

981,874.

Patented Jan. 17, 1911.

2 SHEETS-SHEET 1.

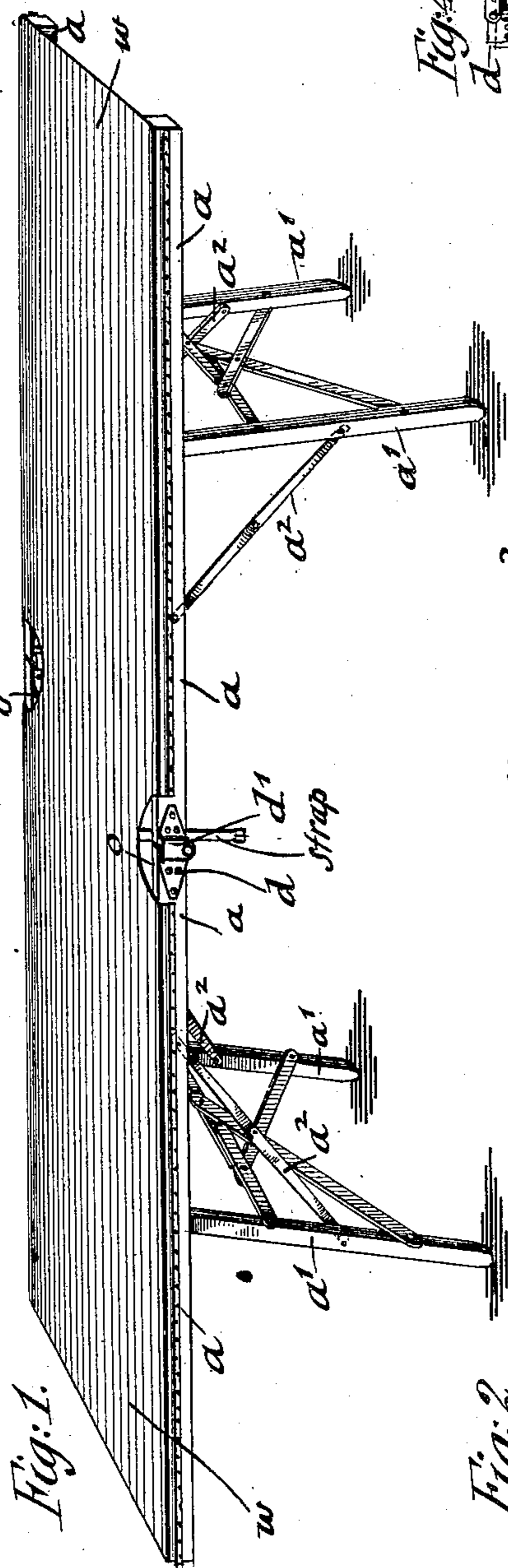


Fig. 1.

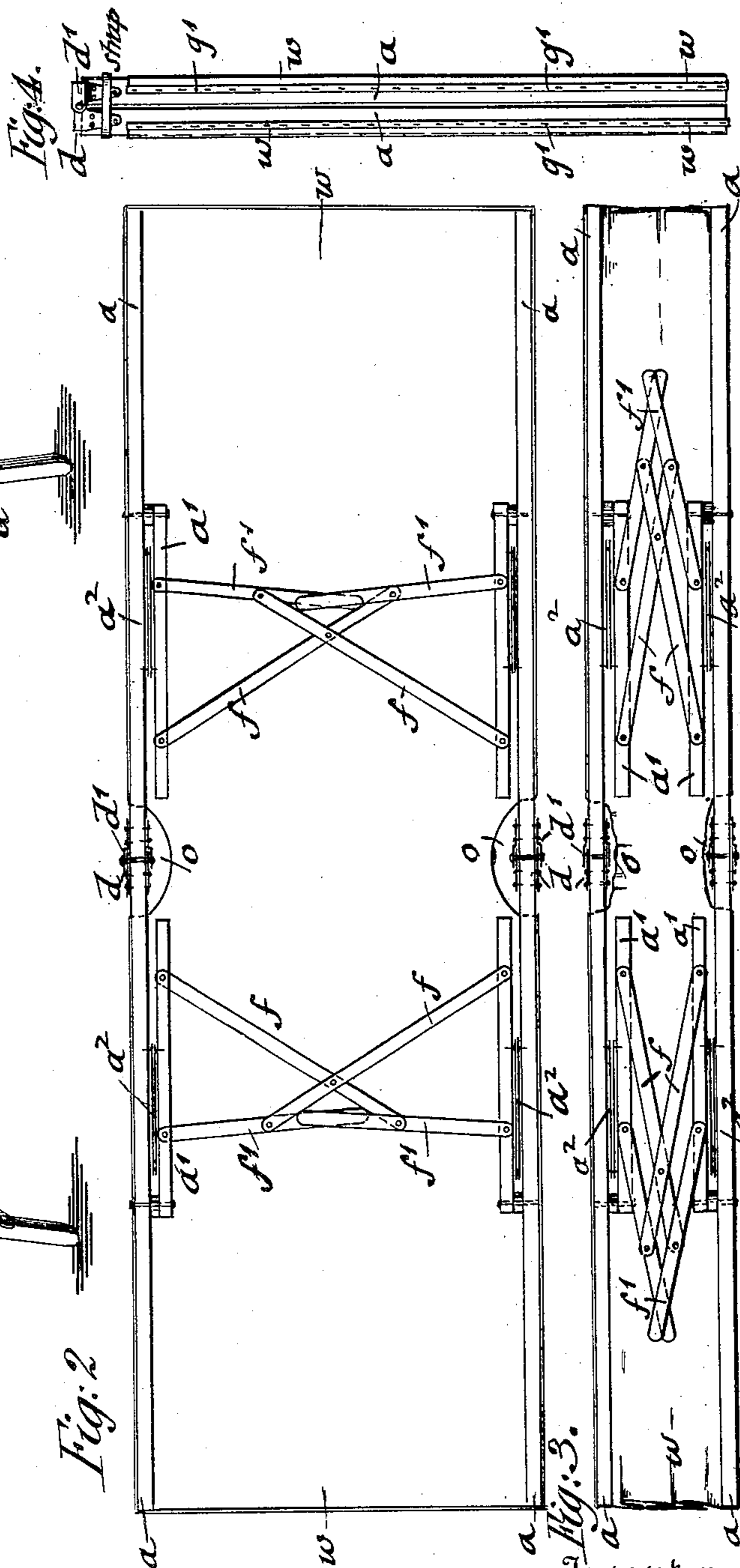


Fig. 2.

Fig. 3.

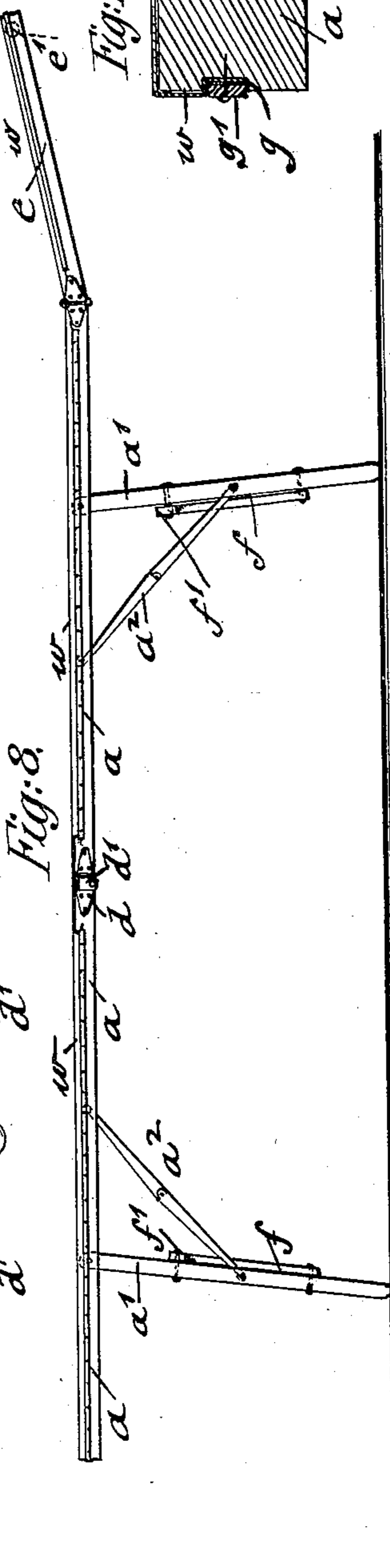
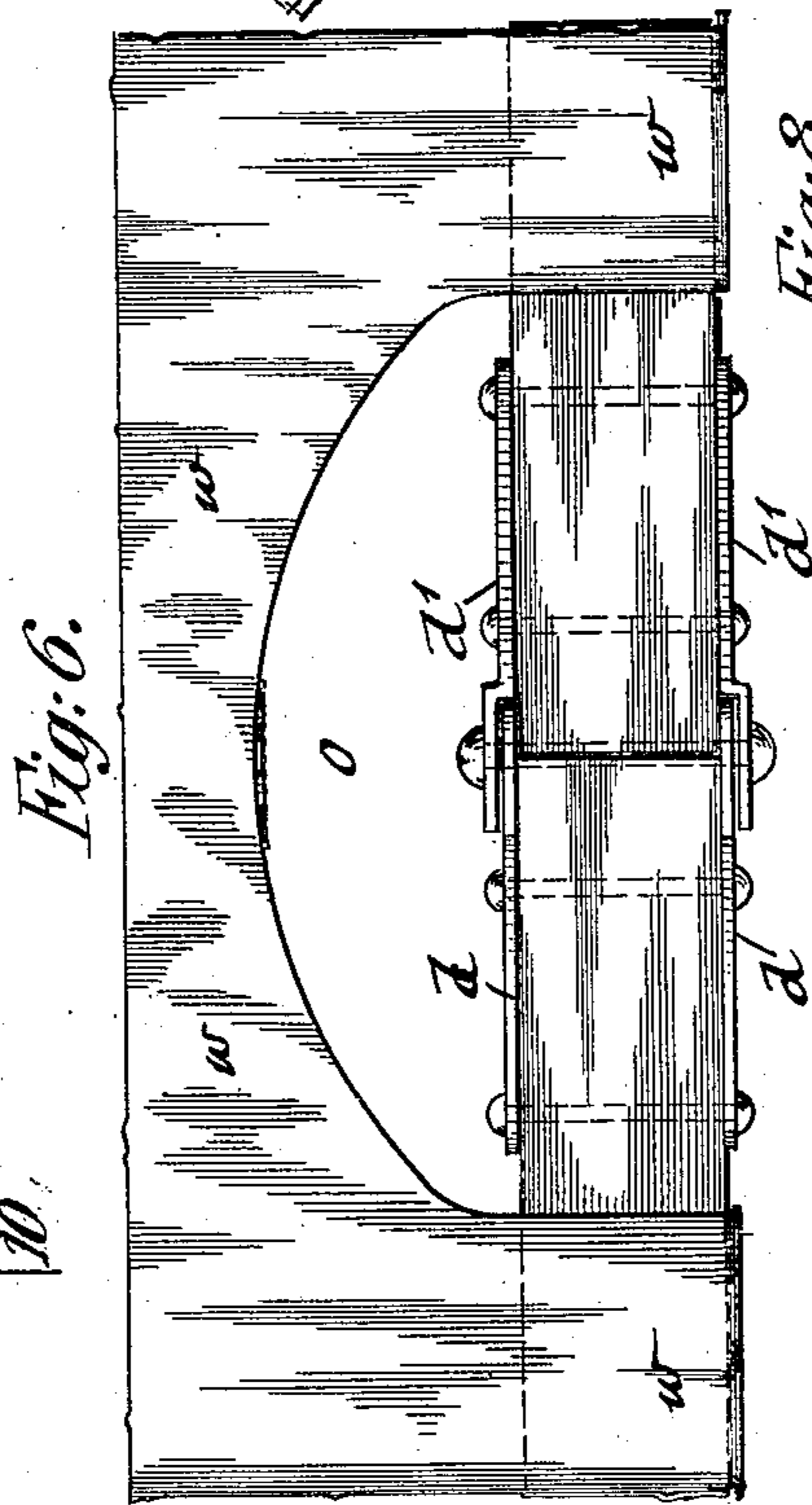
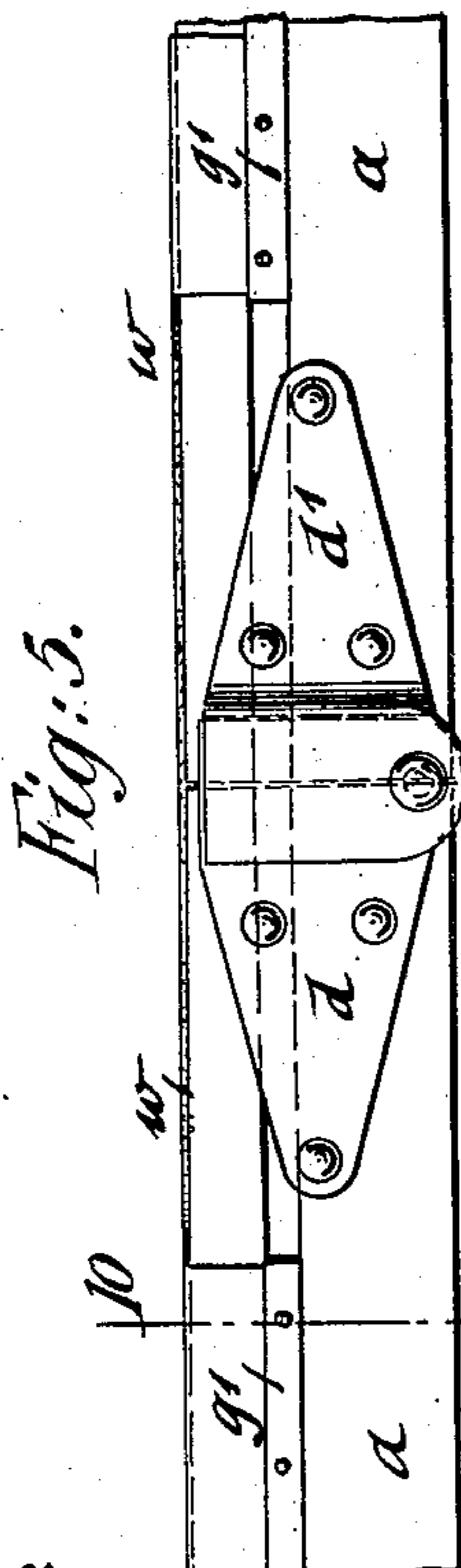
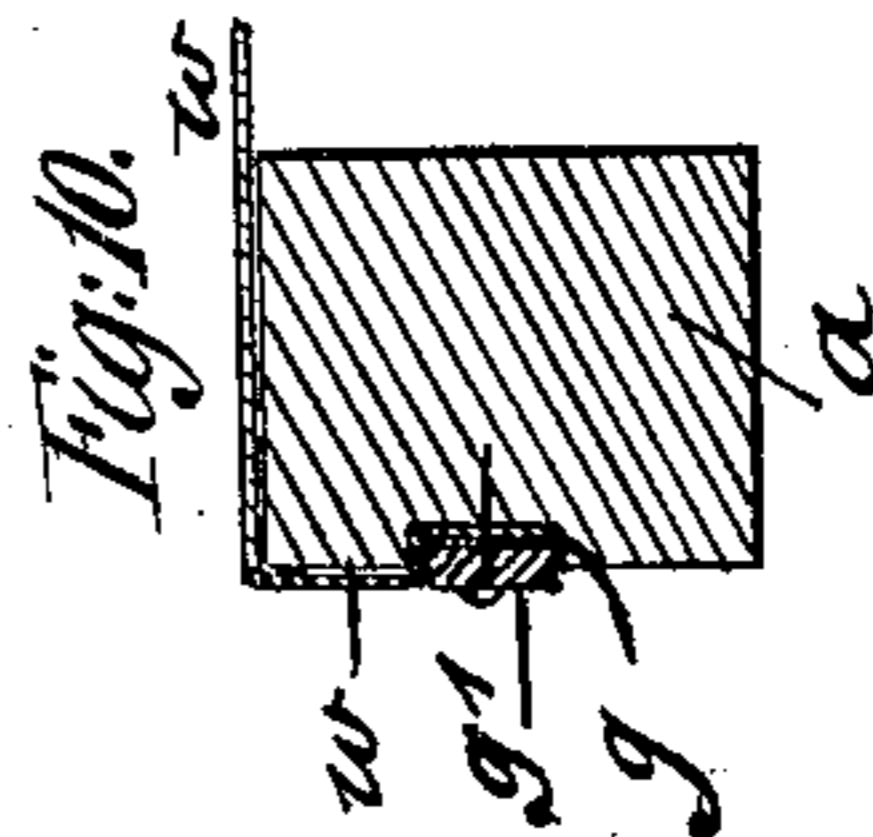
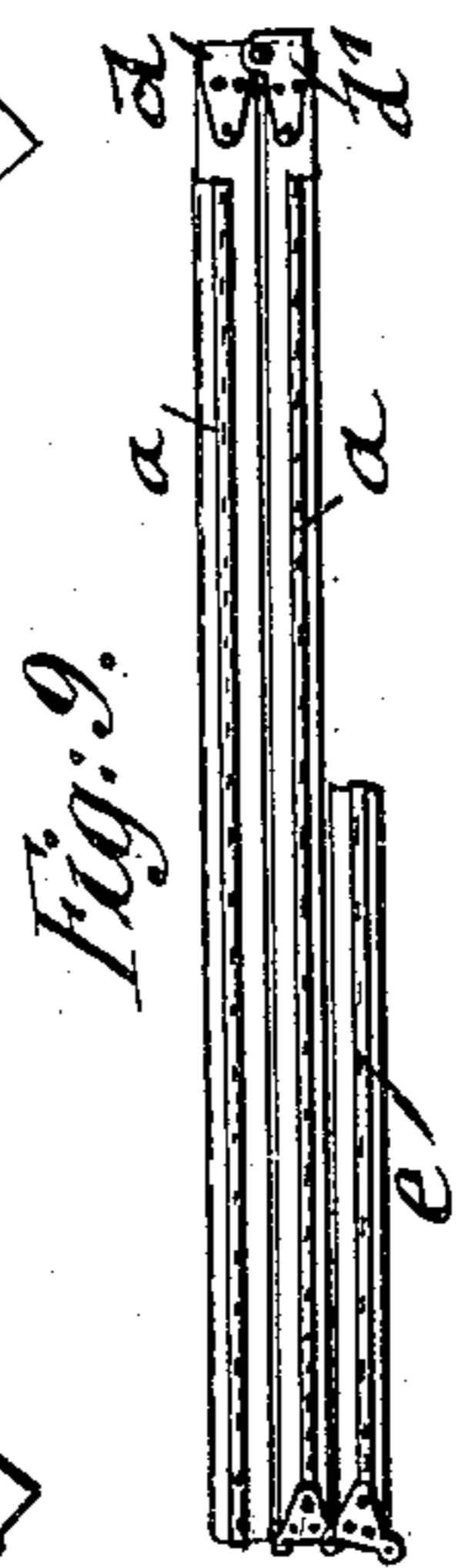
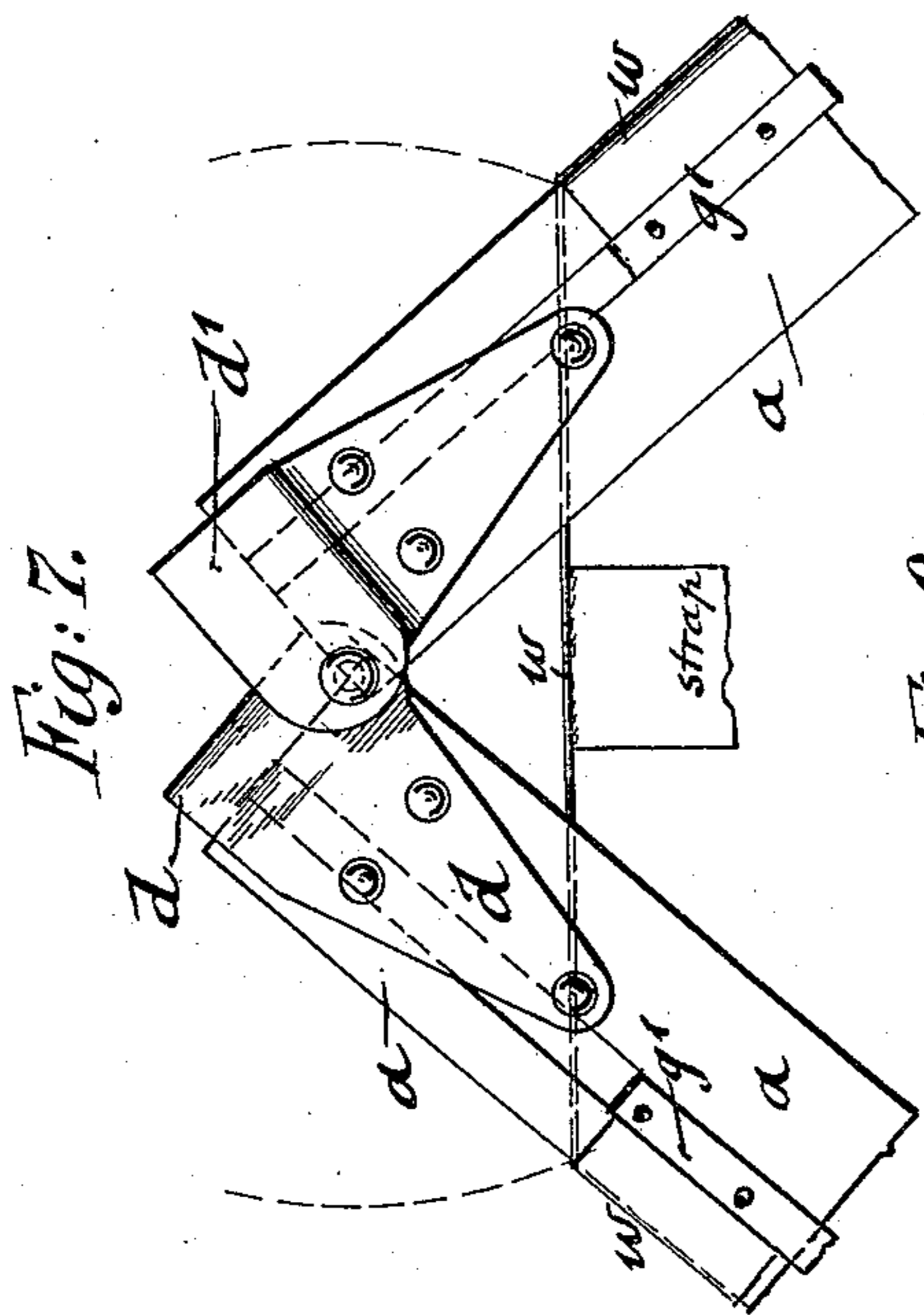
Witnesses:
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By his Attorneys
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

ISRAEL MORAFF, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO JOSEPH HAHNE-SAND, OF BROOKLYN, NEW YORK.

FOLDING COT.

981,874.

Specification of Letters Patent.

Patented Jan. 17, 1911.

Application filed October 7, 1910. Serial No. 535,768.

To all whom it may concern:

Be it known that I, ISRAEL MORAFF, a citizen of the United States, residing in the city of New York, 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 and more especially to certain improvements in the folding-cot for which an application for Letters Patent was heretofore made by me under Serial No. 559,057, filed May 3, 1910, and officially allowed June 21, 1910.

The object of this invention is to so improve the folding-cot referred to, that the same can be folded up into a still smaller size, so as to be still better adapted for packing, storing and shipping the same, and that it can also be used as a stretcher for hospitals and military purposes; and for this purpose the invention consists in a folding-cot, the body of which is formed of two side-rails which are pivoted at their centers, a web stretched between the side-rails, hinged and braced legs near each end of the body and transverse toggle-lever brace-frames, one for each pair of legs, the center pivot-connection of the side-rails being made of inside and outside plates attached to inner adjacent ends of the side-rails and adapted to interlock with each other.

The invention consists further in 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 one form of my improved folding-cot shown in position for use; Fig. 2 is a bottom view of the cot, showing the legs folded against the cot; Fig. 3 is a similar view showing the cot partly folded up in a lateral direction; Fig. 4 is a side-elevation of the completely-folded cot; Figs. 5 and 6 are detail side and plan-views, respectively, of the pivot-connection between the side-rails of the body-section of the cot; Fig. 7 is a side-view of the same detail, partly folded; Fig. 8 is a side-elevation of a modified form of cot ready for use; Fig. 9 is a side-view of the same, completely folded; and Fig. 10 is a detail cross-section of a side-rail, showing the method of fastening the web thereto.

Similar reference characters indicate corresponding parts throughout the several figures.

Referring to the drawings, a represents the side-rails of the body-section of my improved cot. The side-rails extend for the full length of the cot, the head and foot-sections being omitted. The side-rails of the body-section are supported on inclined legs a^1 , which are pivoted at their upper ends to the side-rails a . The legs a^1 are braced and held in inclined position by means of folding-braces a^2 , which are pivoted at their outer ends respectively to the side-rails, and at their lower ends to the legs. The side-rails a are divided at a point midway between their legs into two sections of equal length, which are connected at their inner adjacent ends by a pivot-connection which is formed of underlapping and overlapping plates d, d^1 , which are attached to the inside and outside of said inner ends of the side-rails, the corners of the adjacent ends of both pairs of plates being pivoted one to the other, while the upper portions of said adjacent ends under and overlap each other so as to form a double pivot-connection between the sections of the side-rails and double interlocking connection between the same when the sections are extended in line with each other when the cot is ready for use.

The outside face of the side-rails a is provided with a longitudinal groove g (see Fig. 10) into which are inserted cleats g^1 which serve for the purpose of holding the side edges of a web w . The edges of the web are drawn into the groove g by the cleat g^1 and the latter is then nailed down, together with the edges of the web, so as to firmly connect the web with the side-rails. The web w extends from one side-rail to the other and is provided at the middle of each side, adjacent to the pivot-connections of the side-rails, with cutaway portions o for permitting the folding of the hinged connection without injuring the web. The web is made of stout canvas or other suitable fabric and provided, at the ends, with transverse strengthening seams.

Each pair of legs a^1 is connected by a transverse folding toggle-lever brace-frame, which is formed of a pair of intercrossing braces f that are pivoted at their point of crossing and also 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 pivoted at their outer ends to the upper ends of the legs a^1 , as shown clearly in Figs. 2 and 3. One of the toggle-levers f^1 is located in the plane of one of the braces f , while the other toggle-lever is located in the plane of the other brace f , the inner ends of the toggle-levers bearing on the upper ends of the respective braces f so as to form, when extended, a rigid brace-frame therewith. These toggle-lever brace-frames can readily be folded up in the position shown in Fig. 3 and then still further, so as to fold the web between the side-rails. In folding the cot, the legs are folded as in Fig. 2, then the toggle-lever brace-frames are collapsed, as shown in Fig. 3, the web being disposed between the side-rails, the side-rails and web then are folded on their central hinge connection, as shown in Fig. 4, after which the cot is ready for storage and shipment. The folding-cot may be readily set up by reversing the process thus described, as may be readily understood. However, no special order is required for the successive steps of either folding or setting up the cot.

When making, the web is tightly stretched between the side-rails of the body-section and forms a flexible and yielding support in place of the wire spring or mattress heretofore in use in cots. The web forms a yielding bed-bottom, which can be used directly for supporting the body thereon, or it can be used with a mattress and a head bolster placed thereon. As the cot is folded both longitudinally and transversely, the length and width of the same are greatly reduced, so as to be conveniently packed for storage or shipment. The cot can also be made with a folding head-section e , as shown in Figs. 8 and 9, which is pivoted in the usual manner to one end of the side-rails of the body section, the web being extended over the same and braced by a transverse brace-rod e^1 which is inserted into recesses at the inner faces of the side-rails of the head-section in the usual manner, as described in the aforementioned application. In this construction,

the side-rails are somewhat shorter than when no head-section is employed. 50

The folding-cot is intended mainly for camping and outdoor purposes, but it also may be used in hospitals and barracks. The first form especially, can be used with great convenience as a stretcher for carrying a sick or wounded person, by taking hold of the ends of the side-rails. 55

Owing to the rigid interlocking of the pivot-connection at the inner ends of the side-rails, a rigid support for the web, when stretched between the side-rails, is obtained, while owing to its folding in longitudinal and transverse direction, the size of the folded cot is greatly reduced. The cost of its manufacture is considerably less than that of folding-cots having wire mattresses. 60 65

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

A folding-cot, comprising a body-section provided with side-rails divided midway between their ends, a double pivot-plate and locking-connection at the inner adjacent ends of the side-rails, a web connecting the side-rails of the body-section, a pair of pivoted and braced legs near 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 at their lower ends to the legs and pivoted together at their upper ends and toggle-levers pivoted to the upper parts of the legs and each pivoted near its inner end to the upper end of the brace-lever pivoted to the opposite legs, the inner ends of the toggle-levers being free and adapted, when the cot is set up, to rest upon the brace-levers pivoted to the same leg. 70 75 80 85

In testimony, that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses. 90

ISRAEL MORAFF.

Witnesses:

PAUL GOEPEL,
JOHN MURTAGH.