(No Model.)

A. EUSTIS.

DEVICE FOR ASSISTING INFIRM PERSONS.

No. 535,825. Patented Mar. 19, 1895.

Fig. 1.

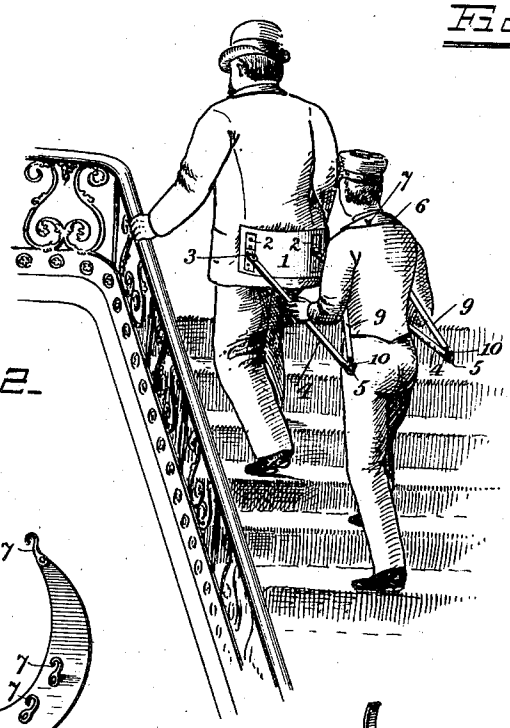


Fig. 2.

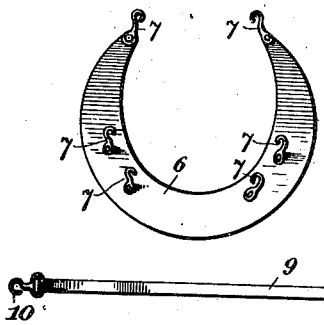


Fig. 3.

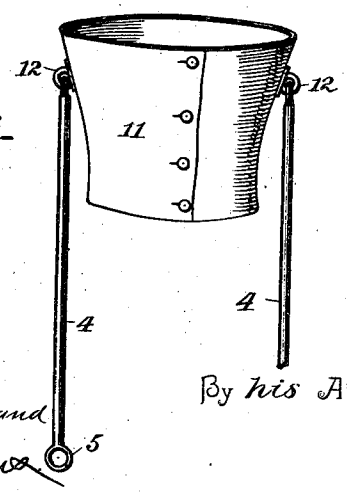
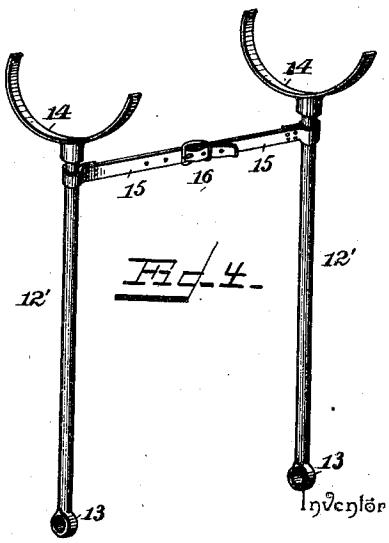


Fig. 4.



Witnesses

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DEVICE FOR ASSISTING INFIRM PERSONS.

SPECIFICATION forming part of Letters Patent No. 535,825, dated March 19, 1895.

Application filed April 7, 1893. Serial No. 470,565. (No model.)

To all whom it may concern:

Be it known that I, ALLAIN EUSTIS, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Devices for Assisting the Locomotion of Persons; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

My invention has for its object to provide a device adapted to be used in assisting old or infirm persons in ascending steps, said device being provided with simple means for attachment to the assistant, whereby the application of power by the assistant is facilitated.

Further objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings:—Figure 1 is a perspective view of a device constructed in accordance with my invention, showing the manner of using the same. Fig. 2 is a detail view, detached, of the collar and connecting straps. Fig. 3 is a detail view of a slightly modified form of pressure plate. Fig. 4 is a view showing another modified form of pressure plate.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

Referring to Figs. 1 and 2, the pressure plate 1, which is adapted to be arranged in contact with the body of the person to be assisted, is provided with bearing plates 2 to which are hinged, as shown at 3, the push bars or arms 4. These push bars or arms terminate at the opposite end in eyes 5 with which are engaged hooks 10 on the lower ends of connecting straps 9.

6 represents a collar of crescent-shape, which is adapted to be arranged around the neck of the assistant and resting upon the shoulders with the front extremities depending in front of the shoulders for attachment to the upper ends of the connecting straps 9, said straps being provided with rings 8 for engagement with hooks 7 on said collar. In addition to the hooks, which are arranged at the extremities of the collar, I employ auxiliary hooks bearing the same reference numeral, which are arranged at intermediate points of the collar to provide for shortening the connecting straps.

With the parts in the positions illustrated in Fig. 1 with the collar resting upon the shoulders of the assistant and depending at its extremities in front and with the connecting straps attached to said collar and depending between the arms and the sides of the assistant, it is obvious that the pressure exerted by the assistant is both upward and forward, and, therefore, it is desirable to employ such means for connecting the push bars to the body of the person assisted as will provide for arranging said push bars in the direct line of strain, and hence of movement. Hence, I employ the hinged or loose connection, which is shown at 3, the pressure plate illustrated in Fig. 1 being preferably flexible to conform to the shape of the back of the person assisted and being constructed of leather, canvas, wood veneer, or sheet metal. The use of the flexible crescent-shaped collar and the flexible connections or straps which are attached to the collar and connect the same to the rear ends of the push bars enable the assistant in exerting an upward and forward pressure to distribute the exertion between the muscles of the back and limbs in such a manner as to avoid overtaxing either, and the arrangement of said collar and connected parts prevents displacement, and at the same time avoids chafing the assistant.

In Fig. 3 I have shown a modified form of pressure plate, which in this instance consists of a jacket or band 11 adapted to be buttoned or otherwise secured around the waist of the person to be assisted, the loose or universal connections between said waist or band and the push bars 4 being shown at 12, and consisting of interlocking eyes.

In Fig. 4 I have shown another modified form of pressure plate consisting of crescent-shaped stirrups 14, adapted to be arranged under the shoulders of the person to be assisted, the push bars 12′ being attached rigidly thereto and being connected to hold said

rests in proper position by a transverse strap 15 to extend across the back of the person assisted. This strap is preferably formed in sections connected by a buckle 16, whereby adjustment to suit the breadth of the person assisted is possible. The push bars 12′ terminate at the opposite end in eyes 13 similar to those described in connection with the form of my invention which is shown in Fig. 1.

The construction and operation of the device will be understood from the foregoing description, and it will be obvious that the same is simple, and may be adapted to the patient according to the peculiar infirmity which causes such patient to require assistance.

Having described my invention, what I claim is—

In a device of the class described, the combination of a pressure plate, a flexible crescent-shaped sling provided with hooks 7, said sling being adapted to encircle the neck and rest upon the shoulders of an operator, with the terminals thereof in front of the operator, push-bars 4 hinged at their front ends to the pressure plate and provided at their rear ends with eyes, and flexible connections or straps between the sling and the rear ends of said push-bars, the upper ends of the connections or straps being provided with eyes to engage the hooks 7, and the lower ends thereof being provided with hooks to engage the eyes on the rear ends of the push-bars, said connections or straps being adapted to pass to the rear under the arms of the operator, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

ALLAIN EUSTIS.

Witnesses:
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