Bird & Dennistan,

Clasp for Artificial Limbs.

No. 112,683. Patented Mar. 14. 1871.

Fig 1.

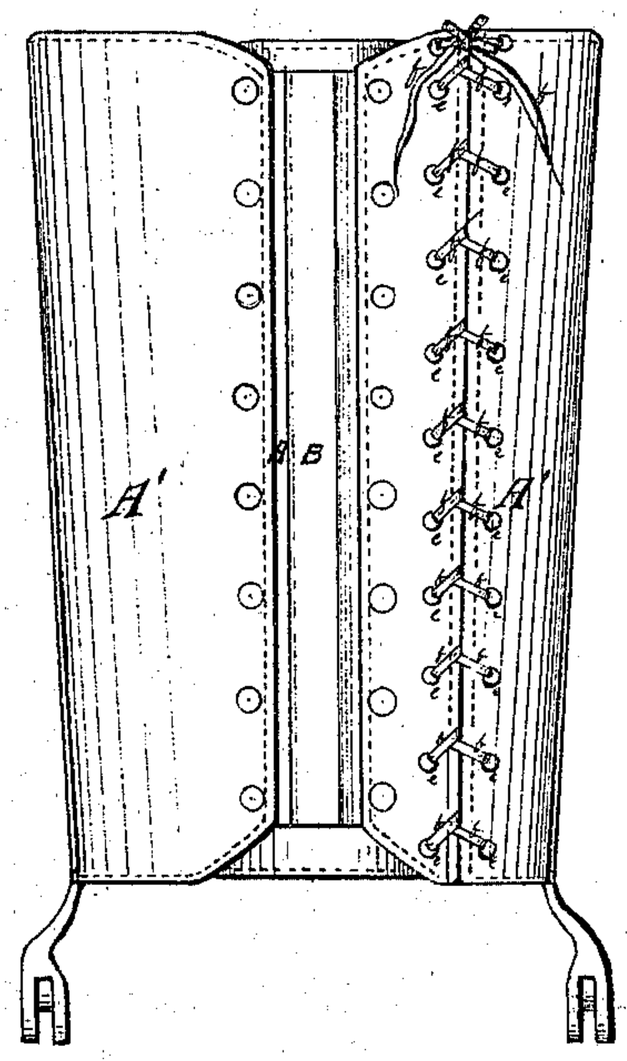


Fig 3.

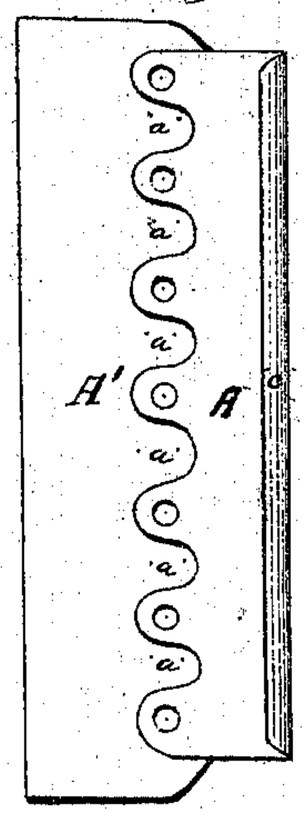


Fig 2.

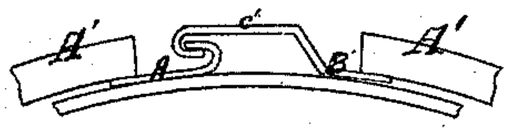
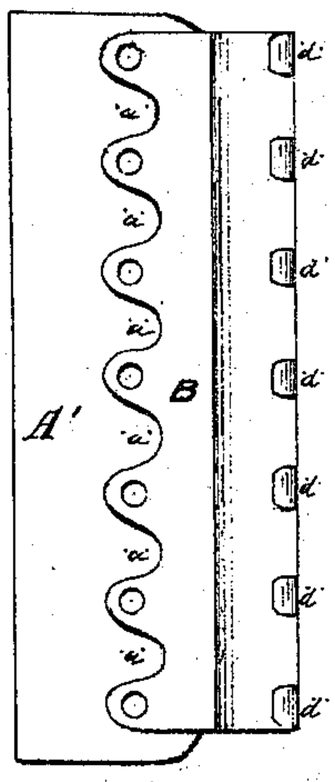


Fig 4.



WITNESSES.
N. K. Ellsworth.
A. C. Rawlings.

INVENTORS.
Samuel R Bird
Joseph F. Dennistan
By Hill & Ellsworth
attys.

United States Patent Office.

SAMUEL F. BURD, OF MERCER, AND JOSEPH F. DENNISTON, OF PITTSBURG, ASSIGNORS TO ARTIFICIAL LIMB MANUFACTURING COMPANY, OF PITTSBURG, PENNSYLVANIA.

Letters Patent No. 112,683, dated March 14, 1871.

IMPROVEMENT IN CLASPS FOR ARTIFICIAL LIMBS.

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

We, SAMUEL F. BURD, of the borough and county of Mercer, State of Pennsylvania, and JOSEPH F. DENNISTON, of the city of Pittsburg, county of Allegheny, in said State, have invented certain Improvements in the Fastening of the Upper Socket or Attachment of Artificial Limbs, for amputations below the knee.

The nature and object of our invention are convenience and saving of time in putting on or taking off the artificial leg, which, by this invention, requires but a moment instead of minutes, and does not open until removed by the hand.

It consists of two strips or plates of either brass or steel, about one thirty-second of an inch thick, about one inch wide, and about one-quarter of an inch shorter than the length of the desired socket, or from five and one-half to seven inches long.

One edge of each plate is riveted to the inside or underside of the leather of the separate sides of the socket, the spaces between the rivets being filed or cut away on the edge of the plates in scallops, thereby reducing the weight but not the strength of the plate. Three-sixteenths of an inch of the straight edge of the under or left-hand section of the clasp is then turned upward and then backward, forming a continuous hook running the whole length of the plate.

The other or right-hand plate (it being riveted to the inner side of the leather of the socket) is first bent upward and then forward again, bringing the exposed surface of the clasp, when fastened, even with the surface of the leather socket, thus securing smoothness.

The outer or straight edge of this plate is filed or cut away three-sixteenths of an inch, in such a manner as to leave projections about one-quarter of an inch long, one at each end, of the plate, and three or four more at regular intervals along the plate. These projections are then turned back, forming hooks, which fit into the continuous hook on the other plate, the two forming a perfect clasp. We then place eyelets and lacer at one side of the clasp, whereby the size of the socket or attachment is regulated at will, and for adjustment only.

General Description.

Our invention secures a convenient and quick fastening, which can be executed readily in the darkness of the bed-room in one-twentieth of the time required by the old lacing process, and has the advantage over single hooks riveted on the socket of being completely smooth.

When the muscles of the thigh are relaxed the clasp is easily fastened, when the lacer has been previously drawn as tight as circulation of the blood will permit when the muscles are in action.

The hooks formed on one of the plates facilitate this process very much, as they can be fastened one after the other; quite an advantage over having to force the continuous clasp to fasten at once.

Clasps vary in weight and size, owing to the weight and size of the person who is to wear them; therefore the word "about" is used in the specification.

Claim.

We claim—

The combination of the lacings and the metallic clasp, constructed as described, when used in connection with an artificial limb, substantially as and for the purposes set forth.

S. F. BURD.
J. F. DENNISTON.

Witnesses:
GEO. W. WRIGHT,
THOS. D. PATTERSON.