

(No Model.)

R. E. McDUFFIE.
ARTIFICIAL LEG ATTACHMENT.

No. 492,583.

Patented Feb. 28, 1893.

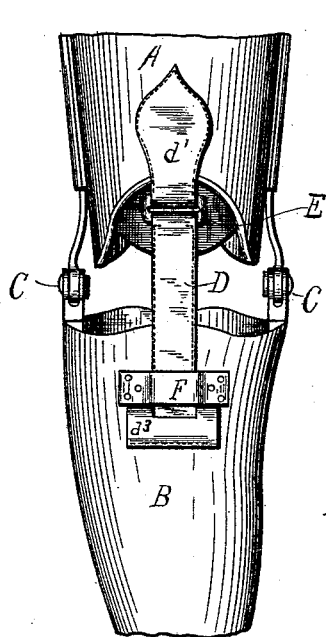


Fig. 1.

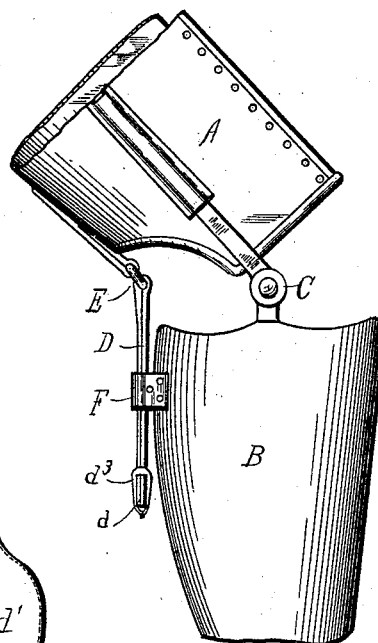


Fig. 2.

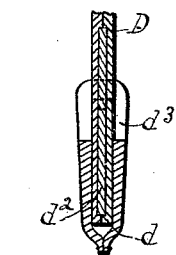


Fig. 3.

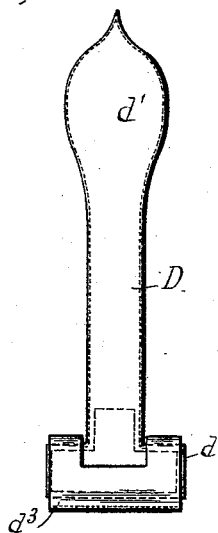


Fig. 4.

Witnesses.

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ARTIFICIAL-LEG ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 492,583, dated February 28, 1893.

Application filed November 25, 1892. Serial No. 452,997. (No model.)

To all whom it may concern:

Be it known that I, REES E. McDUFFIE, a citizen of the United States, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Artificial Legs, of which the following is a specification.

My invention relates to an improvement in artificial legs and particularly to that class, which are designed for use by persons whose limb, or limbs, have been amputated between the knee and ankle, and it consists in providing an improved means to check the movement of the knee, avoid the metallic sound caused by placing stops for the knee joint and to prevent a check strap from buckling outwardly when the knee is bent, injuring the leather and drawing the pantaloons leg against the bent knee portion.

It also consists in providing ready means to adjust the movement of the leg to the stride of the wearer, and compensate for the ordinary wear and stretching of the strap.

Referring to the drawings in which like parts are indicated by similar reference letters wherever they occur throughout various views:—Figure 1. is a rear elevation of a portion of an artificial leg provided with my improvements. Fig. 2. is a side elevation of the same. Fig. 3. is an enlarged detailed view in central vertical section of the lower part of the check strap. Fig. 4. is an elevation of a modified form of my check strap.

Referring to the parts A. is a thigh section, made of leather, or other flexible material, and adapted to being tightly laced around the thigh above the knee. B. is the leg section made of wood, hollowed out on the inside to receive the stump and C, C, are the metal knee joints. These parts are of ordinary construction and need not, therefore, be specifically described.

Referring first to Figs. 1, 2, and 3, D, is a strap of leather which is passed through a metal link E. doubled around upon itself, and stitched together around the edges. The lower end of the strap has a cross head d , and within the cross head is a T shaped plate, d^2 , of brass, or other light metal, to give strength to the cross head. This plate is tightly stitched within the lower part of the strap.

d' , is a leather loop, which is passed through

the link E, its edges are stitched together and the loop firmly stitched to the leg section A.

F, is a metal clip or box, which receives the shaft, or parallel portion of the strap D, which strap is adapted to slide through the clip when the knee is bent, or straightened, as shown in Fig. 2. The clip F, is firmly secured to the leg section B, by screws, or other suitable fastenings.

d^3 is a leather washer which is centrally perforated and its sides are bent down over the cross head, d , and the lower edges stitched together, to retain it in place. This piece, is, as shown, tapered or shaved off at the ends leaving the thicker portion to pass over the shoulders of the cross head, and, after the strap has been used for a time, should it stretch, or the washer become worn, by striking against the under edge of clip F, it may be readily removed and replaced by a new washer, or one of heavier material, to adjust the length of the strap as desired. The form of the check strap d' —shown in Fig. 4 is made of a single piece of leather, omitting the joints formed by link E in Figs. 1 and 2. This form Fig. 4, I regard as an inferior modification of my invention, as it will not in practice work so easily as the preferred form.

I prefer to make my strap attachments of leather, as described and prefer the form as shown, in drawings, but it is obvious, that many variations in form may be made without departing from the spirit and scope of my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination substantially as hereinbefore set forth, of the thigh section, the leg section hinged thereto, the guide clip secured to the leg section, the check strap adapted to slide through said guide clip and having a cross head below said clip, and an articulated joint below the thigh section.

2. The herein before described attachment for artificial legs consisting of the strap D having its upper end adapted for attachment to the thigh section, its lower end formed into a cross head and a metallic clip for attachment to the lower leg section for the purpose set forth.

3. A check strap for the knee joint of artificial legs, consisting of a shaft portion D hav-

ing cross head *d'* and the link E coupling the upper and lower sections of said strap, in combination with the clip or slide adapted for attachment to the leg section, substantially as shown and described.

5 4. The combination as herein before set forth, of the thigh section and leg section, the hinges uniting said sections, the check strap secured to the thigh section and extending
10 down in rear of the leg section, and having at

its lower end, the cross head, the metal plate within, the removable washer over the cross head, and the clip or keeper F secured to the leg section over the strap and above the cross head, for the purpose set forth.

REES E. McDUFFIE.

Witnesses:

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