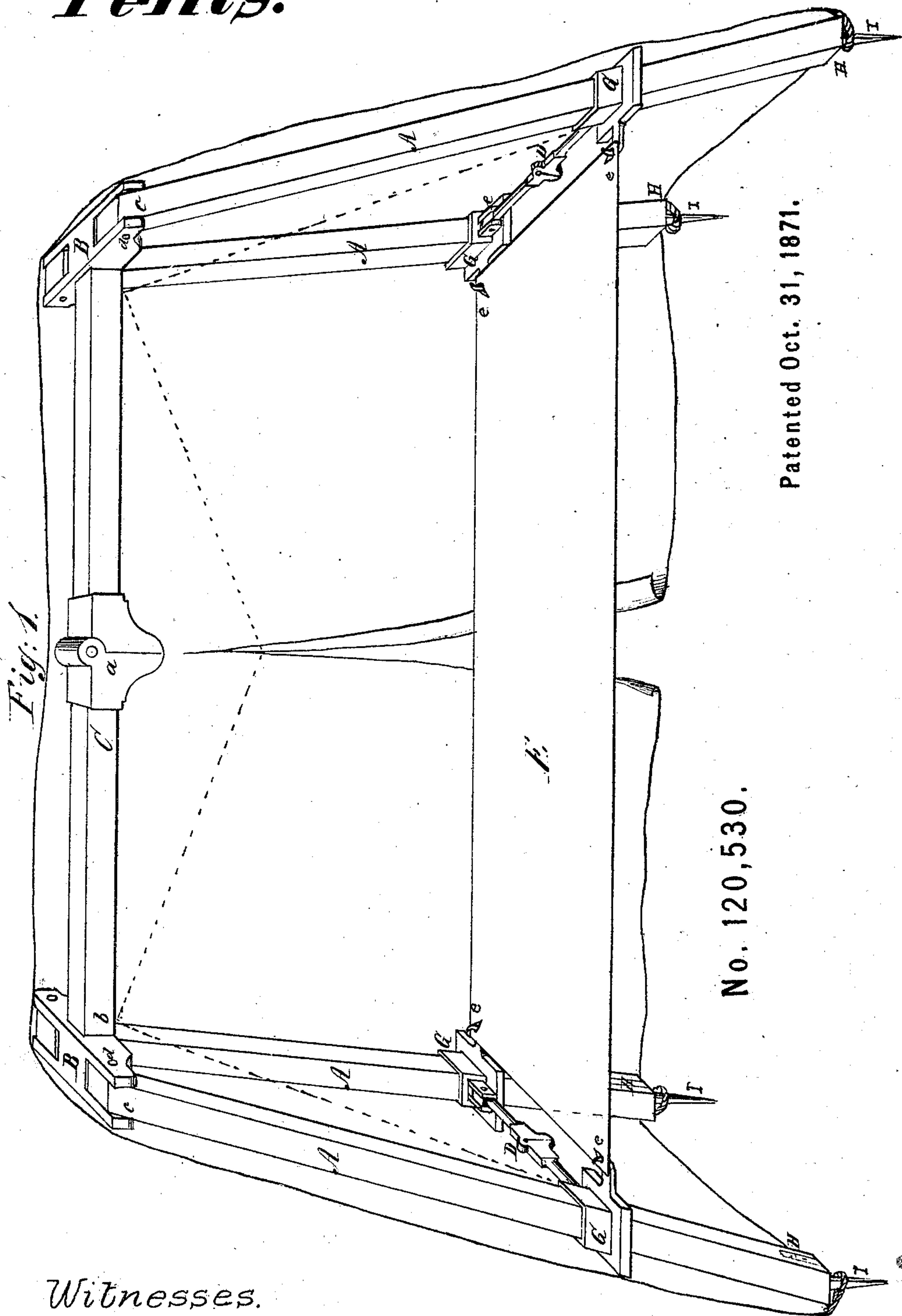


W^m H Penrose's Improv^d in Field Cots & Tents.



Patented Oct. 31, 1871.

No. 120,530.

Witnesses.

J. K. Ellsworth,

A. C. Rawlings.

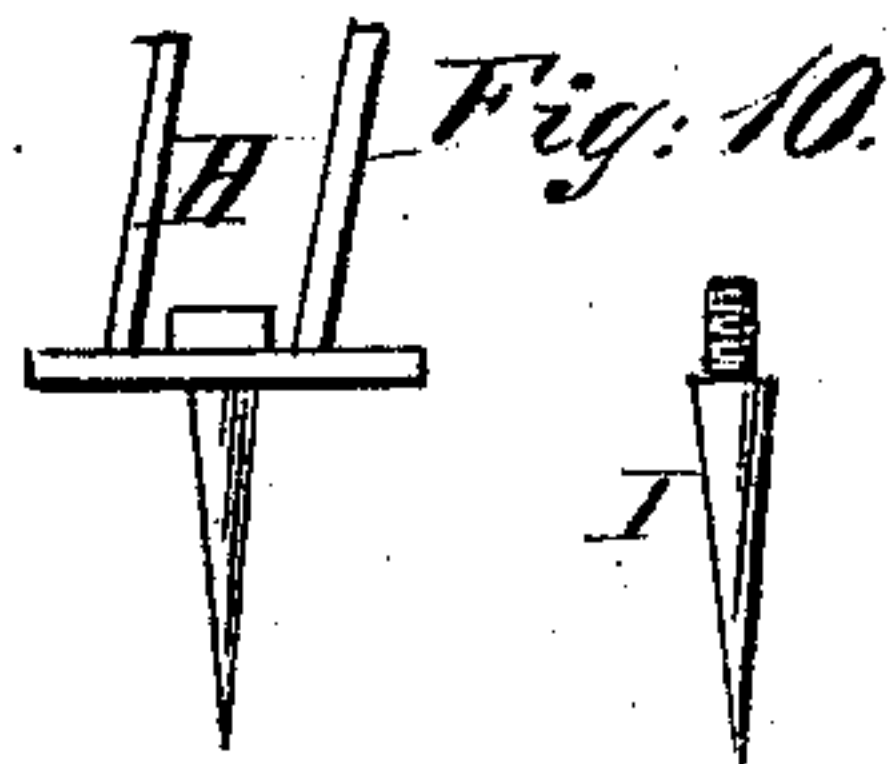
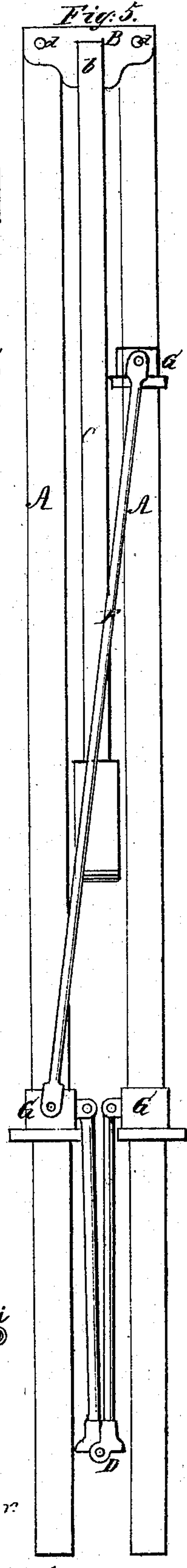
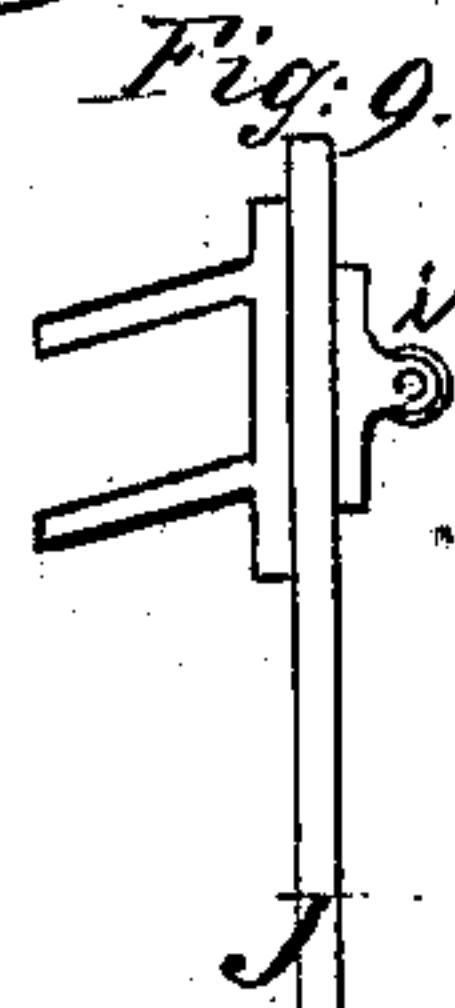
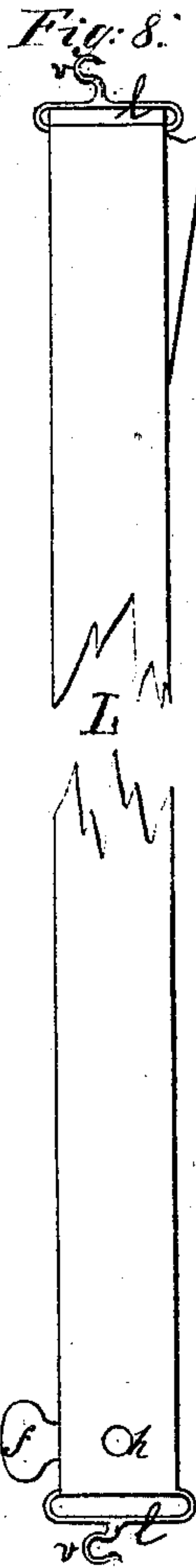
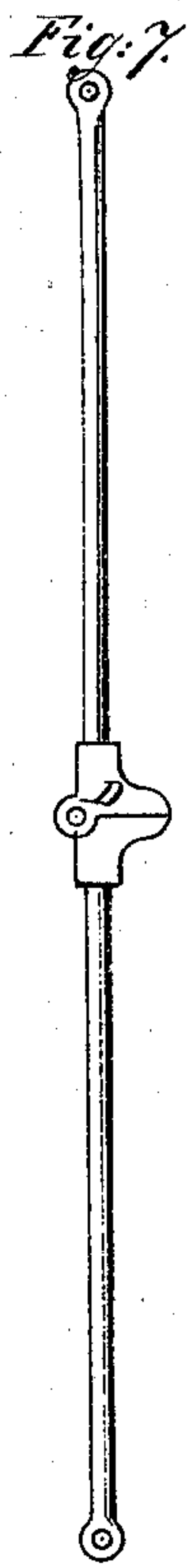
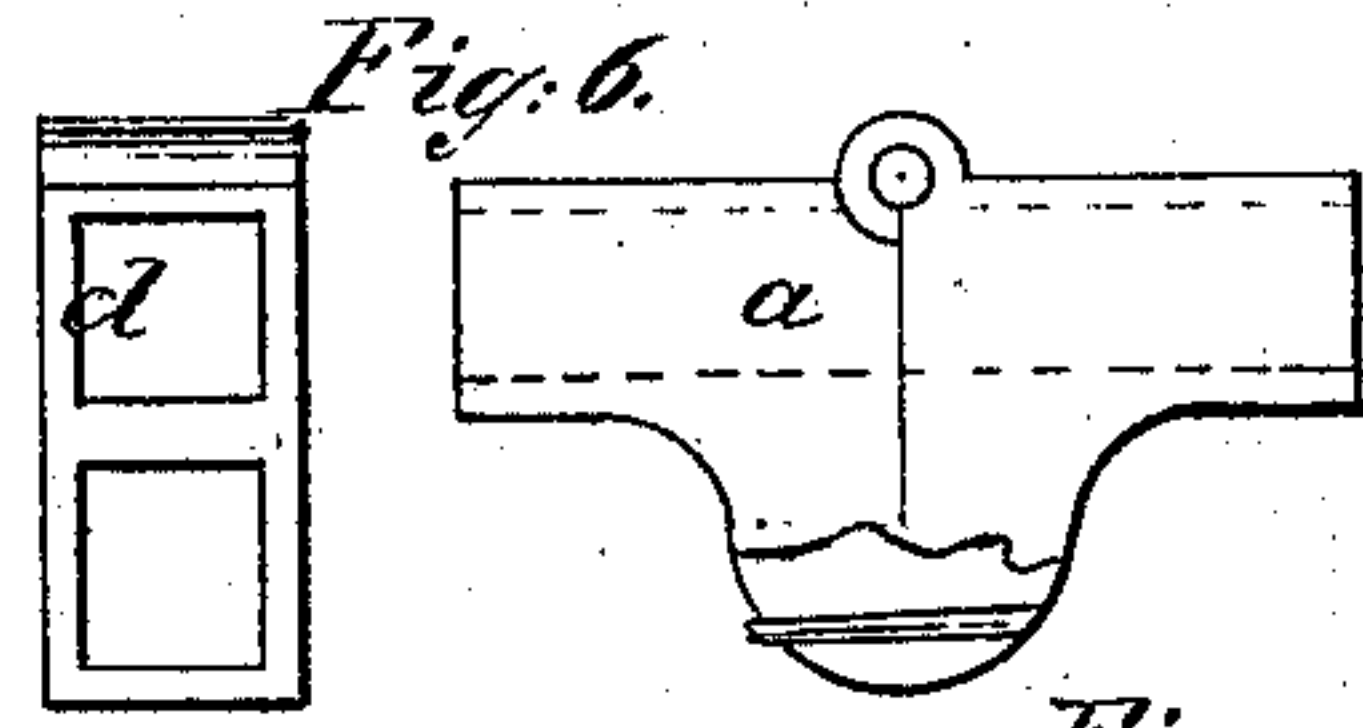
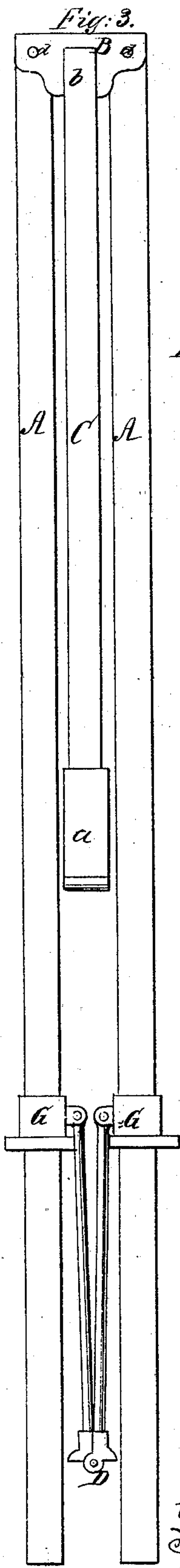
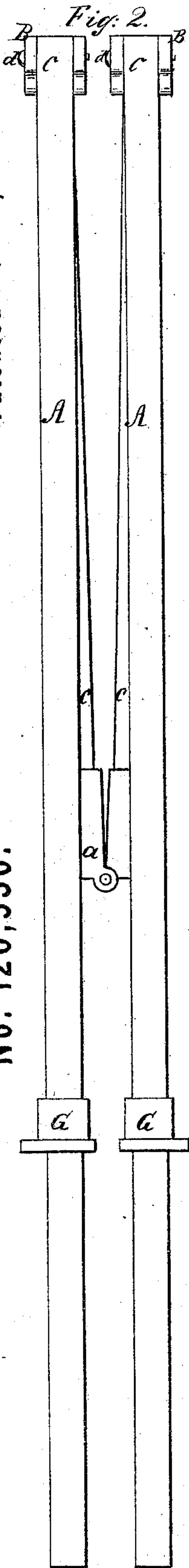
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W^m H. Penrose's *Impr^{vd}* Field Cots & Tents.

2 Sheets--Sheet 2.

Patented Oct. 31, 1871.

No. 120,530.



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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN COMBINED TENTS AND COTS.

Specification forming part of Letters Patent No. 120,530, dated October 31, 1871; antedated September 30, 1871.

To all whom it may concern:

Be it known that I, WILLIAM H. PENROSE, of Fort Lyon, Bent county, Colorado, have invented certain Improvements in Cots and Tents, of which the following is a specification, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a perspective view, representing the bunk set up for use, the dotted lines indicating the position of the bipod before the bar C is extended. Fig. 2 is a side view of the bipod and the bar C folded. Fig. 3 is an end view of the same, with the bar D folded. Fig. 4 is a side view and an end view of the head-plate B. Fig. 5 is an end view of the bipod, with solid extension-bar F and jointed extension-bars C D. Fig. 6 is an end view and a side view of the hinge of the extension-bar C. Fig. 7 is a view of the extension-bar D. Fig. 8 is a section, showing each end of the air-sack, with the pillow, bellows, and air-tube. Fig. 9 is a view, showing the structure of the foot-bar and sockets when employed; and Fig. 10 is a view of the foot-socket with the pin inserted and also pin detached.

Similar letters of reference in the accompanying drawing indicate corresponding parts.

My invention consists in the construction of a combined portable field-cot and tent, and the adaptation of an air-cushion mattress for use in connection therewith, substantially as hereinafter described, the object of the whole being to promote the comfort, convenience, and health of the soldier, and to economize space, weight, material, and cost. To this end the invention consists in the several devices composing the cot, the tent, and the air-mattress, which I will now proceed to describe in detail.

The cot, bunk, or bedstead consists of four up-rights, A A A A; two horizontal hinges or head-plates, B B, to which the up-rights are articulated, as shown in Figs. 1, 2, 3, and 5; two lateral braces made to fold as shown at D, or in one rigid bar, as represented at F; one longitudinal folding-bar, C, provided with a locking-hinge, *a*; four or more thimbles, G G G G, fitting upon the standards A; and one sacking-bottom, E, of canvas or other suitable material, with eyes *e* adapted to catch over hooks upon the thimbles in order to hold the bed-bottom E, as shown in Fig. 1. In addition to these necessary parts there may be

Fig. 10, to hold the feet of the standards A A in place, each one being composed of a socket, H, to receive the foot, and a pin, I, screwed into it to project down into the ground and keep the whole rigidly in position; or, instead of such arrangement, two foot-supporters, constructed as shown in Fig. 9, may be used, each consisting of a long bar, J, with a foot-socket, H, attached near each end; and, if preferred, a caster, *i*, underneath. The former construction is adapted to the field and the latter to the house.

The details of construction of all these parts will be readily understood from the drawing, which represents the apparatus, in Fig. 1, as set up and ready for use; and in Figs. 2, 3, and 5 as folded and ready for transportation or packing away. The hinges *a* are so constructed that when the bar C is extended the plates or leaves of the hinge will lock and hold the bar in that position. This result is easily effected by attaching a spring-catch to one leaf, adapted to hook over a shoulder on the other whenever the bar is fully extended; and preferably I construct the snap so as not to lock until the bar is arched a little, as seen in Fig. 1, in which case the bar supports the weight to better advantage, and has a tendency to press out the upper ends of the standards and keep the bottom E more tightly strained. The bars D, when employed, are jointed to fixed thimbles G, and are constructed very similarly to the bar C except that they may be made much smaller, and the snap-catch may be omitted. When the rigid bar D is substituted for the folding-bar F one end of it is pivoted to a fixed thimble and the other to a loose thimble sliding on the opposite leg of the bipod, so that, although the bar itself is inflexible, the legs can be folded up with it attached, as represented in Fig. 5. All the parts referred to may be made of any suitable materials, and molded or otherwise ornamented as the fancy may suggest. The tent is constructed as represented in Fig. 1, the frame being put together as above described, and a tent-cloth of suitable shape being thrown over it and secured at the corners by means of loops passing around the pins I. The air-mattress L is made of canvas covered with vulcanized rubber or otherwise rendered air-tight, and is about four inches thick, its length and width being adapted to the size of the occupant. The sack is furnished with an air-pillow, *f*, at one end connected internally with

it, and also an escape-tube, *h*, and a bellows, *g*, for the purpose of readily and conveniently filling it. Thus constructed, it is supported by links *l l* at each end, terminating in hooks *v v*, adapted to secure the corners of the sack to the thimble *G*, leaving the whole body of the mattress clear of contact with anything beneath. Suitable hooks attached to the standards or the bar *C* by thimbles or otherwise, may be provided for gun-racks, and to hold knapsacks, clothing, &c., when in the field.

It is evident that the canvas bottom *E* or the air-sack *L* may be employed at pleasure, and that with either of them the apparatus may be used in the field as a tent or tent and bunk combined, while it can be used in-doors, in hospital buildings and elsewhere, simply as a bunk or bed, with or without curtains, as may be preferred by the occupant.

Having thus described my invention, what I

claim as new therein, and desire to secure by Letters Patent, is—

1. The combination of the uprights *A A*, jointed to cap-plates *B*, with the folding-bar *C*, the thimbles *G G*, and the extension-bars articulated to the thimbles, and connecting the lower ends of the uprights, when constructed to operate substantially in the manner and for the purposes set forth.

2. The combination of the frame, above described, consisting of the parts *A*, *B*, *C*, *D* or *F*, and *G* with a bed-bottom supported by the thimbles *G*, substantially as described.

3. The combination of said frame with the bed-bottom *E* or *L* and the tent-cloth covering the whole, substantially as described.

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Witnesses:

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