1,166,727.

J. WARGA.

FOLDING STRETCHER. APPLICATION FILED SEPT. 9, 1915.

30

Patented Jan. 4, 1916. 3 SHEETS-SHEET 1.







Ĩ

Jnventor J. Warga

AMMolson

Attorney

32

25

DI ANGERARU CO WACHINGTON D C

24

By

Ŧ

3

.

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

•

· ·

 \mathbf{n}

· · ·

. .

.

.

1,166,727.

.

· ·

Ν. .

> J. WARGA. FOLDING STRETCHER. APPLICATION FILED SEPT. 9, 1915.

Patented Jan. 4, 1916. 3 SHEETS-SHEET 2.

ι,

•



Attorney

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

. L

• •

1,166,727.

J. WARGA. FOLDING STRETCHER.

APPLICATION FILED SEPT. 9, 1915.

Patented Jan. 4, 1916. 3 SHEETS-SHEET 3.

Ŋ



COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.



FOLDING STRETCHER.

1,166,727.

Specification of Letters Patent. Patented Jan. 4, 1916. Application filed September 9, 1915. Serial No. 49,700.

To all whom it may concern:

Be it known that I, JOHN WARGA, a subject of the King of Hungary, residing at Ohio City, in the county of Van Wert and State of Ohio, have invented certain new and useful Improvements in Folding Stretchers, of which the following is a specification.

This invention relates to certain new and 10 useful improvements in folding stretchers. The primary object of the device is the provision of a stretcher adapted for army and hospital use and which may be readily folded into compact form whenever desired 15 as for storage purposes.

A further object of the invention is the provision of a foldable stretcher of the form embodying a frame and flexible mattress which is so constructed as to be readily 20 folded and unfolded without removing the mattress from the frame. A still further object is the provision of a foldable stretcher frame arranged for supporting a flexible covering and designed 25 to allow the parts of the frame to interengage for accommodating the same, the covering being so arranged as to permit a folding of the frame without removal or injury to the covering. 30 With these general objects in view and others that will appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more 35 fully described, illustrated in the accompanying drawings, and then claimed. In the drawings forming a part of this application and in which like designating characters refer to corresponding parts 40 throughout the several views, Figure 1 is a top plan view of the device set up for use.

Referring more in detail to the drawings, the device broadly consists of the foldable 55 frame 9 shown in Fig. 3 and a flexible covering or mattress 10 that is adapted to be permanently secured thereto at the time of manufacture. The said frame is rectangular in form having a projecting handle 11 at 60 each corner thereof and being provided adjacent each end with double leg members 12 in the form of supporting yokes each having oppositely-arranged feet 13. The rectangular frame 9 is composed of opposite 65 side rails 14 terminating at each of their ends in corner portions 15, the said handles 11 being formed integrally therewith while the legs 12 are hinged to the inner sides of the corner portions 15 as at 16. The side 70 rails 14 are provided centrally upon their under sides with blocks 17 pointed at their opposite ends 18 while the said rails and blocks are centrally transversely severed as at 19 being hingedly connected together by 75 suitable hinges 20 carried by the lower faces of the said blocks 17. The side rails 14 are each provided with lugs 21 intermediately arranged between the said blocks 17 and end members 15, the said 80 lugs being centrally transversely severed as at 22 while hinges 23 are carried by the lower faces of the said lugs and whereby the opposite end portions of the rails 14 are hingedly connected together. The end legs 12 being pivoted within the frame 9 are adapted for folding inwardly between the side rails 14 thereof as best illustrated in Fig. 4 of the drawing. The said frame 9 is provided with end bars 24 90 each of which is severed adjacent its opposite ends as at 25 and the three portions of each bar thus formed are hingedly connected together by means of hinges 26 secured to the lower faces of the said bars at the points 95 of severance thereof. The said legs 12 are each provided with connecting bars 27 connecting the opposite sides 28 thereof, the said bars 27 being of substantially the same length as the frame bars 24 and being simi- 100 larly transversely severed as at 29, the three portions of each of the bars 27 being connected together by means of suitable hinges 30 upon the outer sides of the said bars $\overline{27}$. By means of this arrangement of hinged 105 end bars 24 and connecting bars 27, it will

Fig. 2 is a side elevation thereof. Fig. 3 is a perspective view of the frame of the device with the flexible covering removed.
45 Fig. 4 is an inverted perspective view of a portion of the complete device with the leg members folded. Fig. 5 is a perspective view of the frame-work, with the side portions thereof in their folded positions. Fig. 50 6 is a similar view of the frame-work showing a further step in the folding operation thereof, and, Fig. 7 is a perspective view of the frame-work completely folded.

2

1,166,727

be seen that the side rails 14 may be folded inwardly in contact with each other by folding the separate portions of the bars 24 and 27 together, such partial folding of the frame being best illustrated herein by Fig. 5 5 of the drawing. The handles 11 having outer curved cut-away portions or notches 31 provide end notches when the frame is so folded as shown in Fig. 5 and upon folding together the portions of the end mem-bers of the rails 14 by moving the same upon 10 their hinges 23, the notches 31 will receive and accommodate the tapered block ends 18 as best illustrated in Fig. 6, it being noted 15 that the blocks 17 are of greater height than the hinged lugs 21 of the side rails. When the frame is partially folded as shown in Fig. 6, it will be seen that the frame will then be in a position to be fur-20 ther folded by moving the end portions thereof upon the connecting hinges 20 and whereupon the frame will be completely folded, assuming the compact form illustrated in Fig. 7. The aforementioned flexi-25 ble covering 10 which forms the mattress or supporting member of the stretcher may be provided of any flexible material such as canvas and is permanently secured to the side rails 14 and end members 24 by means 30 of encircling side straps 32. The covering 10 is provided with substantially circular openings 33 at points adjacent the connecting bar hinges 30 and these openings accommodate the connecting bars so that the 35 stretcher frame may be readily completely folded with the said covering 10 operatively attached thereto, it being understood that the folded over end portions of the connecting bars 27 will slightly project through the 40 openings 33 when the device is in its folded position. For affording additional strength at the hinged points hereinbefore noted, it is desirable to complementally form the adjacent ends of the members which are 45 hinged together and such formation as herein carried out by means of tongues 34 adapted to be received within receiving slots 35 upon the end of the oppositely-arranged cooperating member. The structure therefore 50 affords a serviceable stretcher that possesses the requisite strength for operative use while the same is capable of being quickly and easily folded into compact form when-

the parts may be made without departing from the spirit and scope of the invention as claimed.

What I claim as new is:---

1. A rectangular stretcher frame compris- 70 ing side rails and hinged end bars, tapered blocks centrally carried by the said rails and projecting lugs also carried by the same side thereof, the said side rails being transversely severed through the said blocks and 75 lugs, hinged connections between the severed portions of the said blocks and lugs, and foldable sectional supporting legs arranged at the opposite ends of the said frame. 80 2. A rectangular stretcher frame comprising side rails and hinged end bars, tapered blocks centrally carried by the said rails and projecting lugs also carried by the same side thereof, the said side rails being trans- 85 versely severed through the said blocks and lugs, hinged connections between the severed portions of the said blocks and lugs, foldable sectional supporting legs arranged at the opposite ends of the said frame, the 90 said blocks being of greater height than the said lugs, and terminal handles upon the said rails having cut-away outer portions adapted for the reception of the opposite ends of the said blocks when the device is in its 95 folded formation.

3. A stretcher comprising a rectangular

frame having opposite side rails and end bars, yoke-shaped legs formed in hinged sections pivoted between the said rails, a 100 flexible covering secured to the said rails and bars and provided with accommodating openings therein arranged adjacent the hinging points of the said legs, the said rails being formed in four substantially 105 equal portions, hinged connections between the said rail portions, the said end bars being divided into three portions, and hinged connections between the said rail portions. 4. A stretcher comprising a rectangular 110 frame having side rails divided into feur sections and end rails divided into three sections, hinges upon the lower side of the said frame connecting the said sections together, inwardly foldable leg yokes pivotally at-115 tached adjacent the corners of the said frame and having connecting bars divided into three portions substantially corresponding to the portions of the said end bars of the frame, hinged connections between the 120 said connecting bar portions, and a flexible covering carried by the said frame and provided with accommodating openings therethrough positioned adjacent the said hinges of the connecting bars when the device is in 125 its folded position. 5. A stretcher comprising a rectangular frame having side rails divided into four sections and end rails divided into three sections, hinges upon the lower side of the 130

ever desired, it being seen that the inward
55 positioning of the legs 12 when folded as well as the arrangement of the notch formations 31 and the block 17 received thereby forms a rigid interlocking arrangement when the complete structure is folded in its
60 inoperative position.

While the form of the invention herein shown and described is what is believed to be the preferred embodiment thereof, it is nevertheless to be understood that various 65 forms, modifications and arrangements of 1,166,727

said frame connecting the said sections together, inwardly foldable leg yokes pivotally attached adjacent the corners of the said frame and having connecting bars di-5 vided into three portions substantially corresponding to the portions of the said end bars of the frame, hinged connections between the said connecting bar portions, a flexible covering carried by the said frame 10 and provided with accommodating openings therethrough positioned adjacent the said hinges of the connecting bars when the de-

vice is in its folded position, corner handles upon the said frame having cut-away portions upon their outer sides coöperating in 15 the formation of notches when the side rails are folded together, and tapered blocks carried by the said side rails positioned within the said notches when the device is in its folded position. 20

In testimony whereof I affix my signa-

JOHN WARGA.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

ture.