

981,873.

I. MORAFF.  
FOLDING COT.  
APPLICATION FILED MAY 3, 1910.

Patented Jan. 17, 1911.  
2 SHEETS—SHEET 1.

Fig. 1.

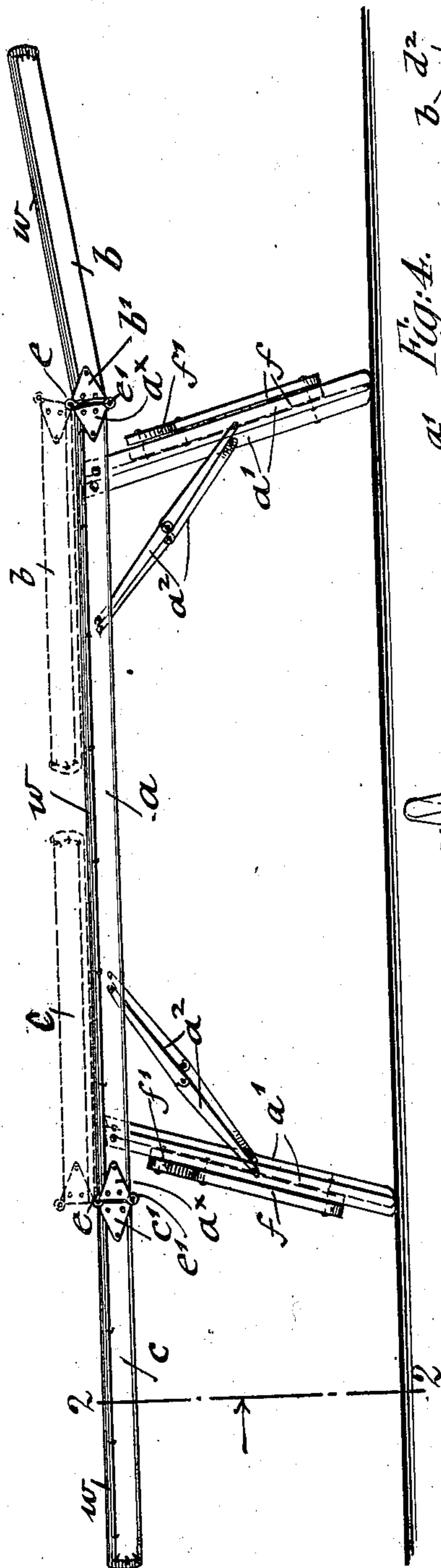


Fig. 4.

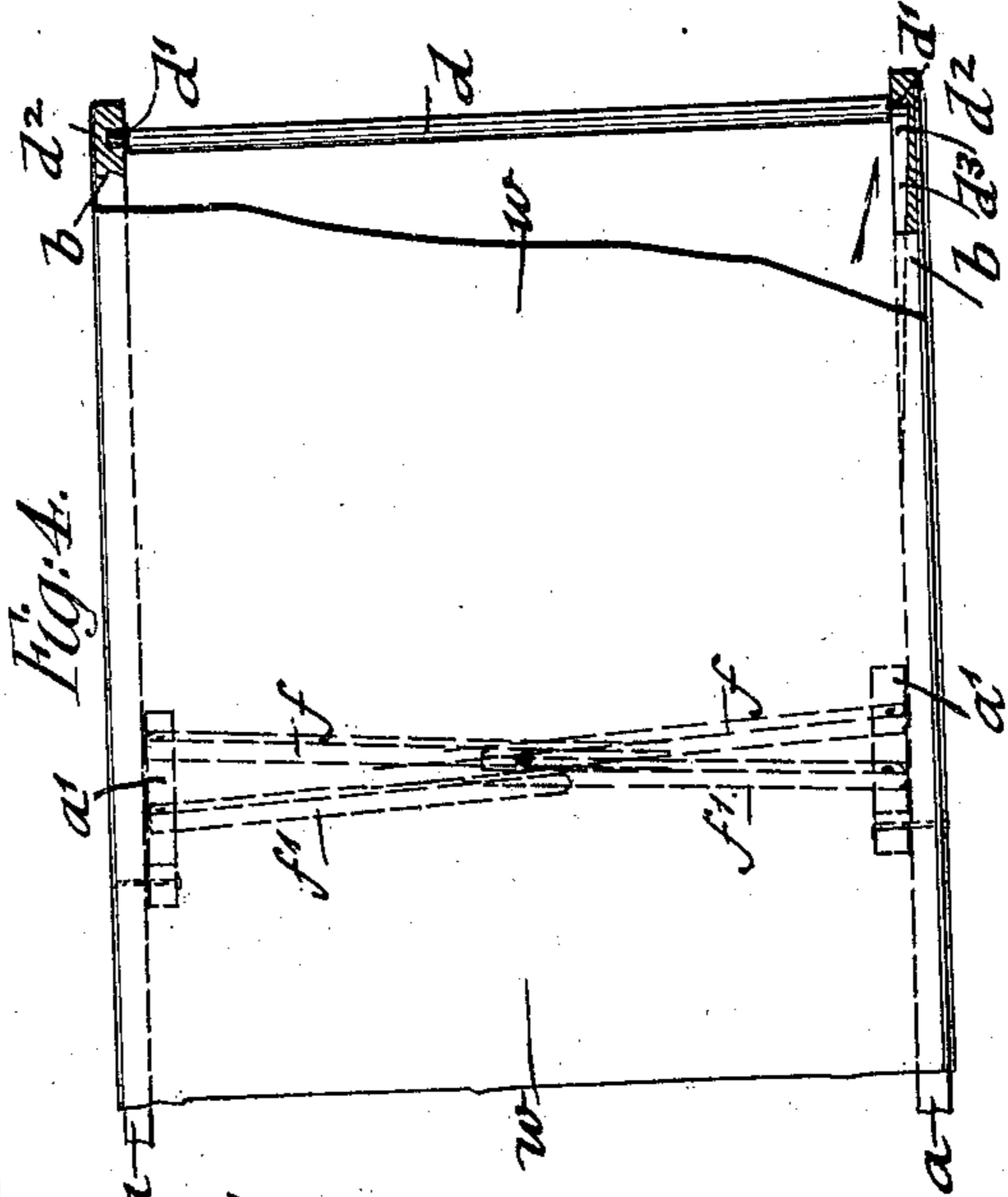


Fig. 3.

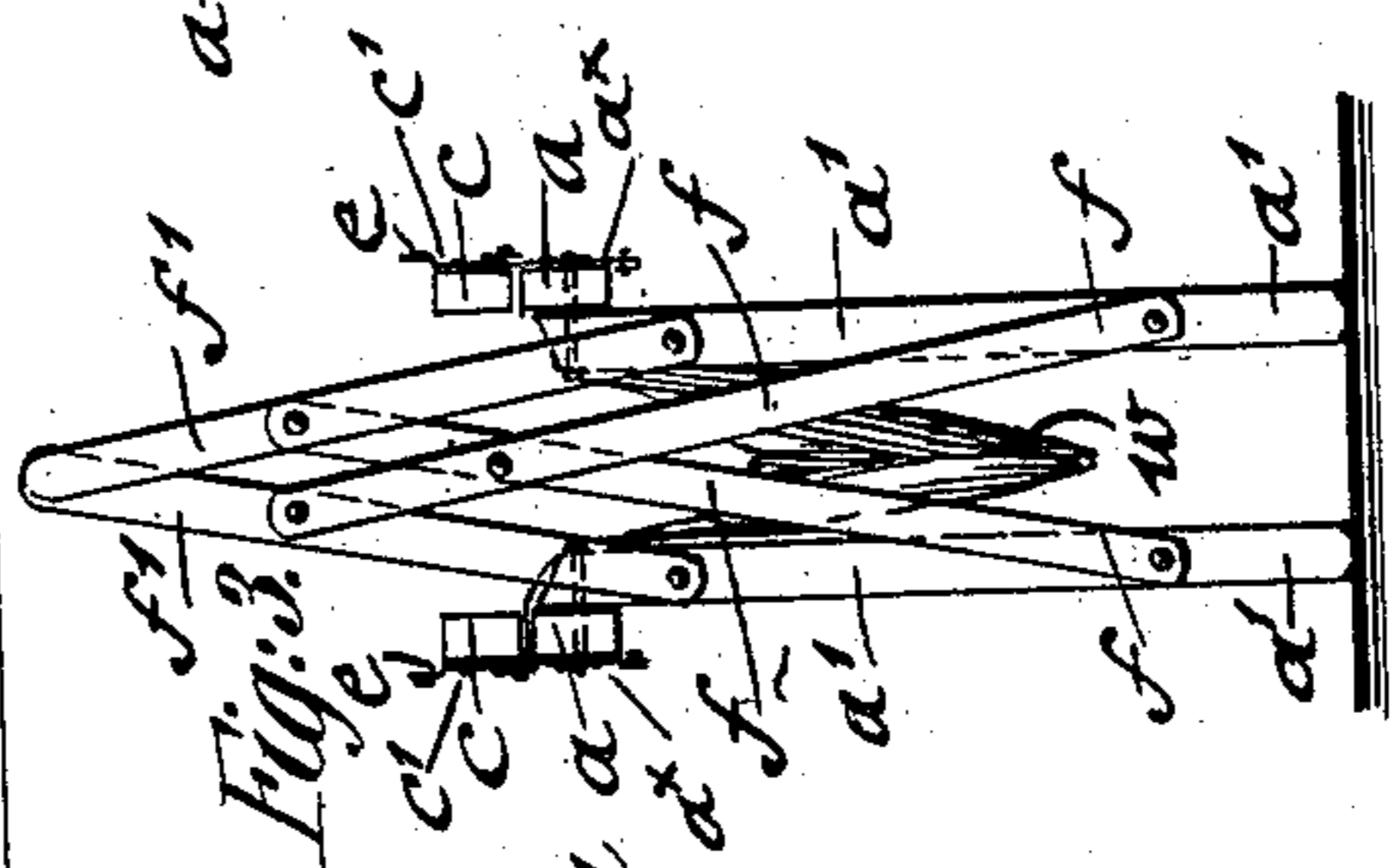
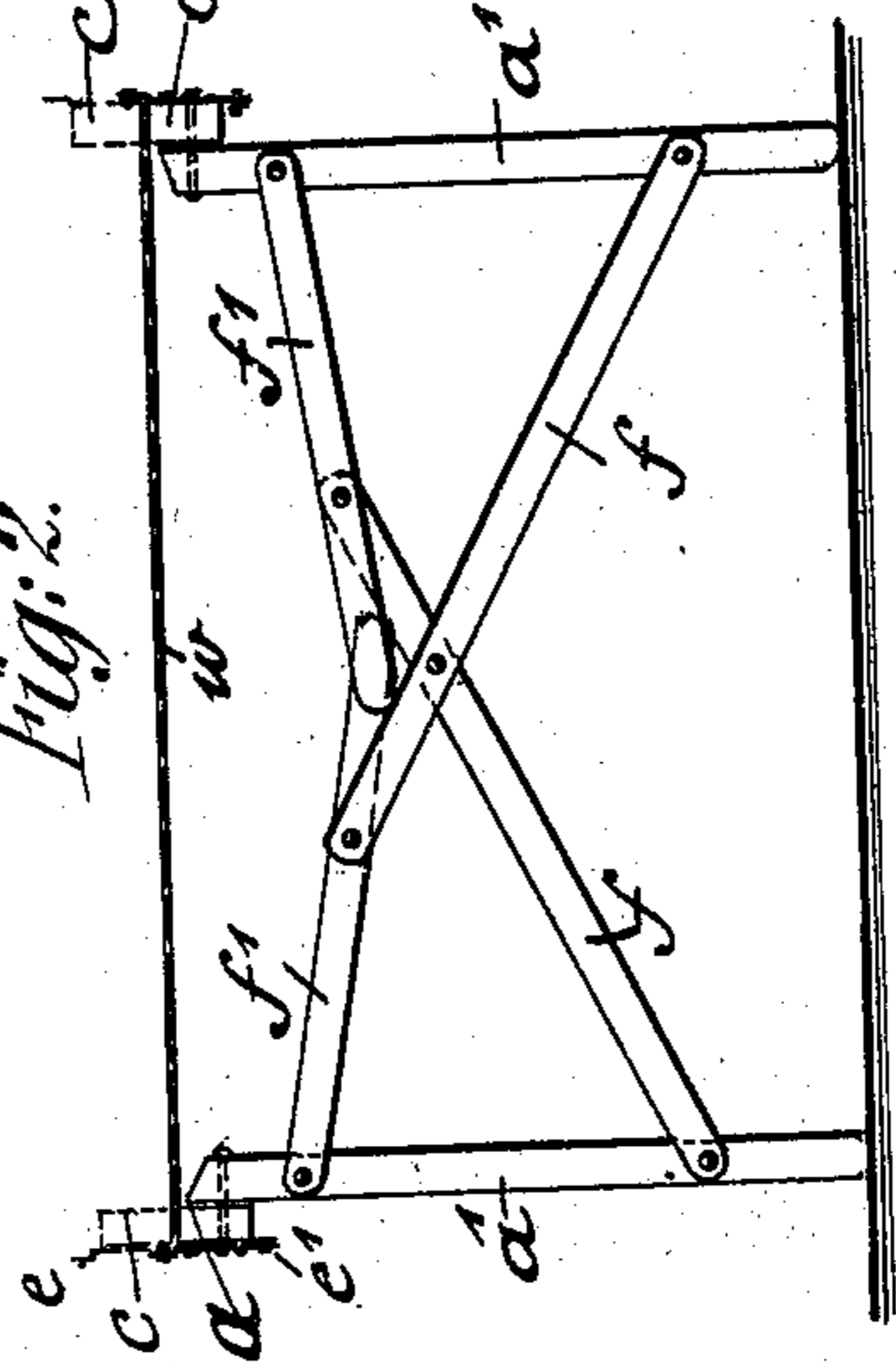


Fig. 2.



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2 SHEETS—SHEET 2.

981,873.

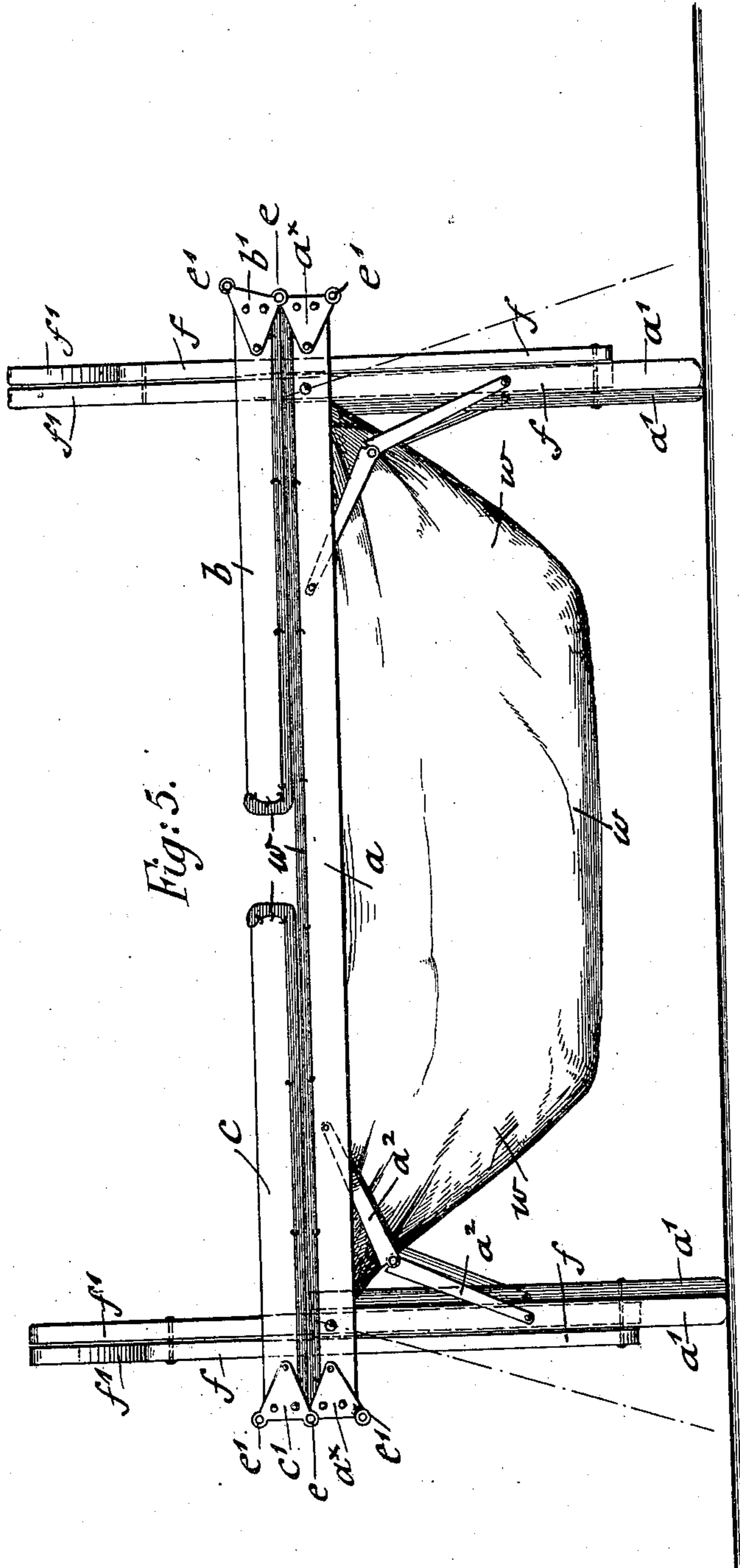


Fig. 5.

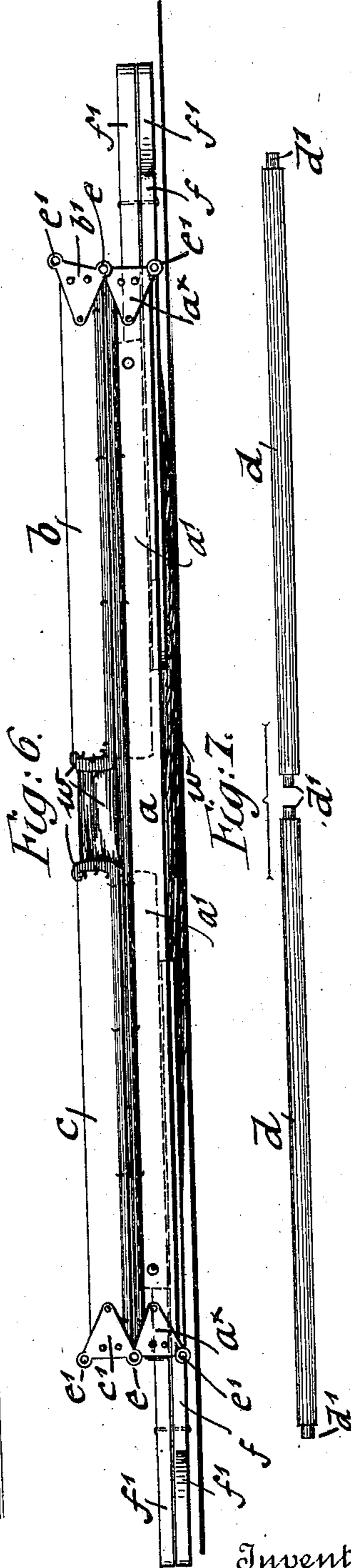


Fig. 6.

Fig. 7.

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# UNITED STATES PATENT OFFICE.

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## FOLDING COT.

981,873.

Specification of Letters Patent.

Patented Jan. 17, 1911.

Application filed May 3, 1910. Serial No. 559,057.

*To all whom it may concern:*

Be it known that I, ISRAEL MORAFF, a citizen of the United States of America, residing in New York, in the borough of the Bronx, county and State of New York, have invented certain new and useful Improvements in Folding Cots, of which the following is a specification.

This invention relates to an improved folding cot which can not only be folded in one direction by bringing the head and foot sections over the body-section, but which can also be folded up in transverse direction so as to take up but a very small space for storage and shipment, the wire mattress of the cot being replaced by a web of canvas, which is tightly stretched when the sections are in position for use, and folded up between the longitudinal side-rails of the cot when it is not required for use.

The invention consists of a folding cot the body-section of which is formed of side-rails and pivoted and braced supporting legs connected by a folding toggle-lever frame in transverse direction when in position for use or folded up with the canvas web of the cot, in connection with hinged head and foot sections, the transverse end-rails of which are removable for permitting the folding of the side-rails of the head and foot sections in transverse direction, said removable end-rails engaging sockets of the side-rails of the head and foot sections.

The invention consists further of certain details of construction which will be fully described hereinafter and finally pointed out in the claim.

In the accompanying drawings, Figure 1 represents a side-elevation of my improved folding cot shown in position for use, Fig. 2 is an end-elevation of Fig. 1, partly in section on line 2, 2, Fig. 1, Fig. 3 is likewise an end-elevation showing the cot partly folded up in lateral direction, Fig. 4 is a detail plan-view of the head-section, partly broken away for showing the transverse end-rail for the same, Fig. 5 is a side-elevation of the improved folding cot shown partly folded up in longitudinal and transverse directions, Fig. 6 is a plan-view of the cot shown folded in longitudinal and transverse directions and ready for storage or shipment, and Fig. 7 is a detail top-view of the transverse end-rails respectively for the head and foot sections.

Similar letters of reference indicate corresponding parts throughout the different figures.

Referring to the drawings, *a* represents the side-rails of the body-section, *b* the side-rails of the head-section and *c* the side-rails of the foot-section of my improved folding cot. The side-rails *a* of the body-section are supported on inclined legs *a*<sup>1</sup> which are pivoted at their upper ends to the side-rails *a*. The legs are braced and held in inclined position by means of folding braces *a*<sup>2</sup> which are pivoted at their inner ends to each other and at their outer ends to the side-rails and legs respectively. The side-rails *b* of the head-section and the side-rails *c* of the foot-section are hinged to the ends of the side-rails *a* of the body-section by means of triangular metallic leaves *a*<sup>x</sup>, *b*<sup>1</sup>, *c*<sup>1</sup> which are bolted to the side-rails of the body-section and the head and foot sections, and provided with overlapping ears *e*, *e*<sup>1</sup>, the upper set of ears serving as connecting pivots *e*<sup>1</sup> for the hinge connection, while the lower ears overlap each other and serve as abutments for steadying the head and foot sections in lateral direction when in position for use.

The inner ends of the side-rails *b* of the head-section and the adjacent ends of the side-rails *a* of the body-section are cut off at a slight bevel so that the hinged leaves *a*<sup>x</sup>, *b*<sup>1</sup> hold the head-section at an angle of inclination to the body-section, as shown in Fig. 1. Both the head and foot sections are adapted to be folded over the body-section, as shown in dotted lines in Fig. 1. The outer ends of the side-rails *b* and *c* of the head and foot sections are braced by transverse end-rails *d* *d*<sup>1</sup>, which are provided with tenons *d*<sup>1</sup> *d*<sup>1</sup> at their ends that enter into mortises *d*<sup>2</sup> *d*<sup>2</sup> in the outermost ends of the side-rails *b* and *c* of the head and foot sections; the mortises of one of the side-rails *b* having an inclined recess *d*<sup>3</sup> for permitting the ready insertion of the end rails *d* into the aforesaid mortises so as to rigidly hold the side-rails of the head and foot sections in position when the cot is to be used, as shown in Fig. 4. A web *w* of stout canvas or other suitable fabric is attached to the edges of the body-rails and the rounded-off outer ends of the side-rails of the head and foot sections, the entire length of the web *w* between the head and foot sections being stretched over

the body, head and foot sections so as to form a flexible and yielding support for the body in place of the wire or other mattress heretofore in use for cots. The web  $w$  forms  
 5 a yielding bed-bottom for the cot which can be used for supporting the body directly thereon, or it can be used with a hair or other mattress and head-bolster placed thereon. The canvas or other web  $w$  has  
 10 the advantage of permitting not only the folding over of the head and foot sections onto the body-section so as to reduce the length of the cot when folded, but also the folding up in transverse direction for re-  
 15 ducing the width of the cot when it is to be folded up for storage or shipment.

Each pair of legs  $a^1$  is connected by a transverse folding toggle-lever brace-frame which is formed of a pair of intercrossing  
 20 braces  $f$  that are pivoted at their point of crossing to each other, at their lower ends to the legs  $a^1$  and at their upper ends to a pair of toggle-levers  $f^1$  at some distance from their ends, the toggle-levers being  
 25 pivoted at their outer ends to the upper ends of the legs  $a^1$ , as shown clearly in Fig. 2. One toggle-lever  $f^1$  is located in the plane of one brace  $f$ , and the other in the same plane of the other brace  $f$ , the inner ends  
 30 of the toggle-levers bearing on the upper ends of the respective braces  $f$  so as to form a rigid frame therewith, as shown in Fig. 2. This toggle-lever brace-frame  $f, f^1$  can readily be folded up into the position shown in Fig.  
 35 3, and then still closer together so as to fold the web  $w$  between them. In folding the cot, the transverse end-rails of the head and foot sections are removed, and the side-rails and web of the head and foot sections  
 40 folded over the body-section, after which the cot is placed on one side, one of the legs being pressed inwardly over the other leg, whereby the brace-levers  $f, f^1$  and toggle-levers  $f^1$  are folded up on their pivots in  
 45 outward direction so as to bring the side-rails of all sections close together with the web folded up between the same, as shown in end-view in Fig. 3 and in top-view in Fig. 6. The pivoted braces of the legs are pushed  
 50 inwardly, as shown in Fig. 5, and the legs, together with the toggle-lever brace-frames,

folded upwardly into the space between the side-rails of the body-section, as shown in Fig. 6, after which the cot is ready for stor-  
 age or shipment.

The bed may be readily set up by reversing the process above described, as will be readily understood.

The advantages of my improved folding cot are primarily that the same can be folded  
 60 not only in longitudinal but in transverse direction so as to take up a greatly reduced space for storage and shipment; second, that the same can be manufactured at a greatly reduced price as compared to the cots hav-  
 65 ing wire mattresses heretofore in use; third, that the cot, owing to its lightness, can be folded up or extended for use by any one with but little effort and within a very brief  
 70 period of time.

The improved folding cot is especially adapted for outdoor and camping purposes, also for use in hospitals and military barracks.

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

A folding cot comprising a body-section and head and foot sections hinged thereto, a web connecting the side-rails of the body, head and foot sections, a pair of pivoted and braced legs at each end of the body-section, and a transverse toggle-lever brace-frame for each pair of legs, said frame consisting of brace-levers pivoted one each to the  
 80 lower part of each leg respectively, said brace-levers being pivoted together near their upper ends, and toggle-levers pivoted to the upper part of the legs and each pivoted near its inner end to the upper end  
 85 of the brace-lever pivoted to the opposite leg, the inner ends of the toggle-levers being free and adapted when the cot is set up to rest upon the brace-lever pivoted to the same leg.

In testimony that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses.

ISRAEL MORAFF.

Witnesses:

PAUL GOEPEL,  
 FANNIE FISK.