No. 681,559. Patented Aug. 27, 1901.

H. LOHSEN.

STRETCHER OR LITTER.

(Application filed Mar. 15, 1901.)

(No Model.)

Fig. 1.

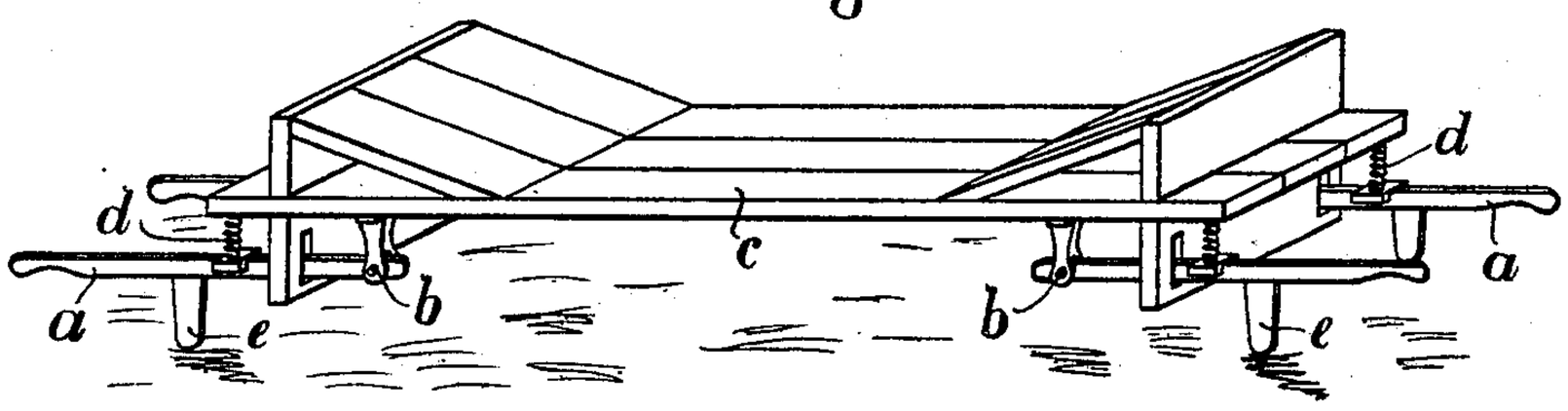
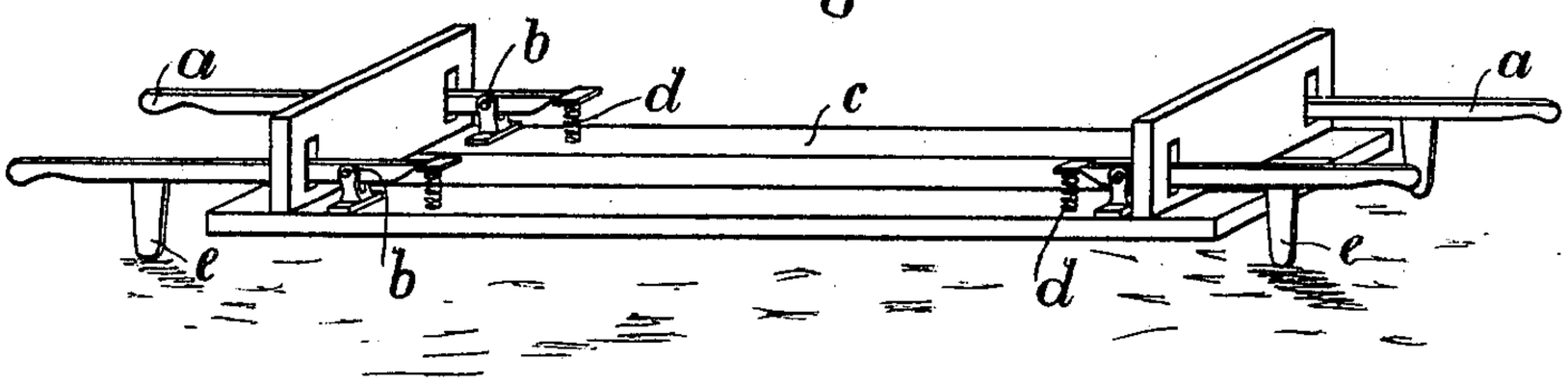


Fig. 2.



Witnesses.
J. B. Keeler
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Inventor.
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By James L. Norris,
Atty.

UNITED STATES PATENT OFFICE.

HERMANN LOHSEN, OF BRUNSWICK, GERMANY.

STRETCHER OR LITTER.

SPECIFICATION forming part of Letters Patent No. 681,559, dated August 27, 1901.

Application filed March 15, 1901. Serial No. 51,319. (No model.)

To all whom it may concern:

Be it known that I, HERMANN LOHSEN, general agent, a subject of the Emperor of Germany, residing at Lonhardstrasse 46, Brunswick, Germany, have invented certain new and useful Improvements in Stretchers or Litters, of which the following is a specification.

This improved stretcher or hand-litter is characterized by an arrangement which renders ineffective the shocks resulting from the stretcher being carried, lifted, or set down, &c. For this object the handles in this improved stretcher are not, as usual, rigidly connected with the frame, but they are connected with the same in such a way that a spring connection exists between them and the frame, which absorbs and renders ineffective all vertical shocks to the stretcher caused by the load when the stretcher is being used. The combination of handle and frame and also the spring connection between the two may be effected in various ways.

In the drawings accompanying and forming a part of this specification, Figure 1 is a perspective view of a stretcher or litter involving my improvements, and Fig. 2 is a similar view showing a modified form of the same.

In Fig. 1 of the accompanying drawings each of the four handles *a* is pivotally connected with the frame *c* at the point *b* after the manner of a one-armed lever, and at a suitable place a compressible spring *d* is inserted between the frame and the lever, which produces the spring-support. When the stretcher is resting on the arms *a*—for instance, in the hands of the bearers—the stretcher, with its load, rests on the springs *d*, as is evident without further explanation from the drawings. In order to allow of the stretcher being deposited down on the ground without shock, the support-arms *a* may be provided with feet *e*, so that the shocks resulting from the depositing of the stretcher may also be rendered ineffective or reduced by the springs *d*. The provision of feet on the spring-support arms also affords the advantage of enabling the stretcher carrying a sick person to be conveyed on springless wagons or vehicles or on vehicles which under ordinary circumstances would not be sufficiently springy, the jolts caused by such wagons being absorbed by the new arrangement of the stretcher itself. The spring-support arms further allow of an advantageous use of this improved stretcher in railway-carriages, as it may be suspended from the spring carrying-arms by means of devices provided in the carriages.

The arrangement shown in Fig. 2 differs from that shown in Fig. 1 in that the carrying-arms *a* are arranged above the bars *c* of the frame. While, therefore, in the arrangement shown in Fig. 1 the frame rests upon the carrying-arms, here it is suspended from them. In order to use pressure-springs in this arrangement, the carrying-arms *a* are mounted at the point *b*, after the manner of two-armed levers, in such a way that one end acts as handle, while the other bears on the spring *d*. Feet or legs *e* may be provided in this case also.

Of course instead of pressure-springs tension-springs may also be employed; but the changes in the position of the springs and points of support *b* necessitated thereby do not require to be separately explained, as they are self-evident.

I declare that what I claim is—

1. A portable stretcher or hand-litter characterized by the carrying-arms *a* pivoted to the body of the stretcher which serve as handles being supported against the actual frame by means of springs, with the object of diminishing and absorbing any vertical shocks resulting during the use of the stretcher, substantially as hereinbefore described and shown.

2. A stretcher such as hereinbefore described, characterized by the carrying-arms *a*, which serve as handles, being pivotally mounted on the frame and supported against this latter with a spring action by the insertion of tension or pressure springs respectively, substantially as hereinbefore described and shown.

3. A stretcher such as hereinbefore described, characterized by the yieldingly-

mounted pivoted arms *a* being provided with feet or legs *e* which share in the spring action of the carrying-arms *a*, and thus render ineffective the joltings resulting when the stretcher is set down, or when it rests on jolting supports or vehicles, substantially as hereinbefore described and shown.

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

HERMANN LOHSEN.

Witnesses:
WILH. LEHCKL,
JULIUS SECKEL.