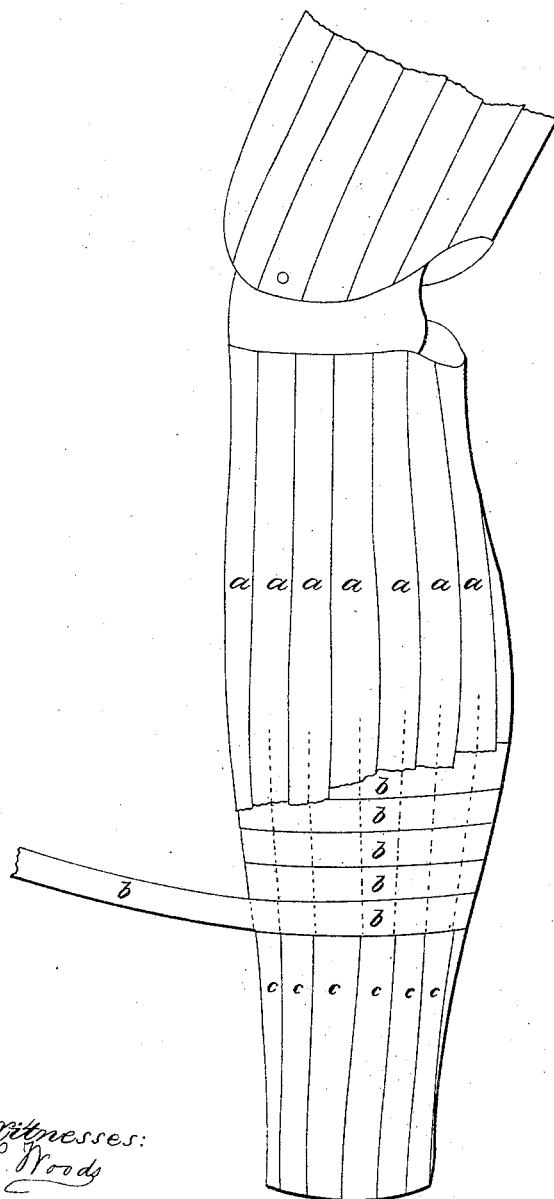


A. Mennel,
Artificial Leg,
No 45,511, *Patented Dec. 20, 1864.*



Witnesses:
W. L. Woods
Arthur de Mott Eben

Inventor:
Anton Mennel

UNITED STATES PATENT OFFICE.

ANTON MENNEL, OF NEW YORK, N. Y.

IMPROVEMENT IN ARTIFICIAL LIMBS.

Specification forming part of Letters Patent No. 45,511, dated December 20, 1864.

To all whom it may concern:

Be it known that I, ANTON MENNEL, of the city, county, and State of New York, have invented a new and Improved Artificial Limb; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, and to the letters marked thereon, making a part of this specification.

The nature of my invention consists in the construction of artificial limbs symmetrical in shape, of great lightness and durability, and as nearly as possible in the form of the natural limb to be mated.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction.

I use the hardest and most flexible wood I can procure, and which I cut into strips after the form of *a b c* of the drawing, suitable in length, width, and thickness for the size of the limb to be made. Of these strips I construct three shells or layers, building one upon the other, and fastening them by means of water-proof cement by the application of steam and powerful machinery. The strips *a* and *c* of the inner shell, *d*, and the outer shell, *f*, re-

spectively, are varied in their width or gored so that when they come together in cylindrical form they will be of the peculiar shape sought. The strip *b* of the middle shell or layer, *e*, is of one unbroken piece, and is wrapped in spiral form around the inner shell, *d*, conforming to the shape of the limb.

Great care and precision must be used in the manner in which the strips *a* and *c* of the shells *d* and *f* are gored or varied in width, respectively, so that when they are put together they may form as nearly as possible a perfect-shaped limb.

A plaster cast from the natural limb may be used with the greatest advantage in determining the shape of the strips *a* and *c*.

What I claim as my invention, and wish to secure by Letters Patent, is—

The construction of artificial limbs by means of the strips *a*, *b*, and *c*, in combination, cemented compactly together, the shells *d*, *e*, and *f*, forming one shell, substantially as above described.

ANTON MENNEL.

Witnesses:

W. L. WOODS,

ARTHUR DE WITZLEBEN.