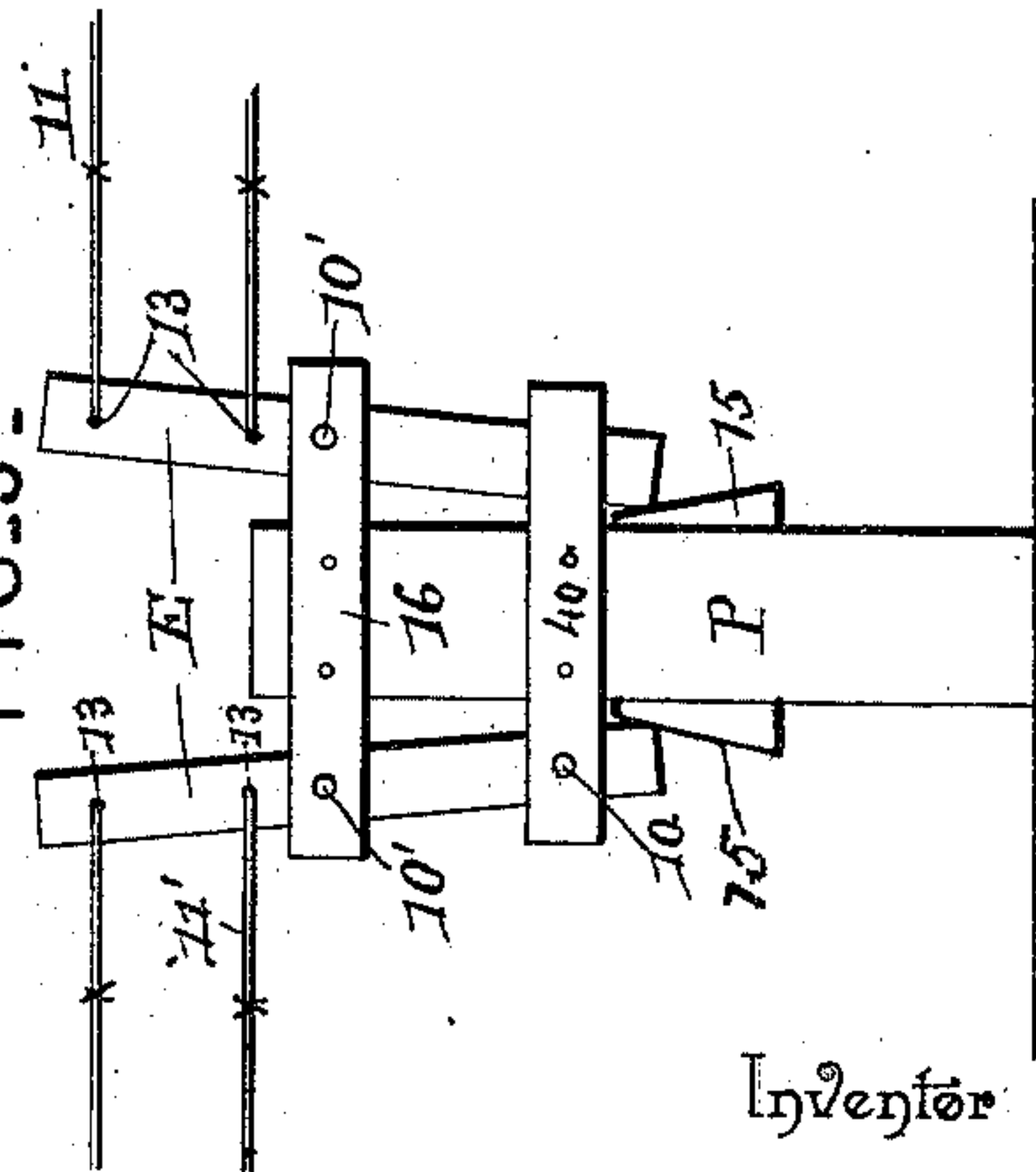


FIG. 3.



Witnesses

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FIG. 7.

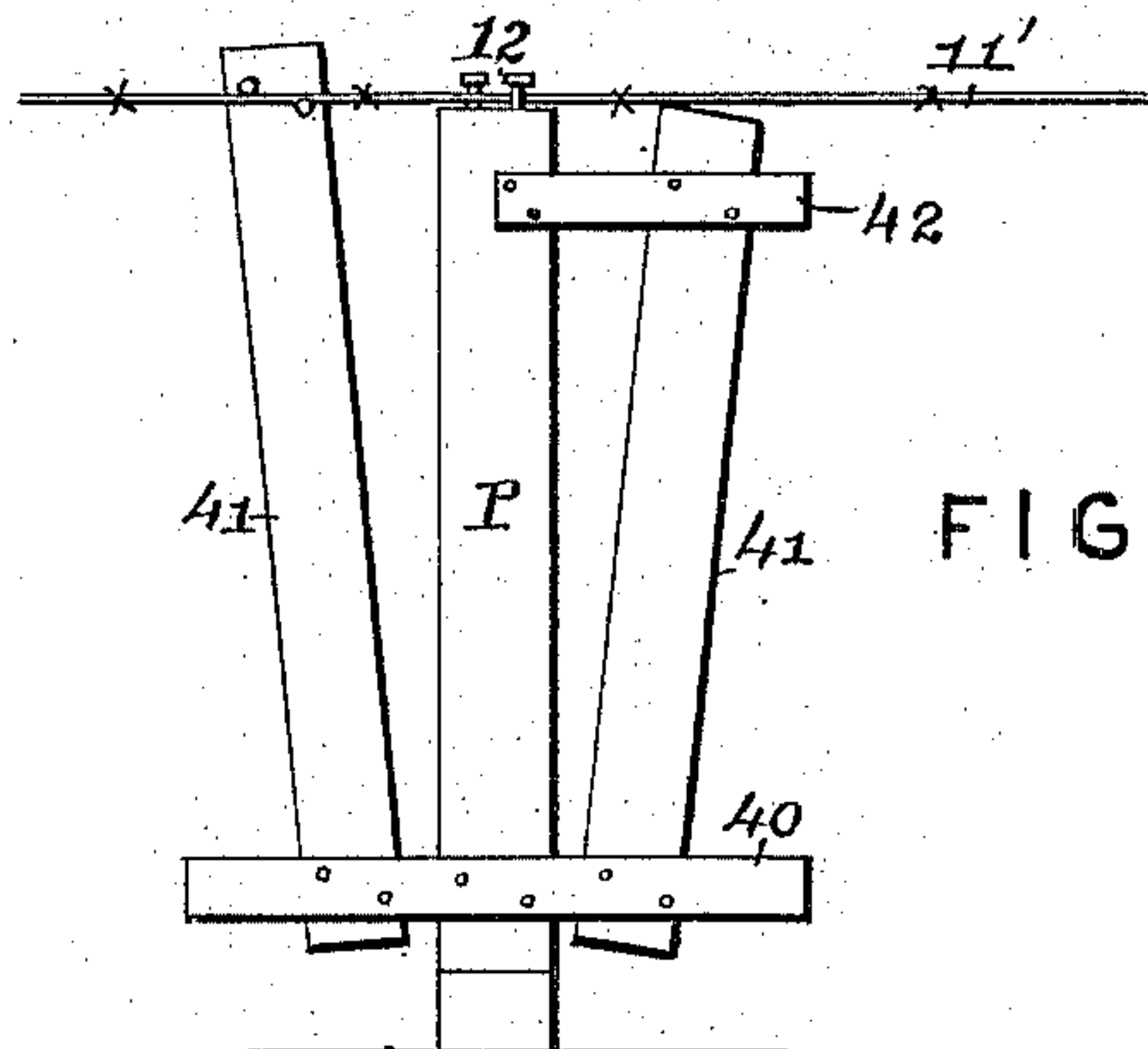
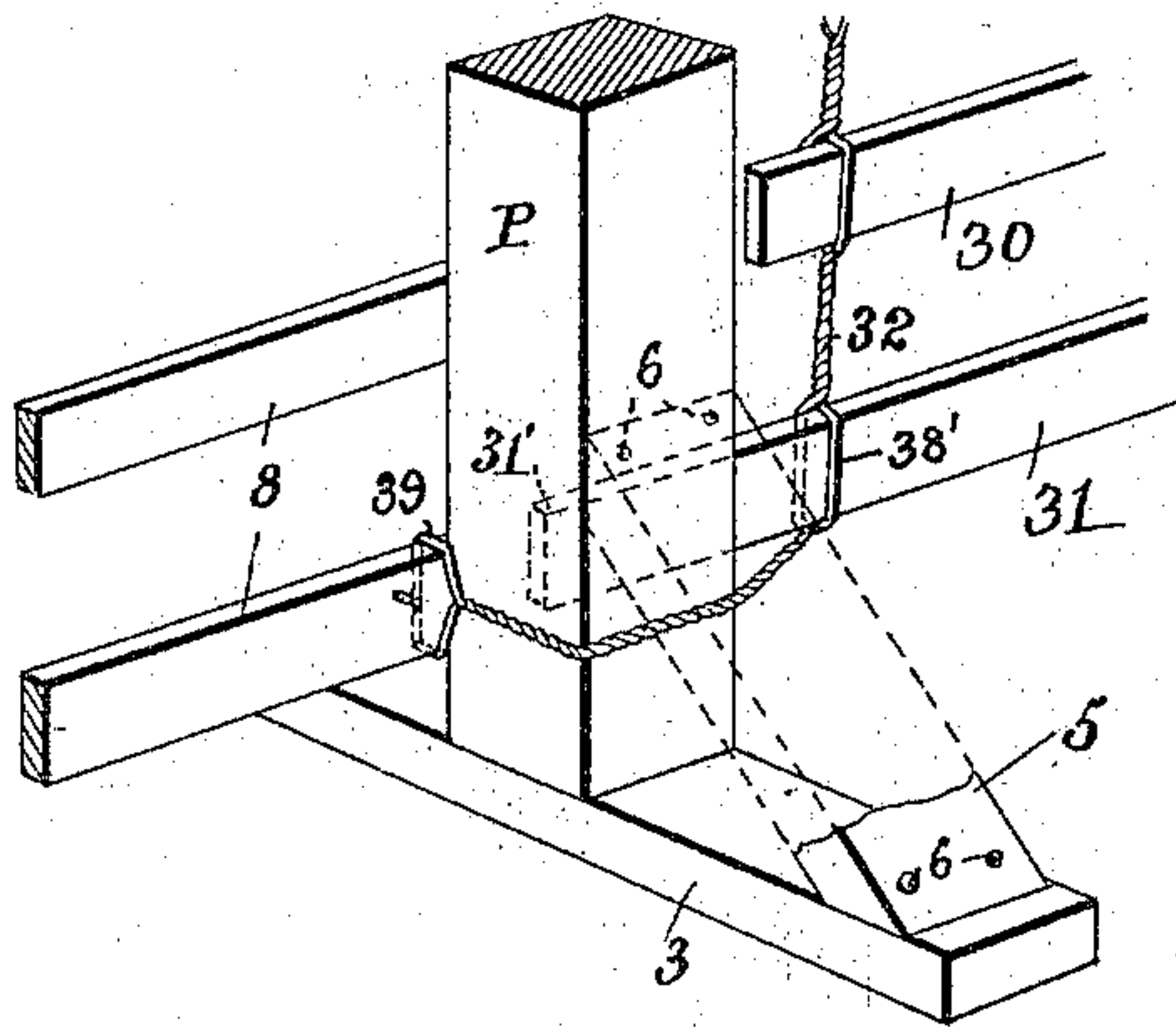


FIG. 8.

FIG. 9.

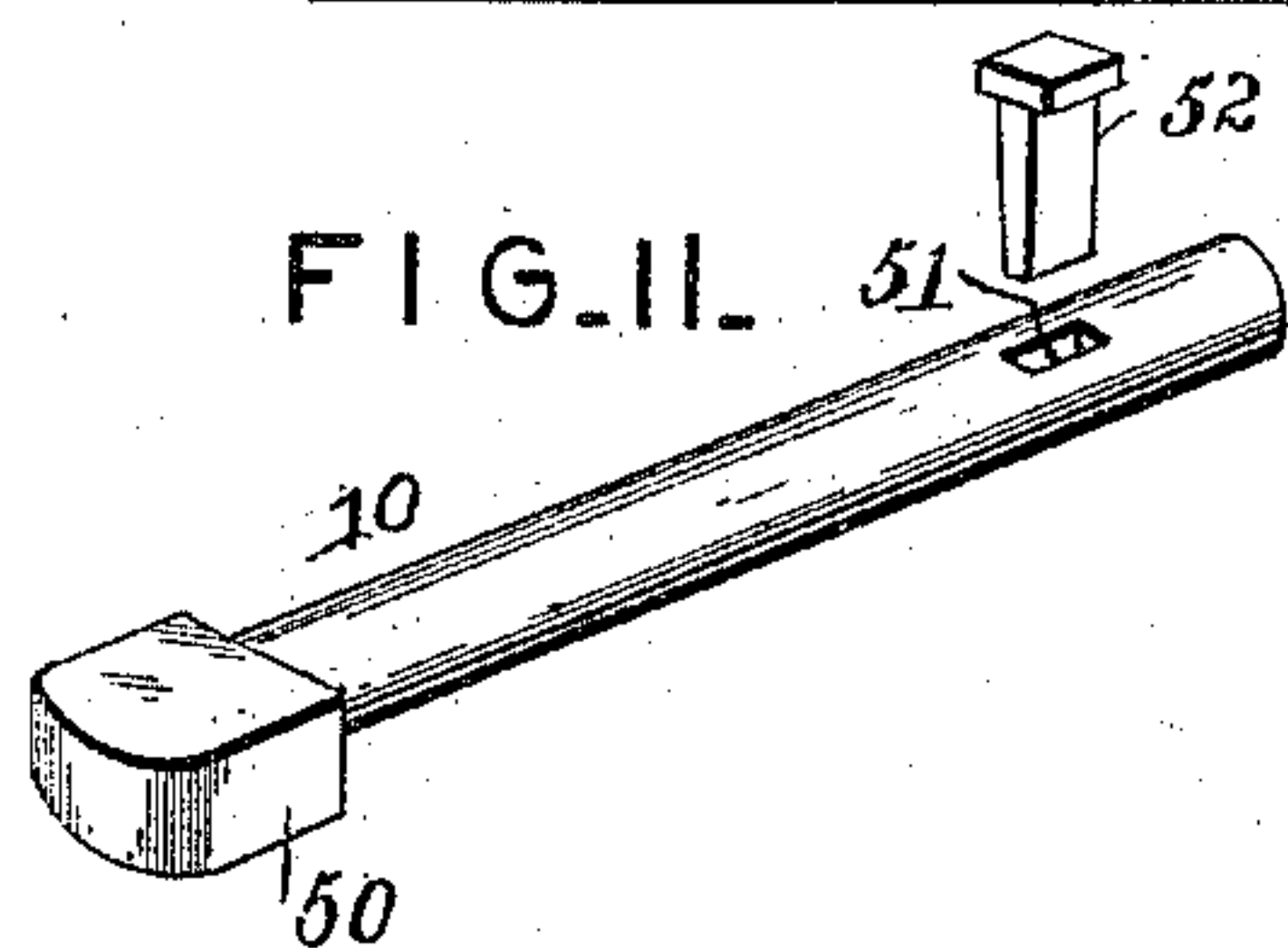
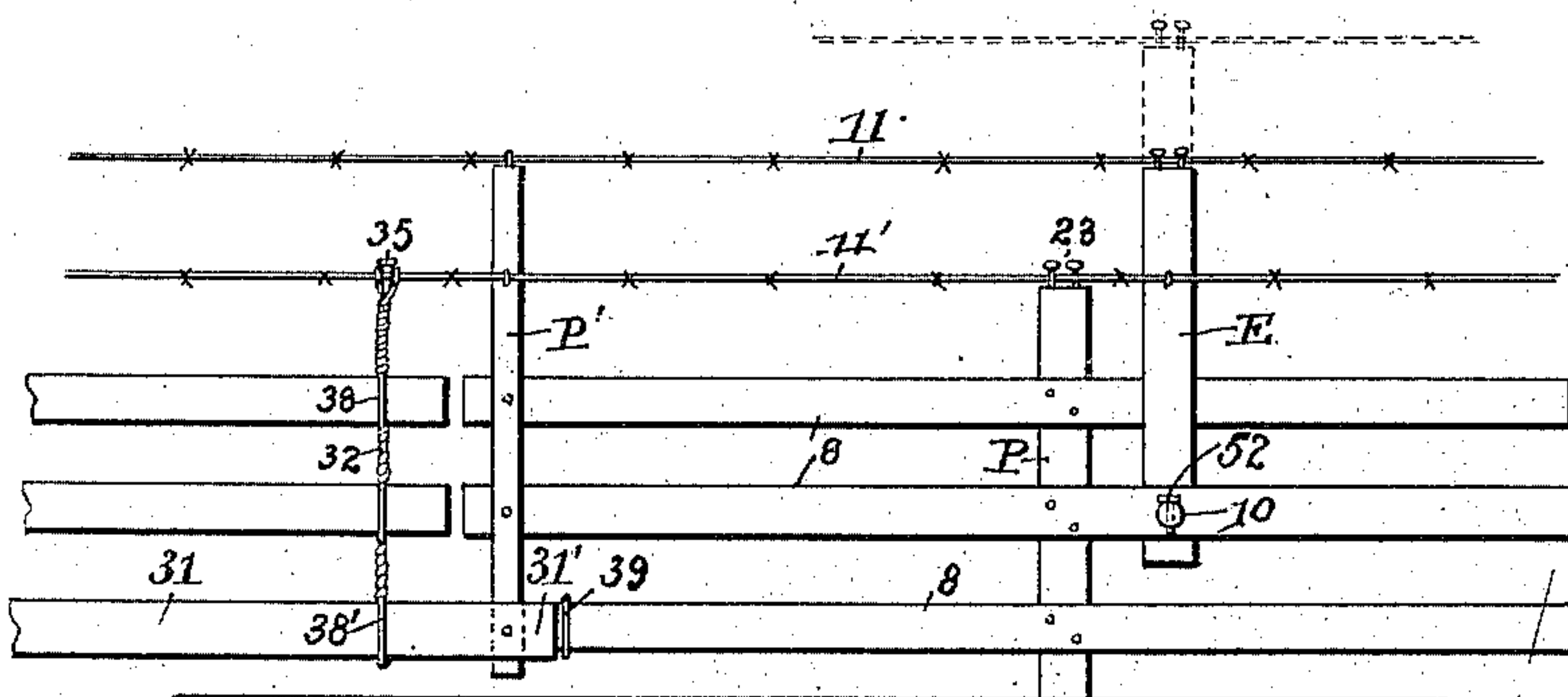
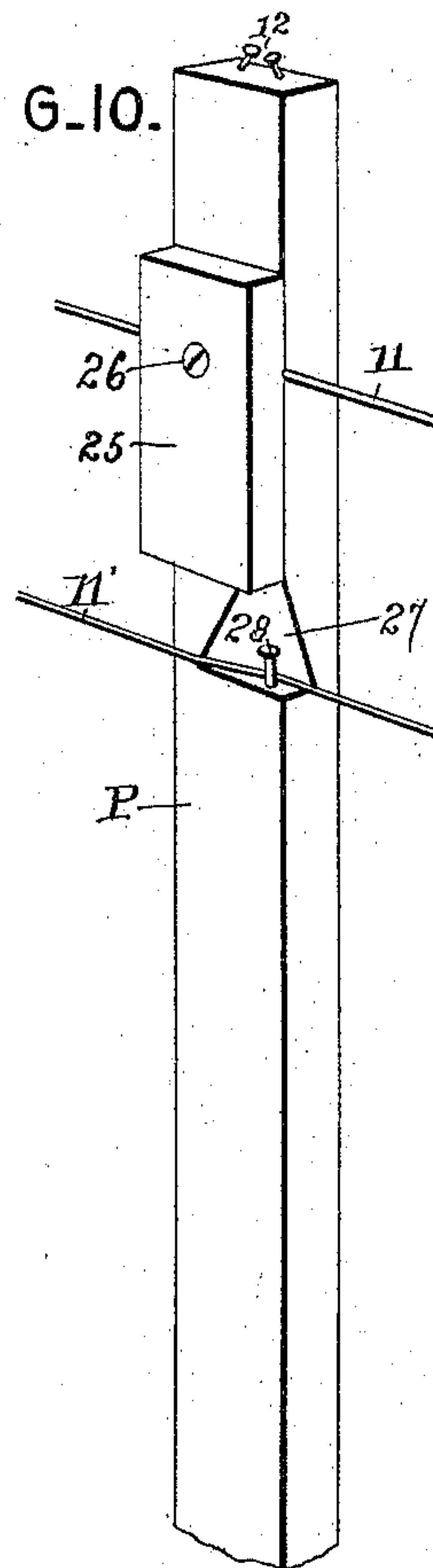


FIG. 11.

FIG. 10.



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UNITED STATES PATENT OFFICE.

JONATHAN GIBSON ORR, OF DANVILLE, ALABAMA.

PORTABLE FENCE.

SPECIFICATION forming part of Letters Patent No. 488,217, dated December 20, 1892.

Application filed October 16, 1891. Serial No. 408,890. (No model.)

To all whom it may concern:

Be it known that I, JONATHAN GIBSON ORR, a citizen of the United States, residing at Danville, in the county of Morgan and State of Alabama, have invented a new and useful Portable Fence, of which the following is a specification.

This invention relates to fences, and more especially to that class thereof known as portable fences; and the object of the same is to improve the details thereof as well as to construct a fence which can be made of pieces that would be unavailable for building an ordinary fence.

To these ends the invention consists in the various constructions hereinafter more fully described and claimed and as illustrated on the two accompanying sheets of drawings, wherein—

Figure 1 is a perspective view showing one suspended and one rigid panel of this improved fence. Fig. 2 is an elevation of one form of wire tightener, showing also a supplemental post. Fig. 3 is an elevation of another form of wire tightener. Fig. 4 is a perspective view of a post, showing two extension-members that are not adapted to tighten the wire. Fig. 5 is an elevation showing the crossed extension-members. Fig. 6 is an enlarged perspective view showing the manner of connecting the twist wire with the supporting wire. Fig. 7 is a perspective view showing the manner of securing the lower end of this twist wire. Fig. 8 is an elevation of a post, showing another form of the brackets. Fig. 9 is an elevation showing a single extension. Fig. 10 is a perspective detail of one of the posts of greater length than that generally used. Fig. 11 is a detail of the connecting pin.

This improved fence consists essentially of rigid panels R having posts P at their ends, wires preferably strung along the tops of the posts or connecting extensions E rising above said posts, means for tightening said wires, and suspended panels S preferably arranged so as to alternate with the rigid panels. When desired to move the fence, the wires are disconnected and rolled up (with the extensions if such are used), and the rigid panels and suspended panels may be piled

with the coil of wire onto a wagon or other conveyance, moved to the point desired, and again set up. To effect this portability of the fence, means are provided for rendering the extensions detachable from the posts and the suspended panels detachable from the supporting wire and capable of being disconnected from the posts—all as will hereinafter more fully appear.

Referring to the drawings, the posts P are preferably of flat timber, such as heavy boards or planks, and are slightly embedded in the ground as seen at 1 in Fig. 2, rest upon stones as seen at 2, or are mounted upon sills 3, in which latter case they have tenons 4 taking into sockets in the sills, and inclined braces 5 connect the rear ends of the sills with the backs of the posts being preferably secured by nails 6 or other detachable means. The posts may be made of short stock unsuitable for other work, in which case it becomes desirable to provide wires supported above the posts in order to make the fence of the required height, but when possible the post is continued for the usual length as seen in dotted lines at 7 in Fig. 1. The posts are connected in pairs by boards 8 which may be nailed to them as seen in this figure so as to form the rigid panels; or these boards may be nailed at their centers to a single post as seen in Figs. 5 and 9, in which case a supplemental post P' becomes necessary in order to hold the ends of the several boards 8 properly spaced. Such supplemental post may be of very light material and may rest upon or stand slightly above the ground. 9, 9 are stakes or plugs which may be driven in the ground adjacent the posts when the latter rest on stones 2 or at either or both sides of the lower rail or rails, so as to prevent the fence from being moved; and the tenon 4 may be continued through the sill 3, and a pin driven through with it as seen at 4' in Fig. 1, for the purpose of keeping said sill in position and fastening the tenon thereto.

The extensions E for increasing the height of the fence may be of other short stock too light to serve as posts but sufficiently strong to support the wires. In Fig. 9 the extension is simply interwoven between certain rails of a panel to one of which it is secured by a nail

or wooden pin 10, its upper end extending above the post and supporting one wire as seen in full lines or a plurality of wires as indicated in dotted lines. In Fig. 2 two such extensions are shown, and the wire 11' instead of passing between nails 12 or in other manner past the extension, is divided and secured as at 13 to the two extensions. But the tension of this wire when so attached would draw the extensions apart, and hence I provide a loop 14 embracing the upper ends of the extensions, and drive wedges 15 into the loop-ends outside the extensions when it is desired to tighten the wire.

In Fig. 3 the extensions are not only secured as at 10 to a lower rail as in the other figures, but are also connected as at 10' to an upper rail or to cleats 16 (hereinafter described), the wire or wires 11 are connected to the upper ends of the extensions, and the wedges are driven between their lower ends and the posts so as to resist strain on the said extensions and to hold the wires taut but without the necessity for the loops 14.

At the left side of this figure the extension E is secured at two points 10 and 10' and hence is not capable of being operated to tighten the wire.

In Fig. 5 I show the extensions E as crossed as at 17 above the post, resting as at 18 on the corners of the post astride of the wire 11', passing down on opposite sides of the panel rails, and secured thereto either by wire ties 19 or by pins 10 as above described. The ties can be reduced in length or the pin can be set in another of the holes 10'' when it is desired to tighten the wire—the extensions in this case rocking over the corners 18 of the post.

In Fig. 4 the extensions E stand against the opposite sides of the post and rest at their lower ends in sockets 20 carried by the post, and the latter has cleats 16 secured to its front and rear faces, over which extend nails 21 projecting from one side of the extensions. In this manner the extensions are supported and prevented from slipping through the sockets 20; and the wire 11' preferably passes over the nails 21 to hold the extensions down, and behind a nail 22 rising from one of the cleats 16, whereby the wire is prevented from slipping off said cleat. At other times the wire passes between two inwardly-inclined nails 12 driven into the top of the post as best seen in Fig. 1, but of this wire more anon.

In Fig. 1 I have shown one of the extensions E just described, because this view illustrates the end of a section of fence, and it will be seen that the post at the left of the figure is supported by an inclined brace-wire 24 extending from one of the nails 12 down to a stake 9' driven in the ground. With this construction of extension, the wire 11 passes across the post before it is secured to the extension, and hence the tension of the wire draws the extension against the post the same as would be the case with the device

shown in Fig. 5, except that in this instance no means are provided for tilting the extension to tighten the wire.

For the sake of economizing material the fence is built of as few rails as possible, preferably planks set up edgewise, but sufficiently near the ground and near each other not to permit small stock to crawl through, and while these rails give visual notice of the location of the fence, the entire upper portion of the latter is preferably of wire which may be plain, flat, twisted, or barbed. This prevents larger stock pushing against or jumping over the fence, braces the same, is easily secured in place and rolled for transporting, and is light, cheap, and durable. The lower wire 11' of Fig. 1 is preferably always used and extends across the tops of the posts when they are of the height shown, being secured between nails 12 as above described, and this wire I shall call the "supporting wire." The other wire or wires 11 are preferably carried by the extensions above described, although as seen in Fig. 10 the post may be long enough to support these wires also. In that case the uppermost or rider-wire passes between the nails 12 as above described, and the other wires may be secured to the post by stapling or in any suitable manner—though I prefer one of the constructions shown in this figure when the fence is to be portable, because the wire can be disconnected from the post when either of such is used.

25 is a block preferably secured to one face of the post by a screw 26, the wire passing behind the block and over the screw.

27 is a notch cut in one corner of the post and 28 is a nail rising from the lower side of this notch, the wire passing behind the nail and resting in the notch. I prefer the latter construction for mid-length high posts, and the block construction for the corner or end posts of the various sections.

Fig. 11 shows the connecting pin 10 above described which is of wood with a head 50 at one end and a hole 51 near the other end through which a nail 52 passes.

In building this fence, after the rigid panels have been set up along the line of fencing, and the posts connected by the supporting wire (and the extensions connected by the wires above if they are used), the suspended panels are placed in the vacancies caused by spacing the rigid panels as described. Each suspended panel consists of a number of short rails 30, a longer lower rail 31, and a twisted wire 32 at each end of the panel embracing the several rails and connected with the supporting wire 11' in the manner best seen in Fig. 6. That is to say the wire 32 is doubled at its center making a loop which is passed over the supporting wire as at 33, then through its own body as at 34, and a nail 35 is passed down through the bend 36, the strands of this wire being then twisted up to a point 37 above the lower end of the nail which prevents the latter flying out of place. Continuing the

twist downward, loops 38 are formed around the ends of the several rails, and at the back of the lower rail 31 the loop 38' is drawn longitudinally of the fence behind the post P and tied or looped as at 39 around the rigid rail 8 at the other side of the post—as seen in Fig. 7. This prevents the lower rail 31 from swinging forward, and by being longer than the others in this suspended panel, its ends 31' lap the posts and rest against them on their front sides as seen in Fig. 1, or lap the supplemental posts P' in the same manner as seen in Figs. 2 and 9. In this case (Fig. 9) I have shown these ends 31' secured to the supplemental post by the same nail or pin which secures the rigid rail 8 thereto, and this is a construction I sometimes employ. It may not be always possible or desirable to have the lower rail 31 long enough to lap over onto the post, and in such case I provide a bracket 40 which I nail or otherwise secure to the face of the post and which projects laterally beyond the same and behind the end of the lower rail 31. These brackets may extend to both sides of the post P as seen in Fig. 3, to only one side thereof as seen in Fig. 1, or—when the suspended panels are very short—they may extend for some distance to the sides of the post as seen in Fig. 8. In the latter case there will of course be openings of considerable size left between the ends of the suspended panels and the adjacent edges of the posts, and in order to prevent stock crawling through these openings I provide upright rails 41 which are secured to the bracket 40 and to an upper bracket 42 as seen at the right of this figure or which may be connected at their upper ends with the supporting wire 11' as seen at the left of this figure. These upright rails fill the openings at the sides of the posts and also strengthen the fence.

To take down this fence, the wires are first removed from the posts and extensions, and this is easy because they are not positively connected thereto except at the ends of the fence or of its sections, and the wires are rolled upon the end-posts or extensions to which they are thus connected. Before the supporting wire can be removed the nail 35 of each twist-wire must be withdrawn, and this frees the upper end of each suspended panel. Its lower end could be connected at 39 with the rigid rail by the same form of connection shown in Fig. 6; but whatever this connection is it must be broken in taking down the fence, and the suspended panels are then free and can be piled on the wagon. The rigid panels with their posts are next piled on the wagon, and to accomplish this the posts are lifted off the stones 2, drawn out of the ground as at 1, or disconnected from their bases 3 which latter are also loaded into the wagon.

In the use of the suspended panels herein-

before described, it will be seen that each panel serves to build more linear fence than its length because its ends are not in contact with the posts adjacent. If the spaces between such ends and posts are too large, they are filled up as seen in Fig. 8, but such spaces are not usually of sufficient size to necessitate this construction.

I am not aware of the existence of a fence which has similar vertical openings between its rails and supporting posts, and I consider this an important feature of my invention.

All wooden members of this fence are given a thick coat of paint or oil where they come in contact with each other or with the ground, thereby preventing the decay of the wood; and all metal portions of this fence are preferably either of galvanized iron or painted, to prevent their rusting.

What is claimed as new is—

1. In a fence, the combination of a pair of posts having vertical extensions, a supporting wire running from one post to the other, and another wire connected to said extensions and located above the tops of said posts, a loosely-suspended panel consisting of parallel bars, and connecting-wires vertically disposed at the ends of the bars, said connecting-wires having their upper ends detachably secured to the said supporting-wire, substantially as described.

2. In a fence, the combination with a horizontal supporting wire, and supports therefor; of a suspended panel comprising bars connected at each end by an upright twisted wire, the bend at the upper end of said wire passing over the supporting wire and through its body, and a nail removably inserted therein.

3. In a fence, the combination with posts, a rigid panel supported thereby, and a supporting wire carried by the posts, of a suspended panel on the side of a post opposite a rigid panel and consisting of bars and a twisted wire, the latter being connected at its upper end with said supporting wire formed into loops embracing the rails and having its lower ends extending from the lowermost loop behind the post and connected with the rigid panel, substantially as described.

4. In a fence, the combination with a post, and a horizontal bar secured thereto; of an extension at each side of and rising above the post, said extension being pivoted to said bar, a wire connected to each extension and leading away from the post, a loop embracing the extensions, and a wedge in each end of the loop outside the extension.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JONATHAN GIBSON ORR.

Witnesses:

H. H. SPARKMAN,
L. P. TROUP.