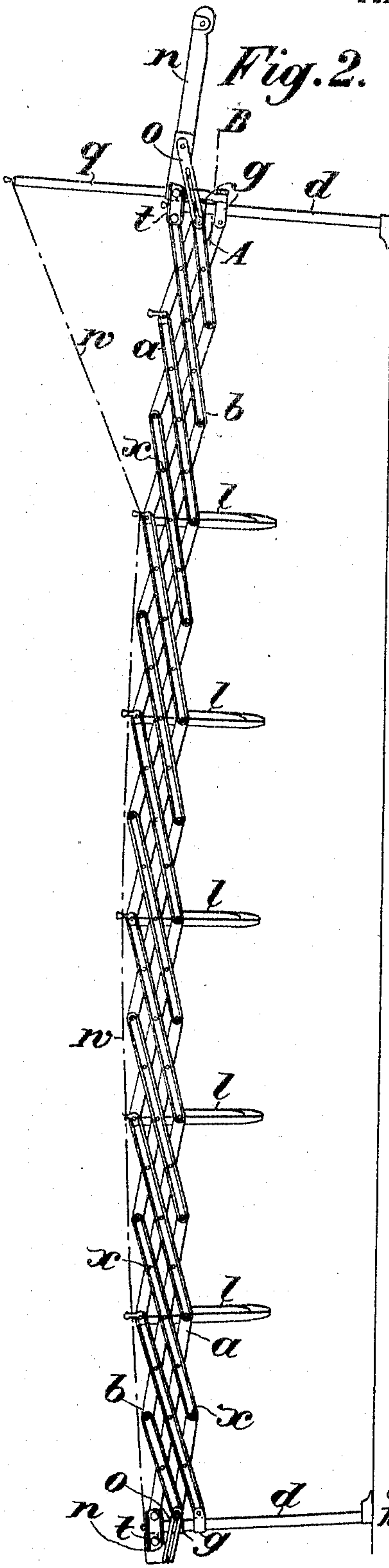
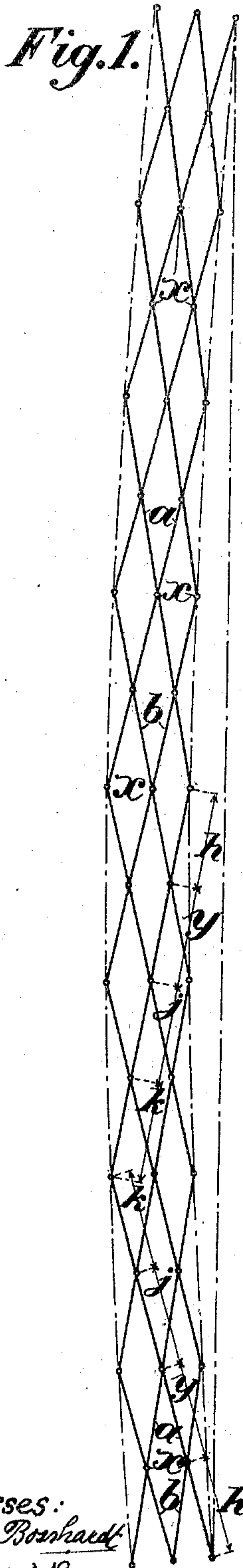


No. 780,278.

PATENTED JAN. 17, 1905.

K. FREULER.
COLLAPSIBLE STRETCHER.
APPLICATION FILED JULY 2, 1904.

2 SHEETS--SHEET 1.



Witnesses:
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No. 780,278.

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APPLICATION FILED JULY 2, 1904.

2 SHEETS—SHEET 2.

Fig.3.

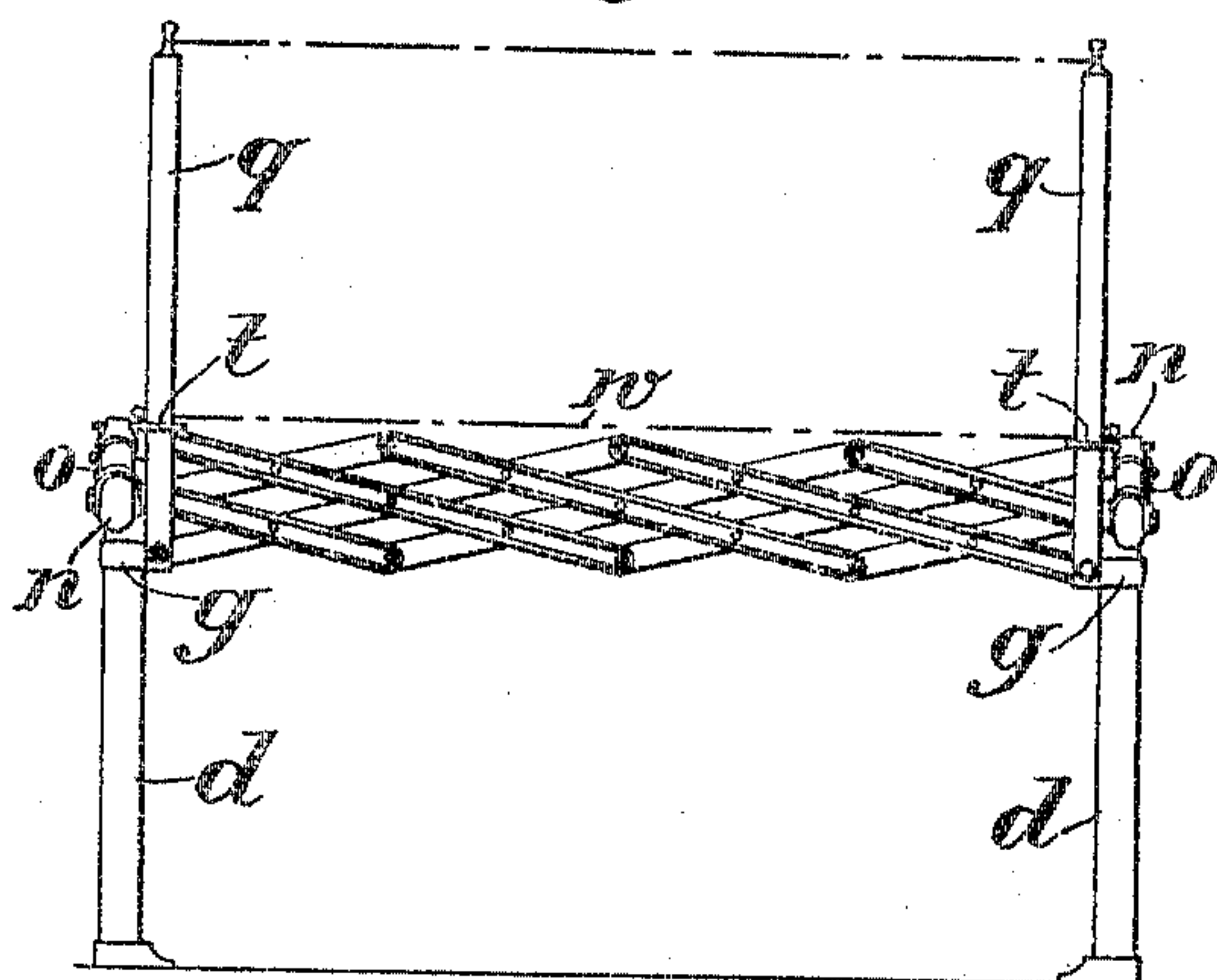


Fig.5.

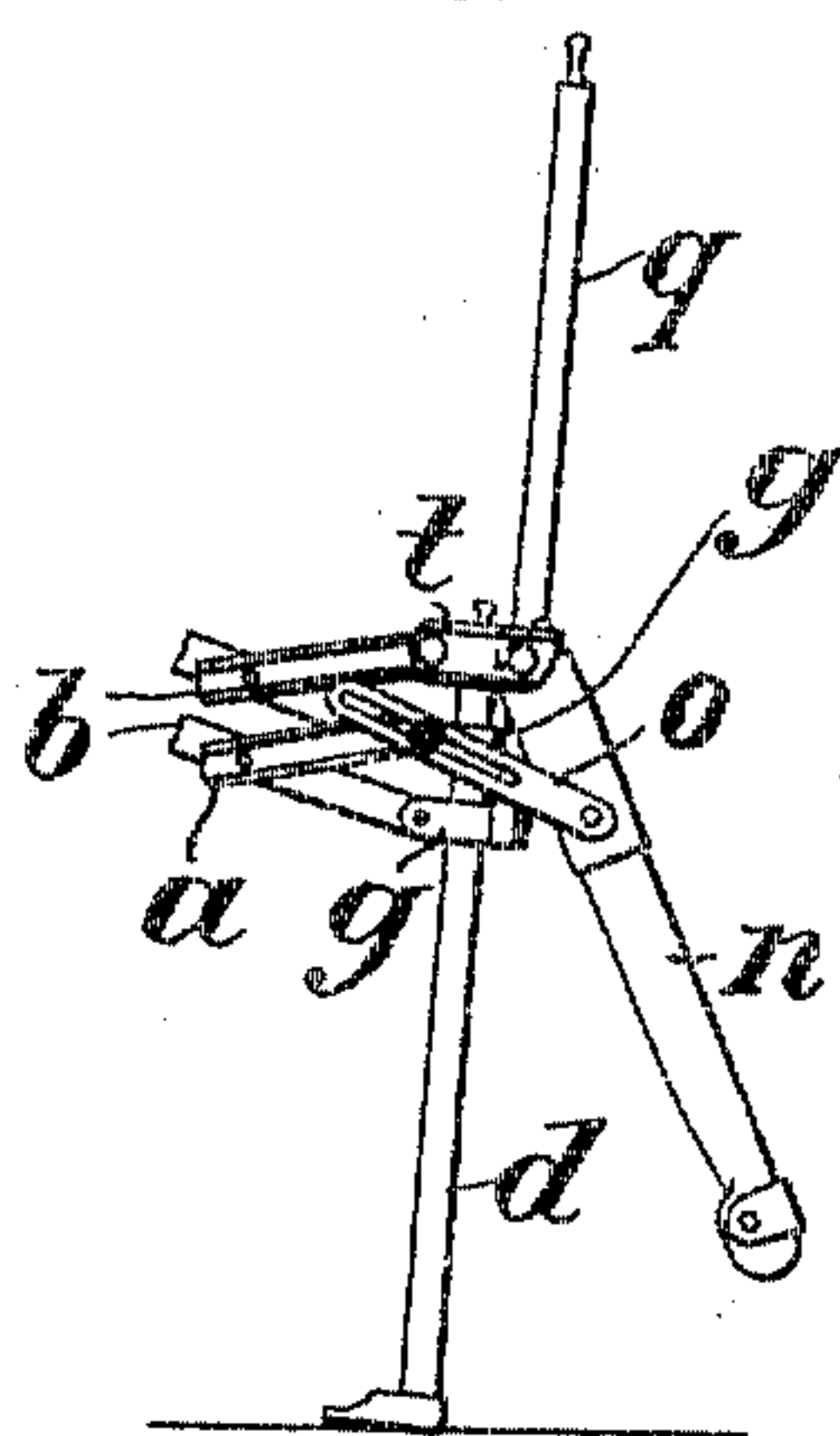


Fig.4.

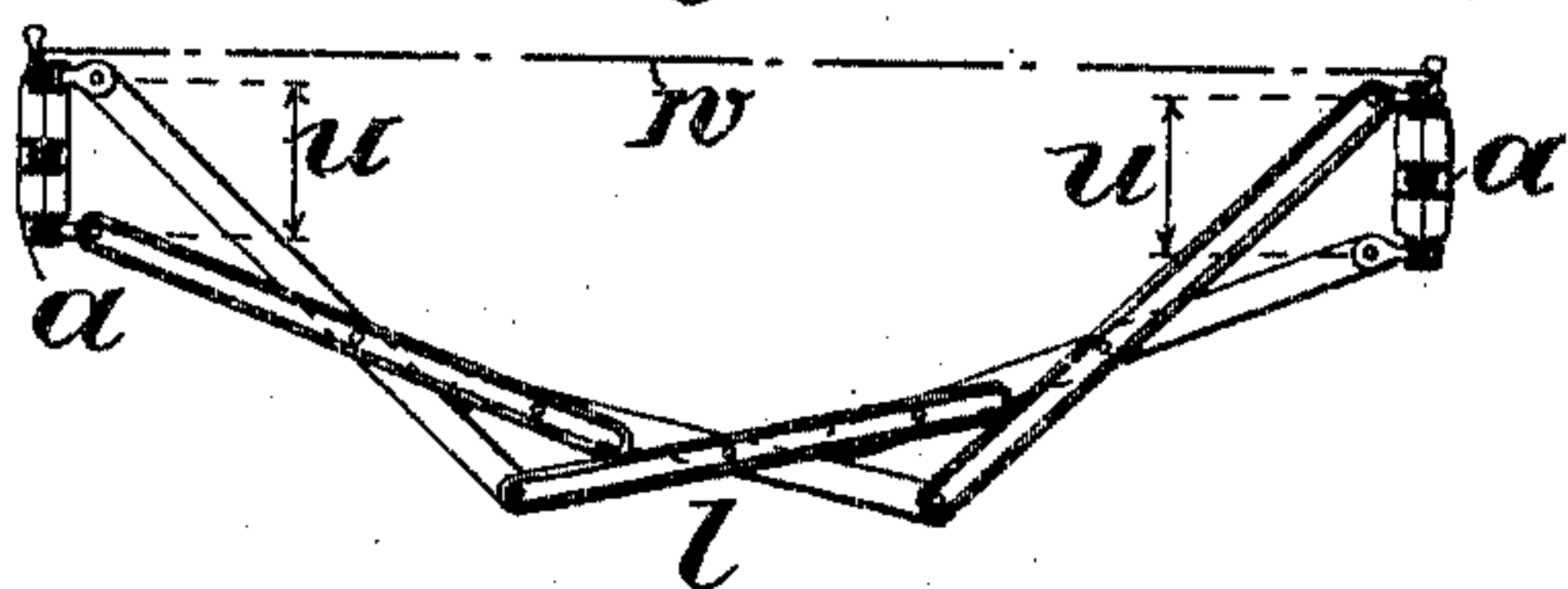


Fig.6.

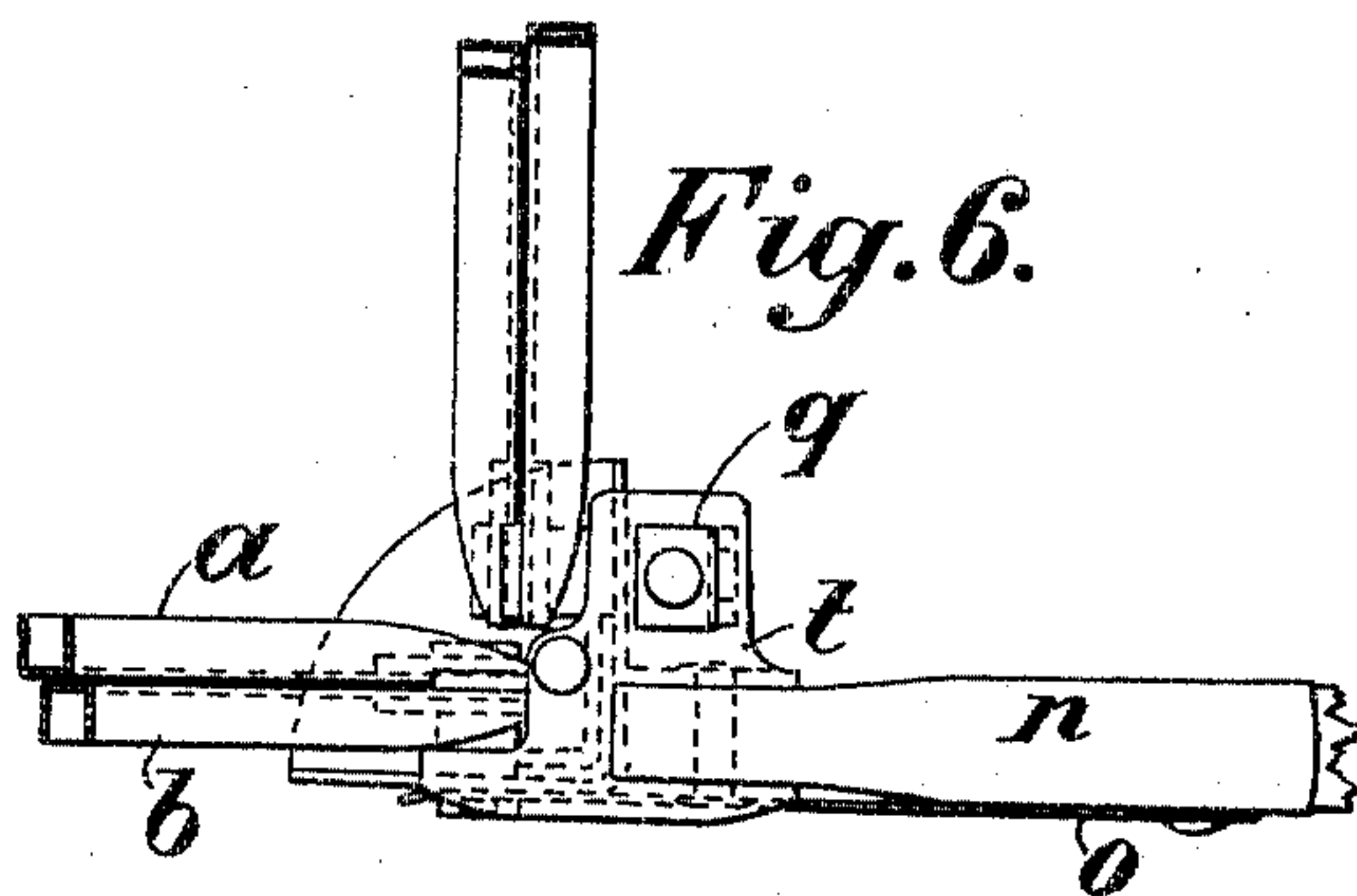
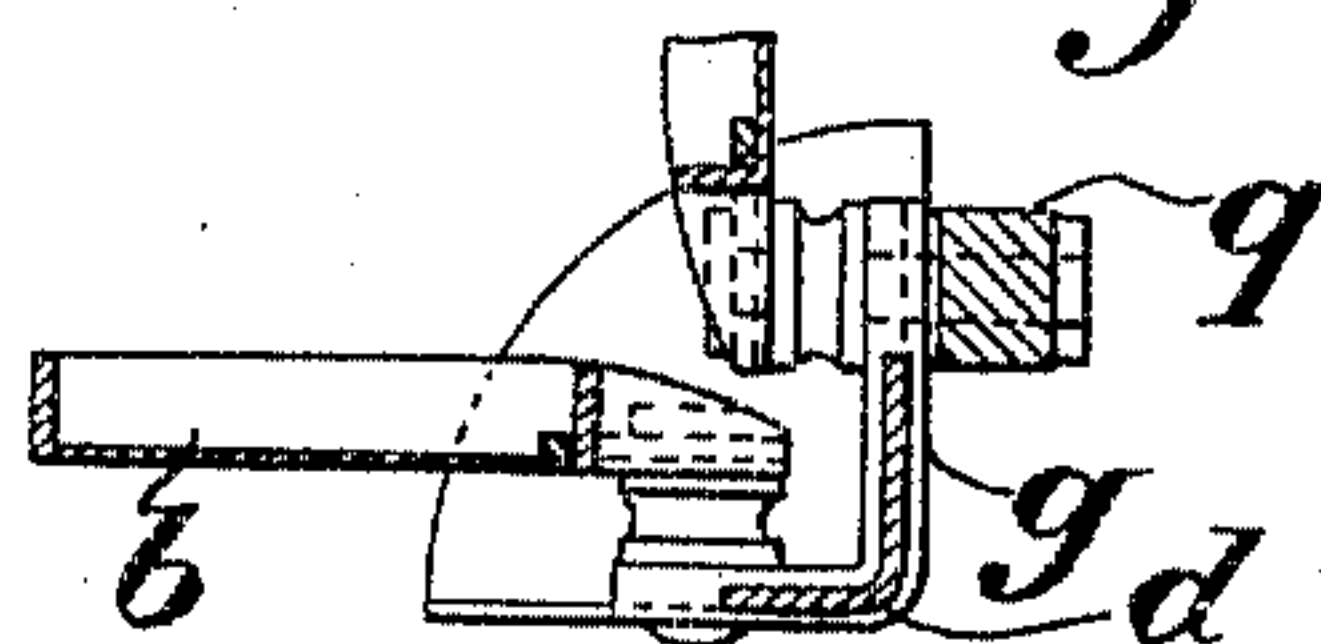


Fig.7.



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UNITED STATES PATENT OFFICE.

KASPAR FREULER, OF ZÜRICH, SWITZERLAND.

COLLAPSIBLE STRETCHER.

SPECIFICATION forming part of Letters Patent No. 780,278, dated January 17, 1905.

Application filed July 2, 1904. Serial No. 215,187.

To all whom it may concern:

Be it known that I, KASPAR FREULER, a citizen of the Republic of Switzerland, residing at Zürich, Switzerland, have invented new and useful Improvements in Collapsible Stretchers, of which the following is a specification.

My invention relates to improvements upon an invention for collapsible stretchers for which Letters Patent No. 740,002, of 1903, were granted to me and wherein the frame sides and frame ends are formed in lazy-tongs fashion, the object of my present invention being to increase the carrying power of such stretchers.

To this end my invention consists in forming the pivot-holes in the lazy-tongs levers constituting the said sides at such a distance from each other that when the stretcher is extended the said sides curve upward, and so displace the pivot-holes in the cross-stays, also formed in lazy-tongs fashion, that when the stretcher is extended the said cross-stays curve downward, the extremity of some of the said cross-stay lazy-tongs levers being adapted to abut against the edge of the adjacent lazy-tongs levers to limit the down-curving of the cross-stays, and thereby also the extent to which the stretcher can be extended, so as to permit the stretcher-cloth to bulge in when weighted without coming into contact with the cross-stays and insure the stretcher being securely stayed crosswise. I attain these objects by the mechanism illustrated in the accompanying two sheets of drawings, in which—

Figure 1 is a diagram of a portion of the stretcher side extended. Fig. 2 is a side view of the stretcher when extended; Fig. 3, an end view from the right of the stretcher extended. Fig. 4 is a side view of one of the cross-stays. Fig. 5 is a side view of the stretcher-head with partly-lowered handles. Fig. 6 is a partial plan, on an enlarged scale, of one of the corners at the head of the stretcher extended. Fig. 7 is a section on line A B of Fig. 2, also on an enlarged scale.

Similar letters refer to similar parts throughout the several views.

In carrying out my invention the stretcher-

frame sides and ends consist, as in my Letters Patent No. 740,002, of 1903, each of two lazy-tongs *a b*, disposed pivotally upon each other. The pivot-holes *x* of each lazy-tongs lever, Fig. 1, are, however, not equidistant, the distance *y* being a fraction greater than *h*, the distance *j* greater than *y*, and *k* greater than *j*. This causes the stretcher sides to curve upward, as shown in Figs. 1 and 2. The corner-pieces *d* are made of angle-iron and have riveted thereto plates *t*, which at the head of the stretcher have square holes, in which the rails *q* are guided, Fig. 6. The extremities of the lazy-tongs *a b* at the stretcher head and foot are pivoted to the plates *t* and to slides *g*, the movement of the latter and lazy-tongs thereon being, however, not limited by abutments in connection therewith, the extension of the lazy-tongs being limited by the cross-stays *l*. The pivot-holes of the cross-stay lazy-tongs levers are so situated that when the stretcher is extended the cross-stays curve downward, Fig. 4, one extremity of some of its lazy-tongs abutting against the edge of the adjacent ones. This limits the distance *u*, Fig. 3, of the end lazy-tongs levers of the cross-stay, which are pivoted to sockets on the lazy-tongs of the stretcher sides, so that the cross-stays only allow the stretcher sides to extend a certain distance, each cross-stay limiting such extension. The cross-stays curving downward enables the cloth *w*, secured to the stretcher, when weighted to bulge in without touching the same.

The handles *n* are at one end pivoted to the respective head-plates and by means of rails *o*, having slots, so linked to the slides *g* that when lowered they lie against the corner-pieces *d*, and their upward movement is limited by the rails *o*.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a collapsible stretcher with sides and ends formed in lazy-tongs fashion, the pivot-holes in the lazy-tongs levers constituting the said sides formed at such a distance from each other, that when the stretcher is extended the said sides curve upward and cross-stays also formed in lazy-tongs fashion with pivot-holes

so displaced that when the stretcher is extended, the said cross-stays curve downward, the extremity of some of the said cross-stay lazy-tongs levers being adapted to abut
5 against the edge of the adjacent lazy-tongs levers, all combined substantially as and for the purpose set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

KASPAR FREULER.

Witnesses:

CARL MÜLLER,
JOSEPH SIMON.