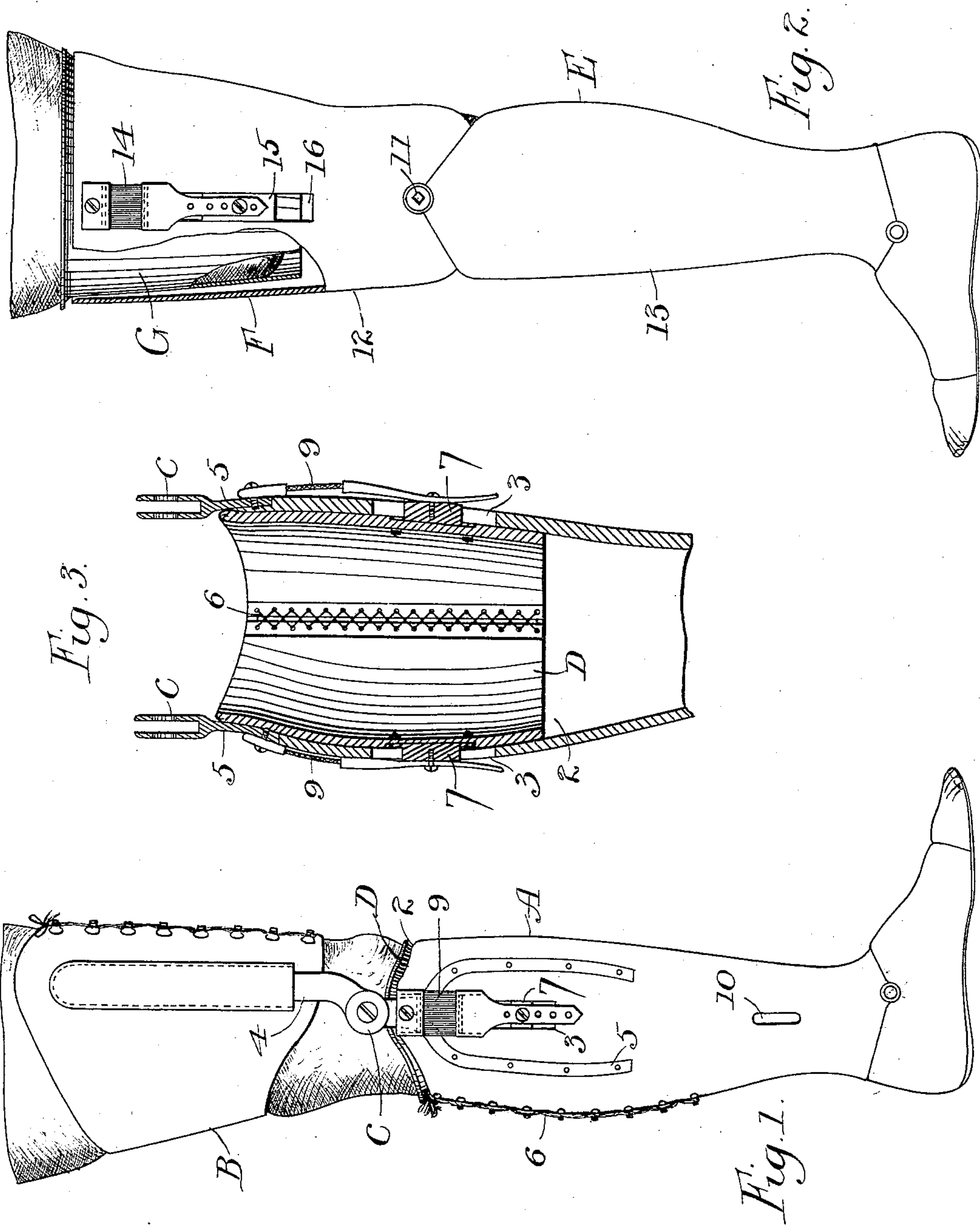


(No Model.)

J. McGUIRE.  
ARTIFICIAL LEG.

No. 521,446.

Patented June 12, 1894.



Witnesses:  
*L. R. Baldwin*  
*A. S. Johnson*

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# UNITED STATES PATENT OFFICE.

JOHN MCGUIRE, OF ST. PAUL, MINNESOTA.

## ARTIFICIAL LEG.

SPECIFICATION forming part of Letters Patent No. 521,446, dated June 12, 1894.

Application filed June 5, 1893. Serial No. 476,572. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN MCGUIRE, of St. Paul, Ramsey county, Minnesota, have invented certain Improvements in Artificial  
5 Legs, of which the following is a specification.

My invention relates to improvements in artificial legs, its object being to provide improved means for the elastic support of the stump therein, and to prevent chafing.

10 To this end my invention consists in arranging in the hollow shell of the artificial leg, an open end socket or corset which slides freely therein and may be bound upon the stump of the natural leg. This socket or cor-  
15 set is connected to the artificial leg by means of elastic straps attached to the lower end of the socket and the upper portion of the leg, preferably by means of projections upon the  
20 shell of the leg, to which the lower ends of the elastic straps are secured.

My invention further consists in the construction and combination hereinafter particularly described and claimed.

25 In the accompanying drawings forming part of this specification, Figure 1 represents a side elevation of my improved device, for use in case of an amputation below the knee. Fig. 2 is a similar view of my device adapted for  
30 use in case of an amputation above the knee, and Fig. 3 is a sectional detail of Fig. 1.

In the drawings A represents the artificial leg, which is made of any suitable material, its upper part 2 being a hollow shell. Through  
35 the side walls of the shell 2 are formed the vertical slots 3 and ventilating openings 10.

B represents the corset which surrounds the thigh in the construction shown in Fig. 1, and which is connected to the leg A by means  
40 of the joints C, the upper members 4 of which are secured to the corset and the lower members 5 to the leg. Arranged in the shell 2 of the leg is the open end socket or corset D provided with suitable lacing 6, to fit the same  
45 to the stump, and provided with projections 7 which extend through the slots 3. Secured at the lower end to the projections 7, and at the other to the top of the shell 2, are elastic  
50 straps 9, which thus serve as supports for the socket in the leg.

In the modified form shown in Fig. 2, for use in case of an amputation above the knee, the shell 12 of the leg E turns in the top of the lower portion 13 of the leg and is connected thereto by the joints 11.

G represents the stump socket or corset which works in the shell 12, and is supported elastically therein by means of the elastic straps 14, the upper ends of which are connected to the top of the shell 12, and the lower  
60 ends to the projections 15 upon the socket G, which project through the slots 16 in the shell 12. The weight of the body of the person is thus supported elastically in either construction, by the elastic straps, and in walking the  
65 friction is entirely between the socket embracing the stump and the wall of the leg in which it works, and the thigh and stump are relieved from the pressure and incumbrance  
70 of unnecessary straps as in the common construction.

I claim—

1. The combination of the corset, or socket open at both ends, adapted to be laced upon the stump, and fitted to and working in the  
75 artificial leg, and the elastic straps attached to said leg and corset and serving as a support for the latter, substantially as described.

2. The combination with the hollow artificial leg, of the corset or socket open at both  
80 ends adapted to be laced upon the stump and working in said leg, and elastically supported therein, substantially as described.

3. The combination with the hollow artificial leg, having vertical slots therethrough, of  
85 the corset adapted to be laced upon the stump, and fitted to and slidable in said leg; the spurs upon said socket projecting through said slots, and the elastic straps secured at one end to said spurs and at the other to the upper part  
90 of said leg, substantially as described.

In testimony whereof I have hereunto set my hand this 27th day of May, 1893.

JOHN MCGUIRE.

Witnesses:

T. D. MERWIN,  
H. S. JOHNSON.