

No. 706,371.

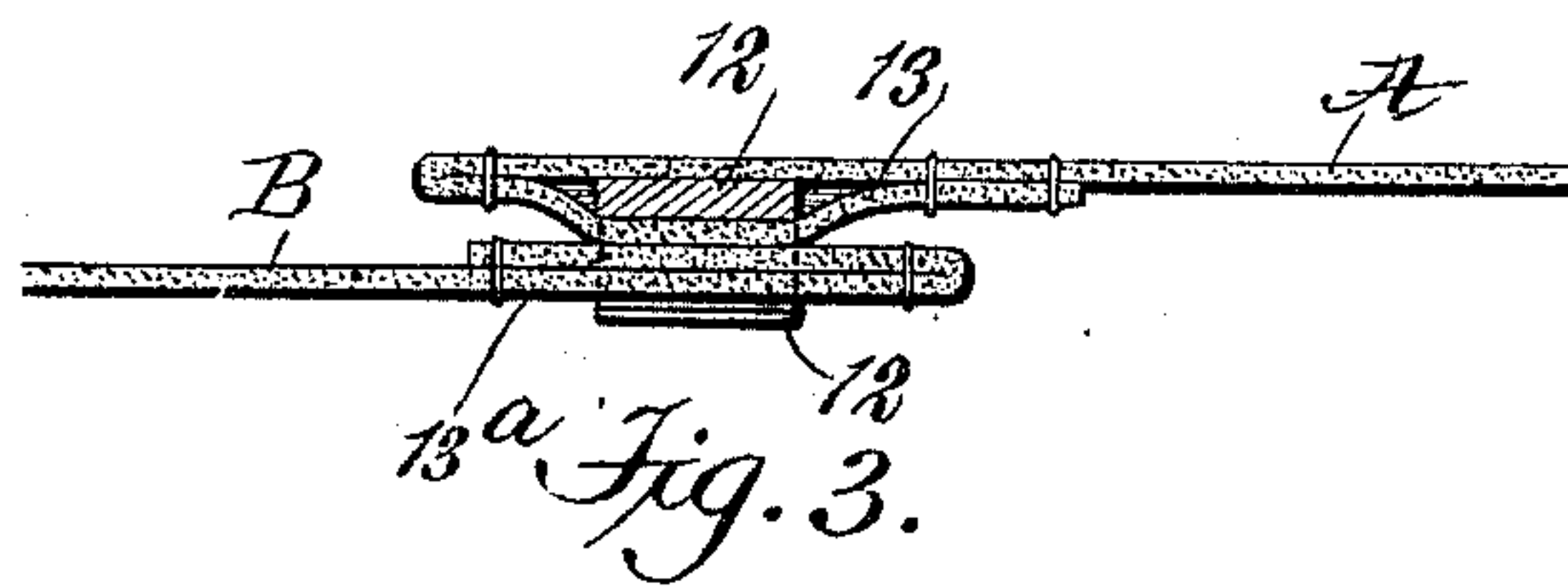
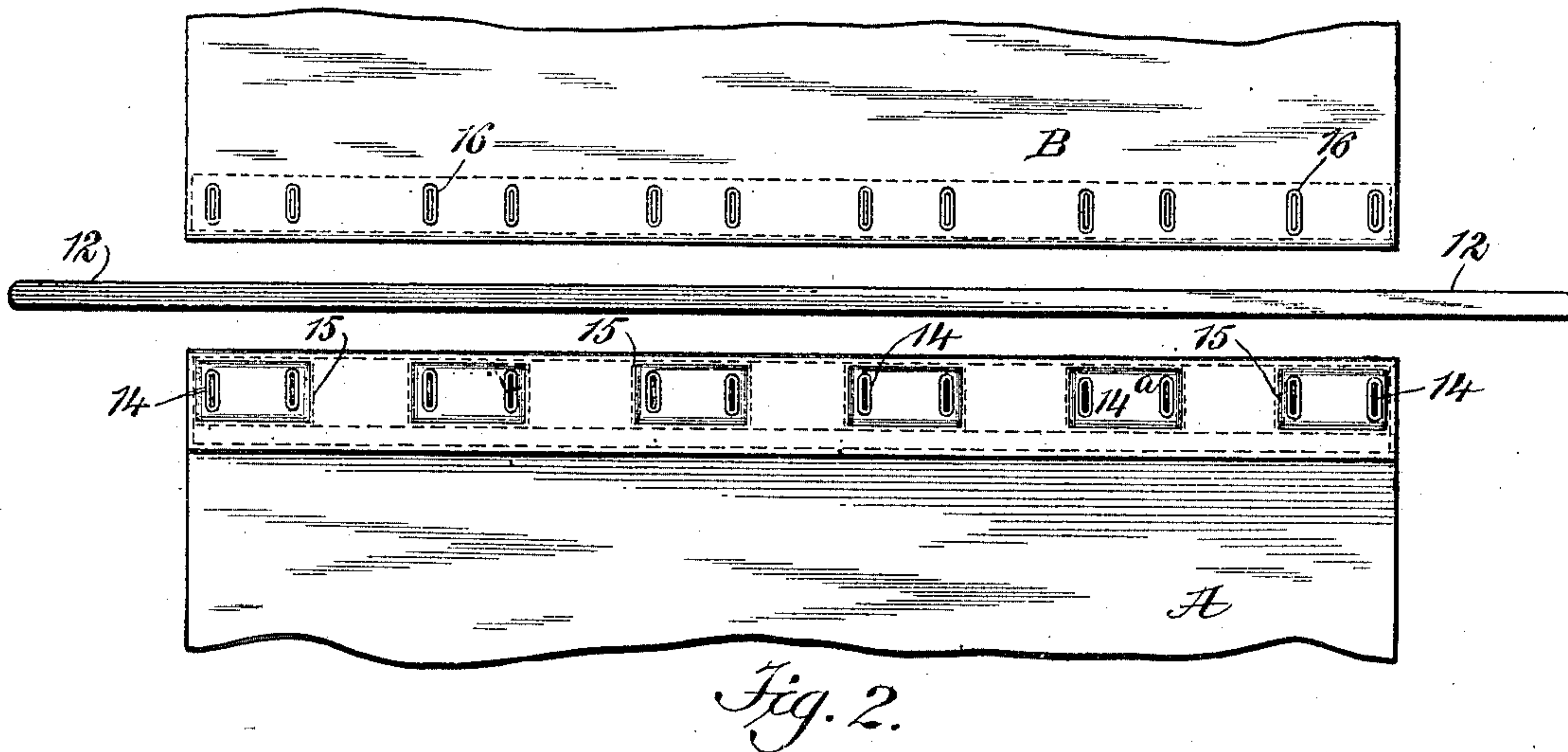
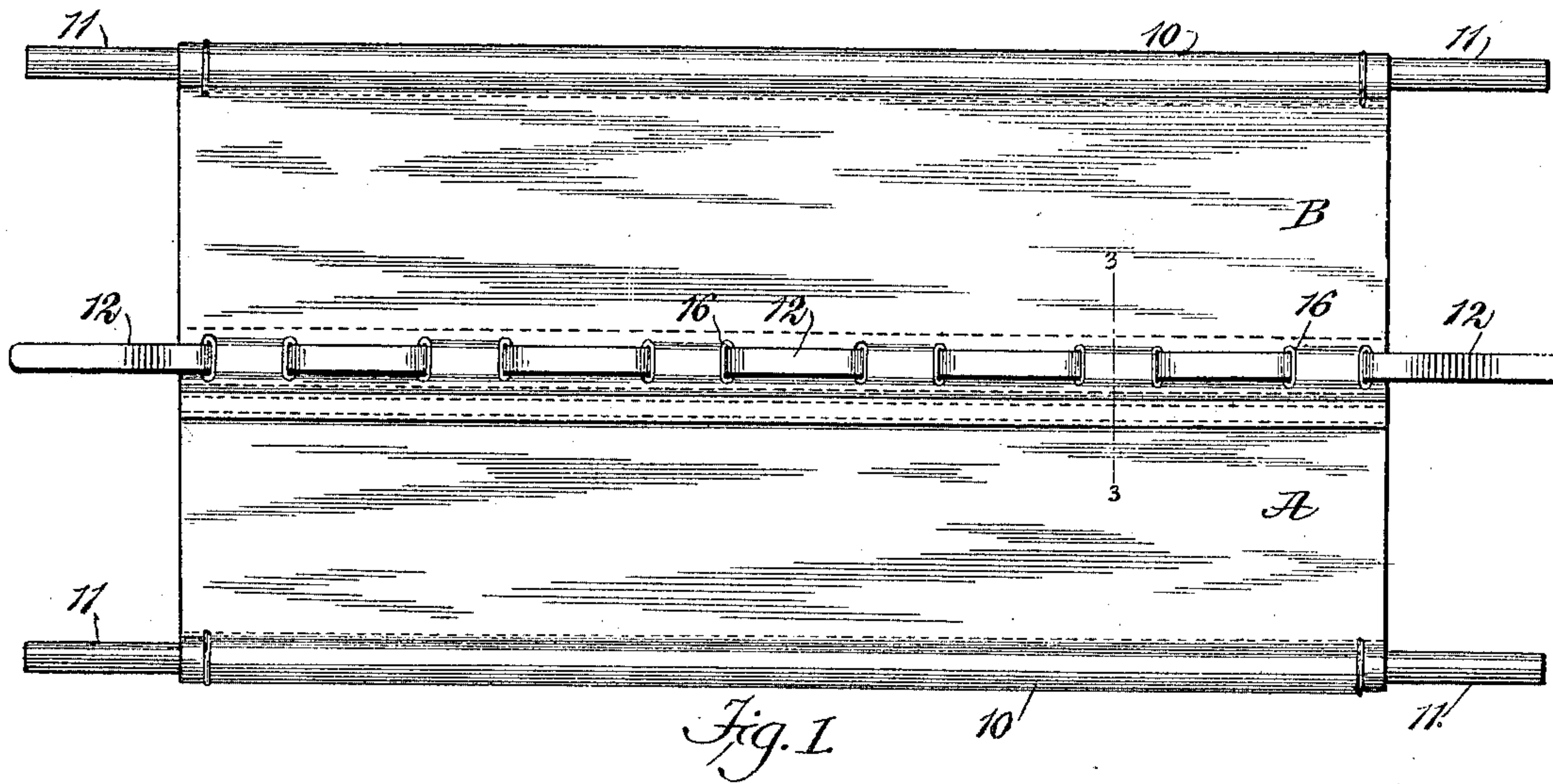
Patented Aug. 5, 1902.

F. X. AIGNER.  
STRETCHER.

(Application filed Dec. 30, 1901.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:

*A. Rappaport*  
*W. H. F. K.*

INVENTOR

*Francis X. Aigner*

BY

*M. M. L.*  
ATTORNEYS

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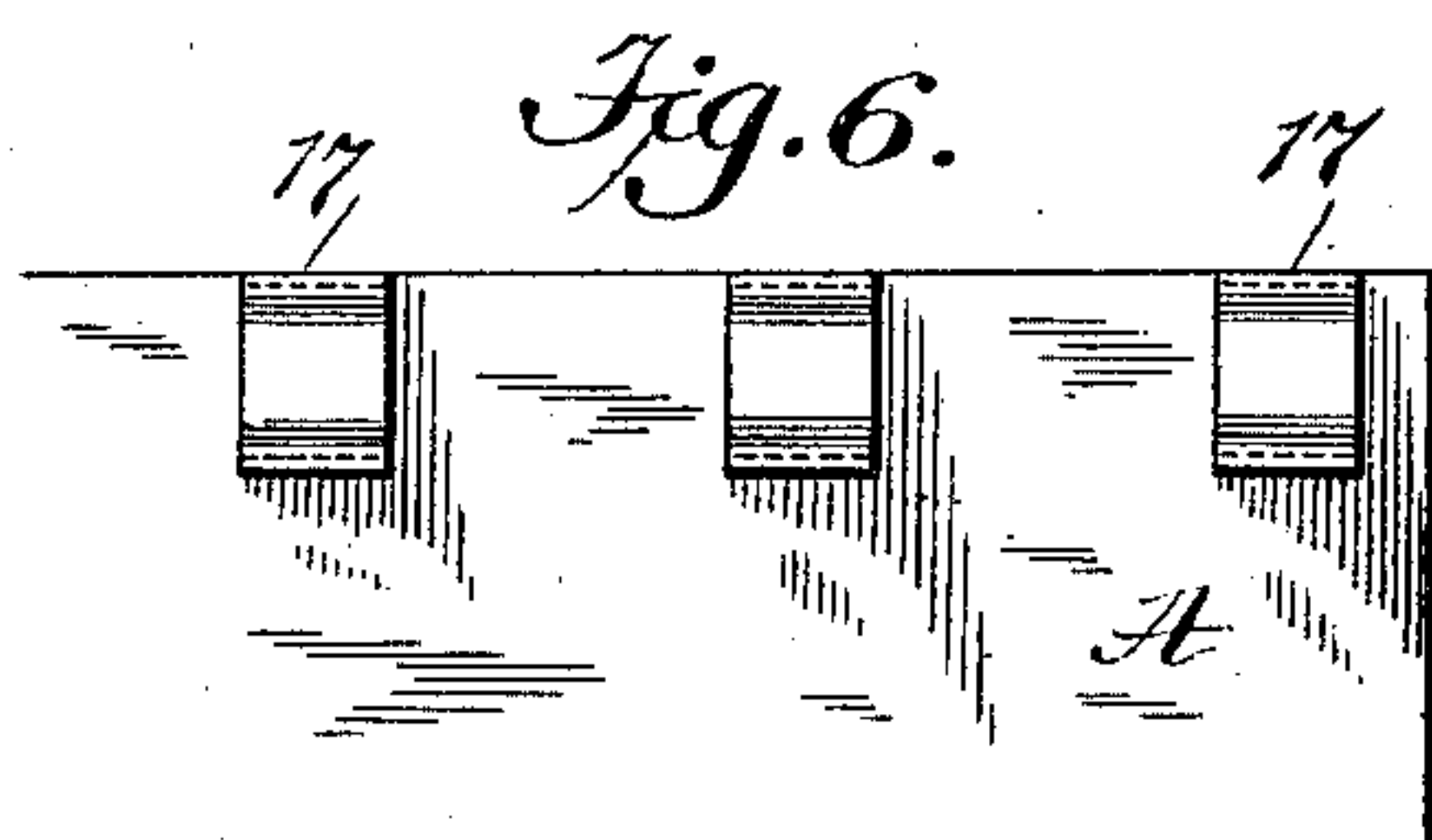
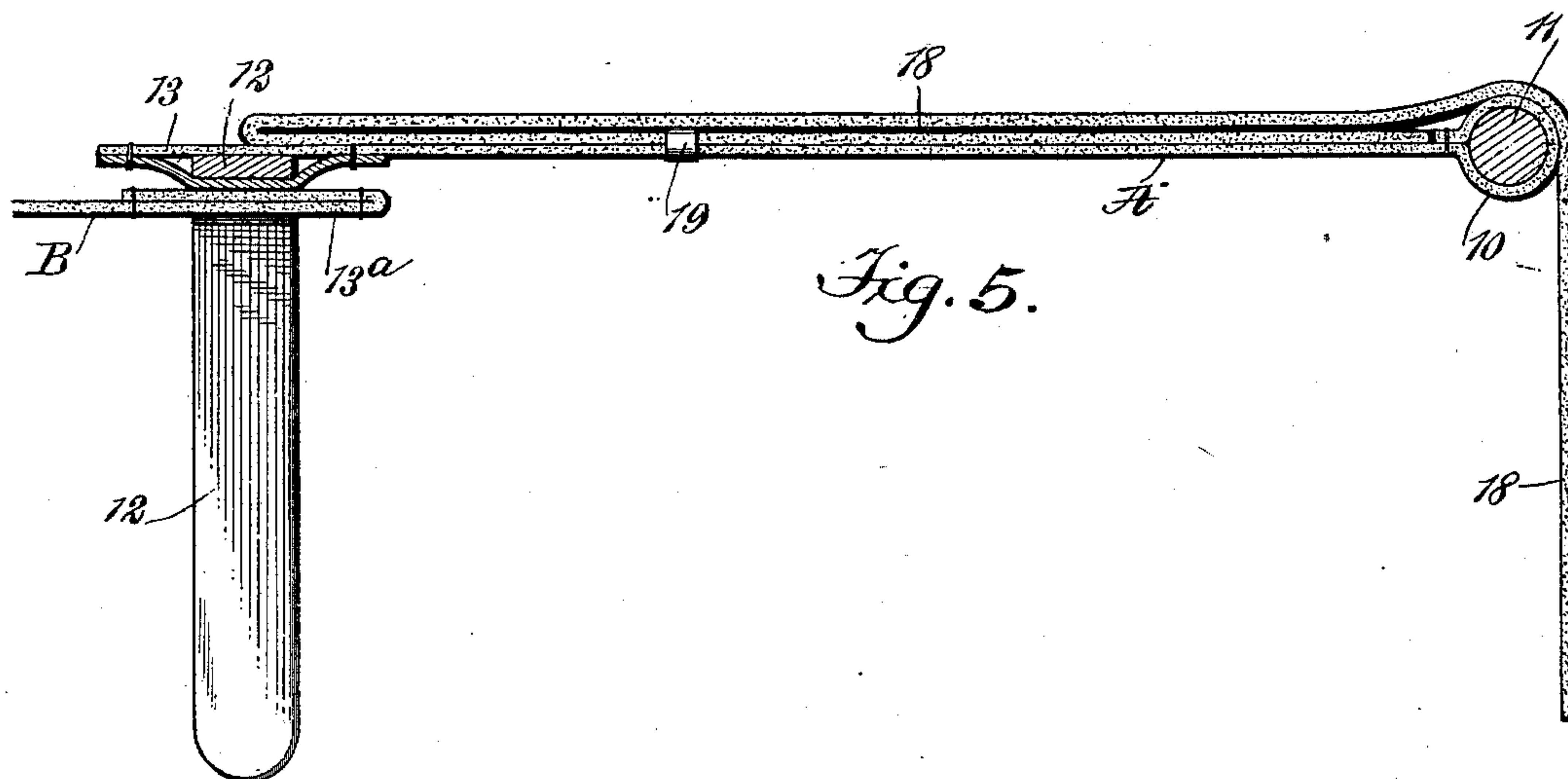
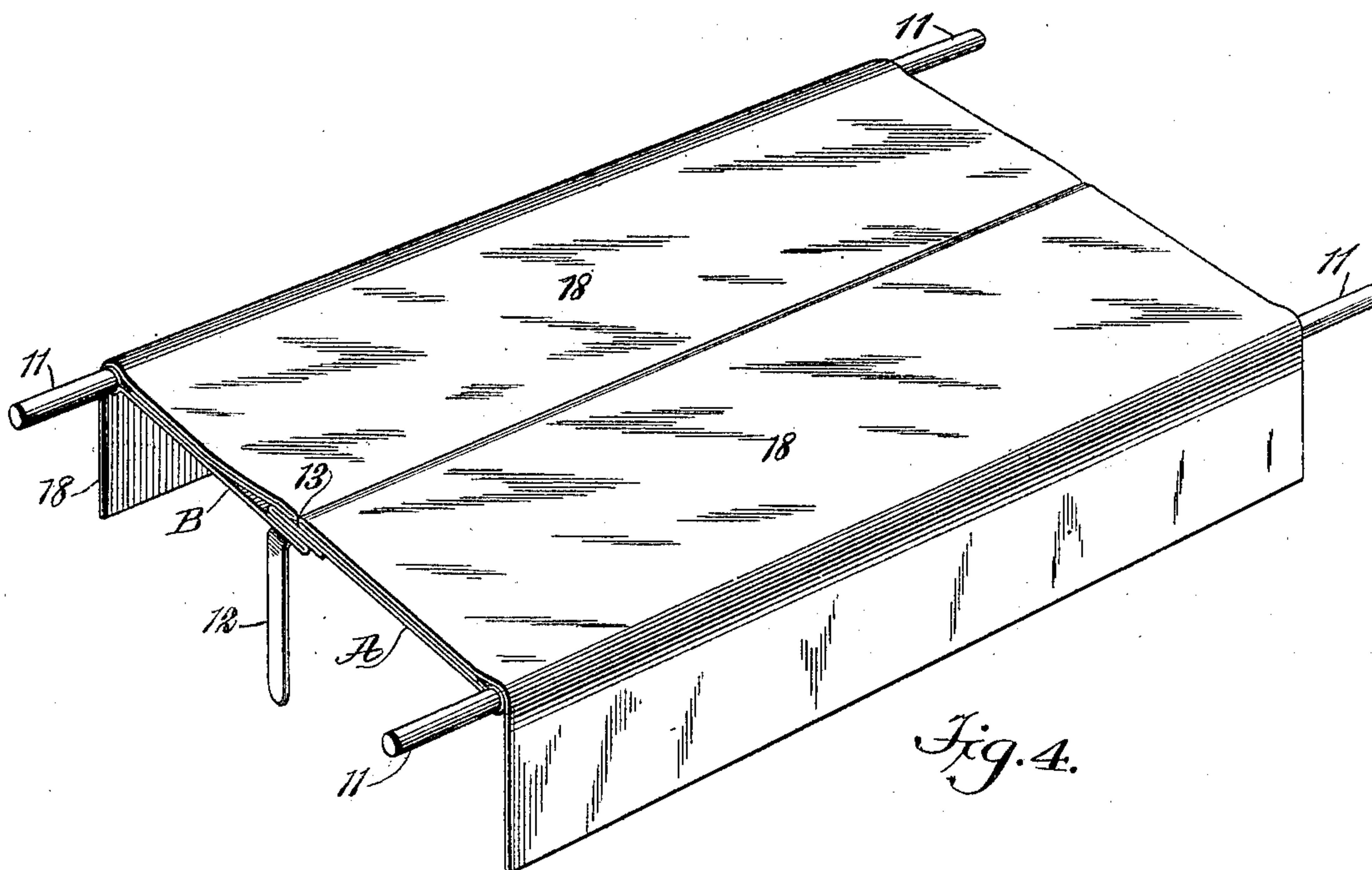
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2 Sheets—Sheet 2.



WITNESSES:

*A. Appleman Jr.*  
*Walter K.*

INVENTOR

*Francis X. Aigner*

BY

*Munn*  
ATTORNEYS



# UNITED STATES PATENT OFFICE.

FRANCIS X. AIGNER, OF JERSEY CITY, NEW JERSEY.

## STRETCHER.

SPECIFICATION forming part of Letters Patent No. 706,371, dated August 5, 1902.

Application filed December 30, 1901. Serial No. 87,710. (No model.)

*To all whom it may concern:*

Be it known that I, FRANCIS X. AIGNER, a subject of the Emperor of Germany, and a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Stretcher, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a sectional stretcher so constructed that the body portion may be parted beneath a patient and the patient laid upon a bed without being turned or unduly jarred when the stretcher is removed or in any way inconvenienced by the connecting strip or strap for the sections, especially while being carried up and down stairs or when the weight of the body is shifted, and, furthermore, to provide a portable folding stretcher constructed without cross-bars, combining the simple construction of the ordinary folding stretcher with the improvement of a divided stretcher capable of being used with or without attached blankets.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a bottom plan view of the improved stretcher complete and in condition for use. Fig. 2 is a plan view of a portion of the body-section of the stretcher, the parts being separated. Fig. 3 is a section taken substantially on the line 3 3 of Fig. 1. Fig. 4 is a perspective view of the stretcher with blankets applied. Fig. 5 is an enlarged transverse section through one portion of the stretcher and a blanket applied thereto, and Fig. 6 is a detail view illustrating a slight modification in the construction of the stretcher.

The body of the stretcher may be made of any suitable material—such as canvas, for example—and is in three parts—namely, two main sections A and B, which overlap at their inner edges, and a tie or locking section 12, which is in the form of a strap or strip. The strap or strip 12 is made of stiff belting of rubber or leather having a width of about

half an inch, preferably more, and the said strip extends about twelve inches beyond the ends of the body-section, enabling the strip to be readily withdrawn when the body-sections are to be separated, as shown in Figs. 1, 2, and 4.

Each body-section A and B is provided with a hem 10 at its outer longitudinal edge, through which hems the carrying or handle poles 11 are passed, as is shown in Figs. 1 and 4.

In the construction of the section A, which may be termed the “uppermost” section, the material at its inner longitudinal edge is returned at the lower face of the section and secured in such manner as to form a longitudinal flat hem 13, and in this hem a series of transverse eyeleted openings 14 are produced, arranged in communicating pairs by securing the hem by lines 15 of stitching or otherwise to the main portion of the said section A. The stitching 15, as is best shown in Fig. 2, is carried adjacent to the outer edge of one eyeleted opening of a pair and adjacent to the inner edge of the second eyeleted opening of the pair, thus forming a series of loops 14<sup>a</sup>, a loop occurring between each two eyelets so treated.

The material of the under body-section B is preferably reinforced by folding the material at the inner longitudinal edge of the section upon its upper surface, as is shown at 13<sup>a</sup> in Fig. 3, and in this reinforced portion of the section B eyeleted openings 16 are produced, adapted to register with the openings 14 in the section A when the two sections are brought together, the inner portion of the section A resting upon the corresponding portion of the section B. The two body-sections A and B are detachably tied together by the strip or strap 12, which is laced through the eyeleted openings 14 and 16, as is shown in Figs. 1 and 3.

It will be observed that when the lacing or tie strap 12 is applied the said strap is not visible at the upper face of the body, as said strap passes within the hem 13, and is therefore also not felt by a patient lying upon the stretcher and being sufficiently stiff will not roll up through tension, and thus inconvenience the patient.

In operation when the stretcher is placed upon a bed the strip or strap 12 is drawn from



locking engagement with the sections of the body of the stretcher, whereupon the two sections A and B may be easily pulled from beneath the body of the patient, leaving the patient upon the bed, the operation being accomplished without jarring or otherwise disturbing the patient.

In Fig. 6 I have illustrated a slight modification in the construction of the body of the stretcher, in which leather loops 17 are employed to receive the strip 12 instead of eyeleted openings, and when the loops 17 are used they may be applied to both body-sections or to the section A only, in which latter event the loops are arranged to register with the openings 16 in the section B.

In Figs. 4 and 5 I have illustrated blankets 18, applied to the body-sections of the stretcher, and when such an application is made the blankets are given a single fold, the turned edges abutting at the central portion of the stretcher, as is shown in Fig. 4, and the blankets are attached to the body-sections of the stretcher by straps 19 or their equivalents, secured to the under face of the upper members of the blankets, which straps are passed through openings in the under members of the blankets and in the body-sections A and B, as is shown in Fig. 5.

I desire it to be understood that the sections A and B of the stretcher are held connected, even when the stretcher is heavily weighted, by the strip 12 of strong belting of suitable width interlaced through exactly registering openings or eyelets, dispensing thereby with the necessity of fastening the connecting-strip to cross-bars or otherwise securing its ends, avoiding any strain on either end of the connecting-strip which might be communicated to the patient when carried up or down stairs, causing great inconvenience and pain.

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

1. In a stretcher, a body consisting of two sections arranged to overlap, the overlapping portion of the under section having openings extending through from face to face, and the corresponding portion of the upper section being provided with loops on its under face,

and a tie-strip interlaced through said openings and loops, as set forth.

2. In a stretcher, a body consisting of two sections arranged to overlap and provided with registering openings in their overlapping portions, a flexible strip removably interlaced through the said openings, and a blanket attached to the upper face of each of the sections of the body, the blankets abutting at the central portion of the stretcher for the purpose described.

3. In a stretcher, a body consisting of two sections arranged to overlap, the overlapping portion of the under section having openings extending through from face to face, the corresponding portion of the upper section being provided with a hem and the under member of the hem having loops formed therein, the inlets and outlets of which loops are in registry with the openings in the under section, and a tie-strip interlaced through the openings and passed through the loops, as specified.

4. In a stretcher, a pliable body constructed in two overlapping sections having registering eyelets, and a strip of strong belting laced through the eyelets, the ends of the belting-strip being free, whereby the sections of the body are detachably held together even when the stretcher is heavily weighted, and dispensing with the necessity of cross-bars and other fastening devices for the ends of the belting-strip and avoiding tension on the ends of the strip which might be painfully communicated to the patient carried, as described.

5. A stretcher, comprising a body formed of two sections having their inner edges overlapping and provided in the overlapping edges with registering openings, a strip interlaced through said openings, and a folded blanket secured upon each section, the turned edges of the blankets meeting at the center of the body of the stretcher, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANCIS X. AIGNER.

Witnesses:

JOHN GRIFFIN,  
DANIEL J. GRIFFIN.