J. MONROE.

LACER FOR KNEE BRACES, &c.

No. 66,728. Patented July 16, 1867.

Fig. 1.

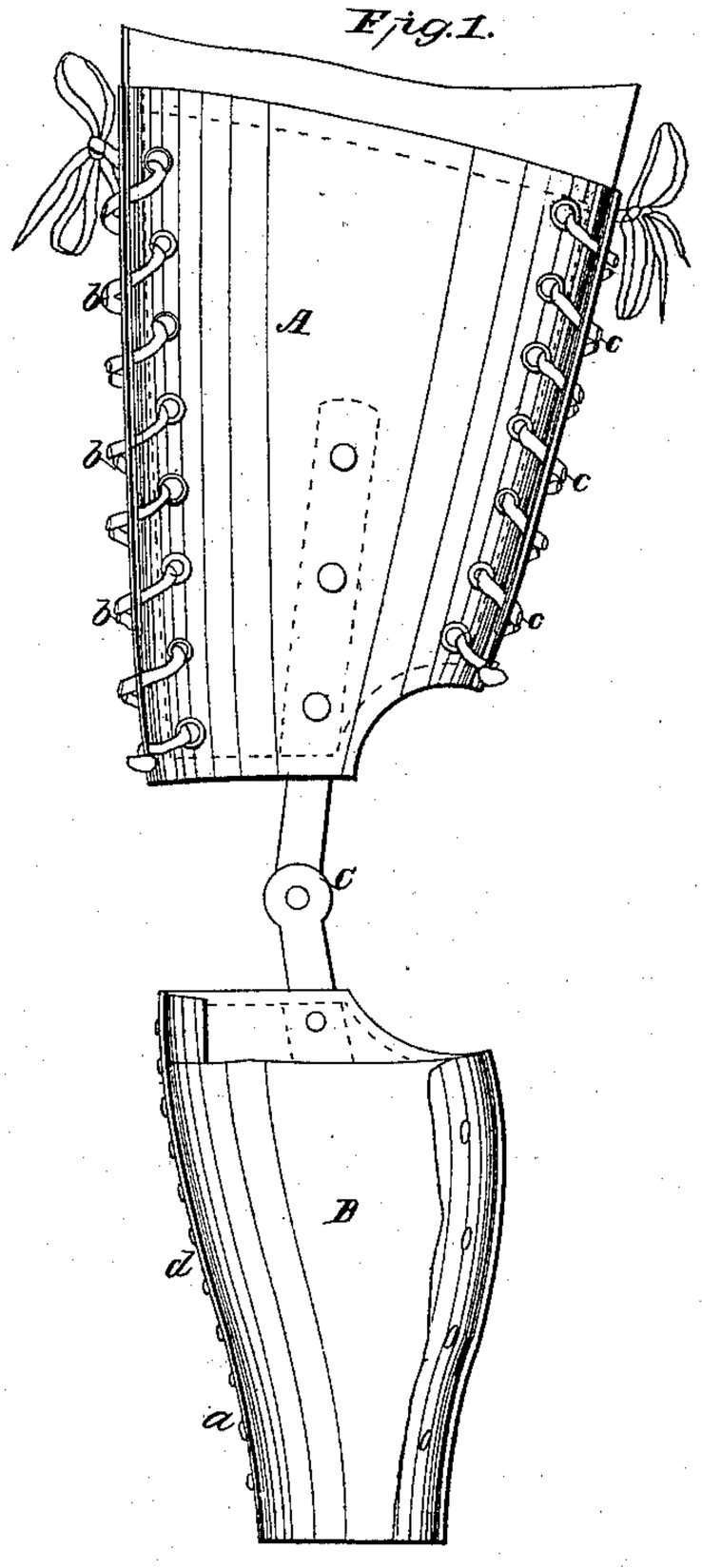
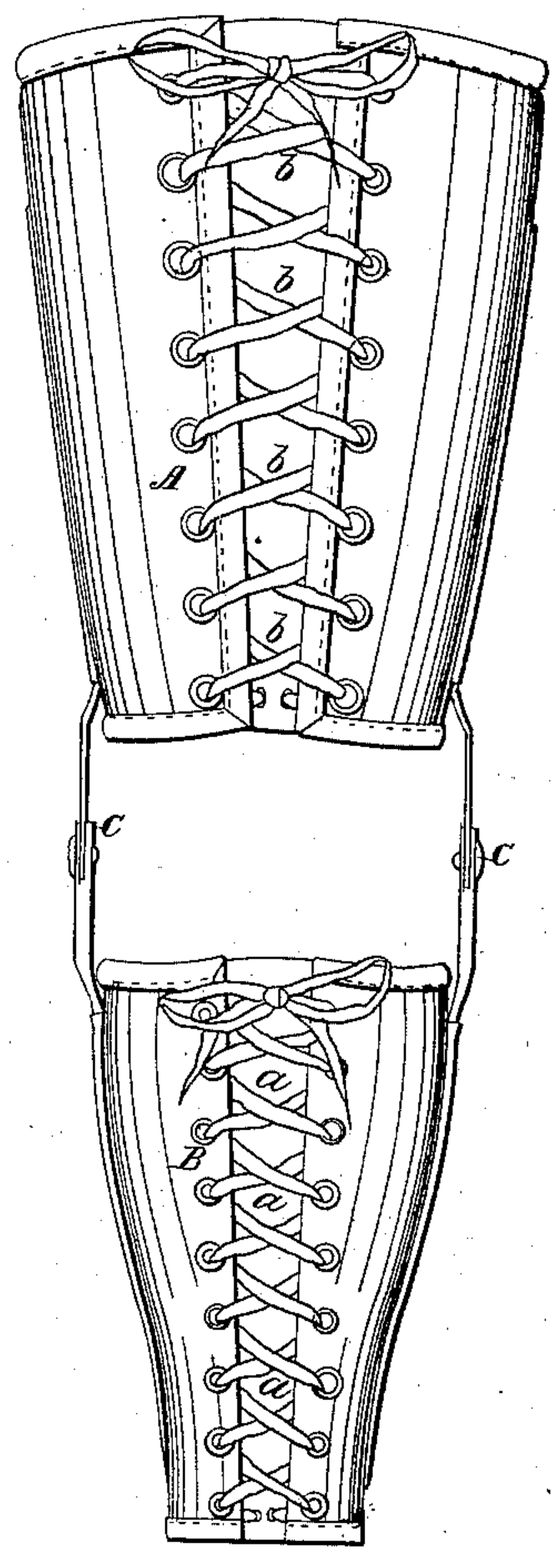


Fig. 2.



Witnesses:
W. Haupt
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Inventor:
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United States Patent Office.

JOSHUA MONROE, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND J. GARDNER, OF SAME PLACE.

Letters Patent No. 66,728, *dated July* 16, 1867.

LACER FOR KNEE-BRACES, &c.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOSHUA MONROE, of No. 432 Broome street, in the city, county, and State of New York, have invented a new and improved Lacer for Knee-Braces, Artificial Limbs, etc.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 represents a longitudinal vertical section of this invention.

Figure 2 is a front elevation thereof.

Similar letters of reference in both views indicate corresponding parts.

This invention relates to a lacer for knee-braces, artificial limbs, splints, and other similar articles, which is constructed of two parts, laced, or otherwise connected in front and rear, in such a manner that by adjusting the lacing-strings or fastenings, the joint of the knee-brace, artificial limb, or splint, can be brought in the proper position in relation to the natural knee-joint, and all lateral or undue strain on said knee-joint and on any portion of the limb can be easily avoided.

A represents a lacer, which is applicable in combination with a socket, B, as a knee-brace, such as shown in the drawing, and used in fractures of the knee, or which can be used in connection with artificial limbs, in amputations below the knee-joint, or with splints. Said lacer connects with the socket B by means of the joints C, which are composed each of two bars, connected by a pivot, or which may be constructed in any other suitable manner. The socket B is made by preference of rawhide, and it is fitted on the leg below the knee, being held in position by a lacing-string, *a*, in front, as clearly shown in the drawing, or it may be secured in any other suitable manner. The lacer A, instead of being made in one piece, laced in front only, as usual, is made in two parts, connected by lacing-strings *b c* in front and rear, as shown; or instead of lacing-strings, any other adjustable fastening may be used. By this arrangement I gain the great advantage that I can adjust the joint C so as to bring it in the proper position in relation to the knee-joint of the limb to which the lacer is attached. With a lacer of the ordinary construction the joint C is thrown in a certain position, from which it cannot easily be moved, and if this position happens to be correct, the knee-brace, or artificial leg, or splint, with which said lacer is used, feels comfortable and easy; but if the joint C is not thrown in the proper position, the socket B binds on the limb, and an uncomfortable feeling and injurious effect are produced, which cannot easily be remedied.

With my lacer the joint C can be readily thrown in the proper position. If it happens to be too far in front, the lacing-string in front is loosened, and that in the rear tightened, and thereby the joint C is thrown back, and in the same manner said joint can be thrown forward, and it can be readily brought in the correct position. When my lacer is used with an artificial leg, where the limb has been amputated below the knee, I can, by adjusting the lacing-strings or fastenings *b c*, give to the stump ease and comfort in the socket, and all lateral strain can be avoided.

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

A lacer for knee-braces, artificial limbs, and splints, which is made in two parts, connected by lacing-strings, or other suitable adjustable fastenings, in front and in the rear, to operate in combination with the joint C and socket B, substantially as and for the purpose described.

JOSHUA MONROE.

Witnesses:

W. HAUFF,

J. VAN SANTVOORD.