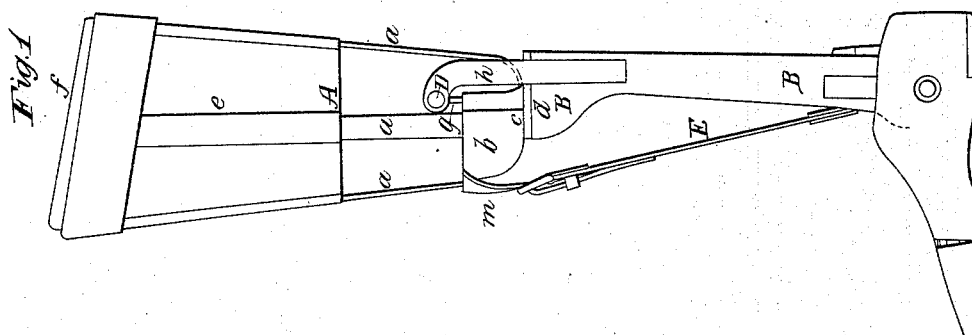
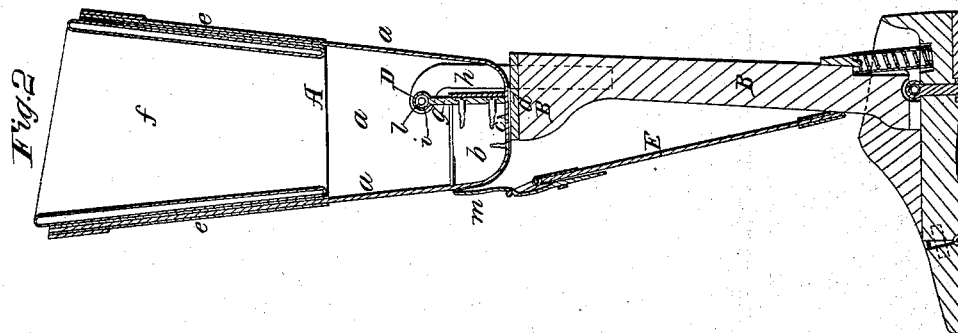
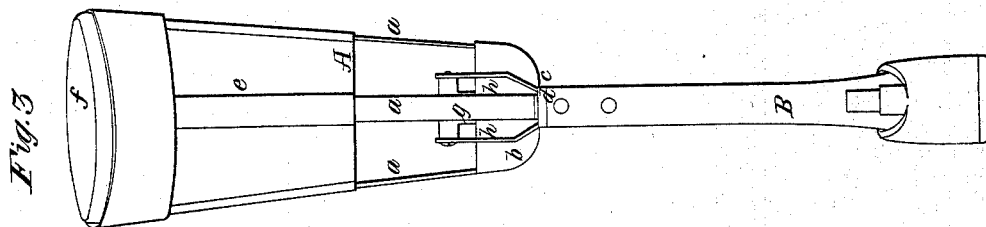


G. B. Jewett,
Artificial Leg,
No. 49,528, Patented Aug. 22, 1865.



Witnesses:
L. W. K. Snow
A. P. Halif

Inventor:
George B. Jewett
by his attorney,
R. W. Edley

UNITED STATES PATENT OFFICE.

GEORGE B. JEWETT, OF SALEM, MASSACHUSETTS.

IMPROVEMENT IN ARTIFICIAL LEGS.

Specification forming part of Letters Patent No. 49,528, dated August 22, 1865.

To all whom it may concern:

Be it known that I, GEORGE B. JEWETT, of Salem, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Artificial Legs; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a side elevation, Fig. 2 a vertical and longitudinal section, and Fig. 3 a rear elevation, of an artificial leg provided with my invention.

Hitherto it has been deemed very difficult, if not impossible, to make a duly-proportioned artificial leg suitable for what is termed "a long thigh-stump"—that is, one in which the amputation has been made immediately above or close to the knee-joint—for to make room for the parts composing the knee-joint of the artificial leg it became necessary to so construct the limb that the knee thereof would project beyond the natural knee of the wearer while in a sitting position, the same imparting to the person the appearance of having a want of correspondence between the lengths of those parts of his legs which are located above his knees. To obviate this difficulty has been one of the most important desiderata in the manufacture of artificial legs, and is accomplished by my invention, which also admits of the lower leg being bent far back into an acute angle with the thigh, whereby a person wearing one of my artificial legs is enabled to kneel therewith into natural postures.

In the drawings, A denotes the thigh-socket frame as composed in part of four metallic bars, *a a a a*, arranged at equal distances asunder, and projecting upward from a knee block or piece, *b*, which is semicircular, or nearly so, on its upper surface, and is formed with a flat base, *c*, and in other respects as shown in the drawings. This base is to rest and bear on a cushion or layer of felt, *d*, fixed on the upper end of the lower leg-column B. The bars *a a a a* are extended into a stiff leather socket, *e*, which receives the stump-cushion *f*. Alongside of the back part of the knee-frame there extends upward a hanger, *g*, which should be firmly fastened to the knee-piece or the metallic frame A, or both, and is to rise above the knee-piece and be arranged between and hinged to two struts or posts, *h h*, which project upward from the leg part B in manner as shown in the drawings. The back bar *a* of the series of bars *a a a a* is between the two struts.

For forming the connection of the hanger and the struts a screw-pin, D, is employed, it being passed through one of the struts and the head of the hanger and screwed into the other strut. This pin has an oil-reservoir, *i*, made lengthwise in it, and provided at one of its ends with a closing-screw. It also has a hole, *l*, leading out of it and into the joint, the same being to allow oil to pass from the reservoir and to lubricate the joint. An elastic band or spring, E, connected to the leg-column B, is buckled to a strap, *m*, which is fastened to the upper part of the knee-piece *b* and extends down in front thereof. This elastic band serves to straighten the limb or bring the knee-piece into bearing on the cushion on the top of the leg-column.

With the above construction of the knee-joint there will be ample room over it and in the socket for the longest thigh-stump without causing the knee, when the wearer is in a sitting position, to project beyond his natural knee.

My invention renders the leg equally applicable to short thigh-stumps, with which the leg can be used and worn with great comfort and facility. The successful treatment of this latter class of cases depends upon particulars which eminently exist in my improvement, and which render the leg easily worn and operated by a short thigh-stump.

With my improvement not only can the wearer of the leg bend the knee at more than a right angle, so as to enable him to kneel in natural postures, but he is enabled, when sitting, to draw the leg back underneath the thigh as far as may be desirable.

I claim—

1. The combination and arrangement of the hanger *g* and the two struts or posts *h h* with the thigh-socket frame A and the leg bar or column B.
2. The combination and arrangement of the knee piece or block *b* with the thigh-socket frame, the hanger *g*, and the two struts *h h*.
3. The arrangement of the cushion *d* and the flat base *c*, or its equivalent, with the column B, the thigh-socket frame A, the hanger *g*, and the struts *h h*, the whole being substantially as specified.

GEO. B. JEWETT.

Witnesses:

JAMES A. GILLISS,
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