

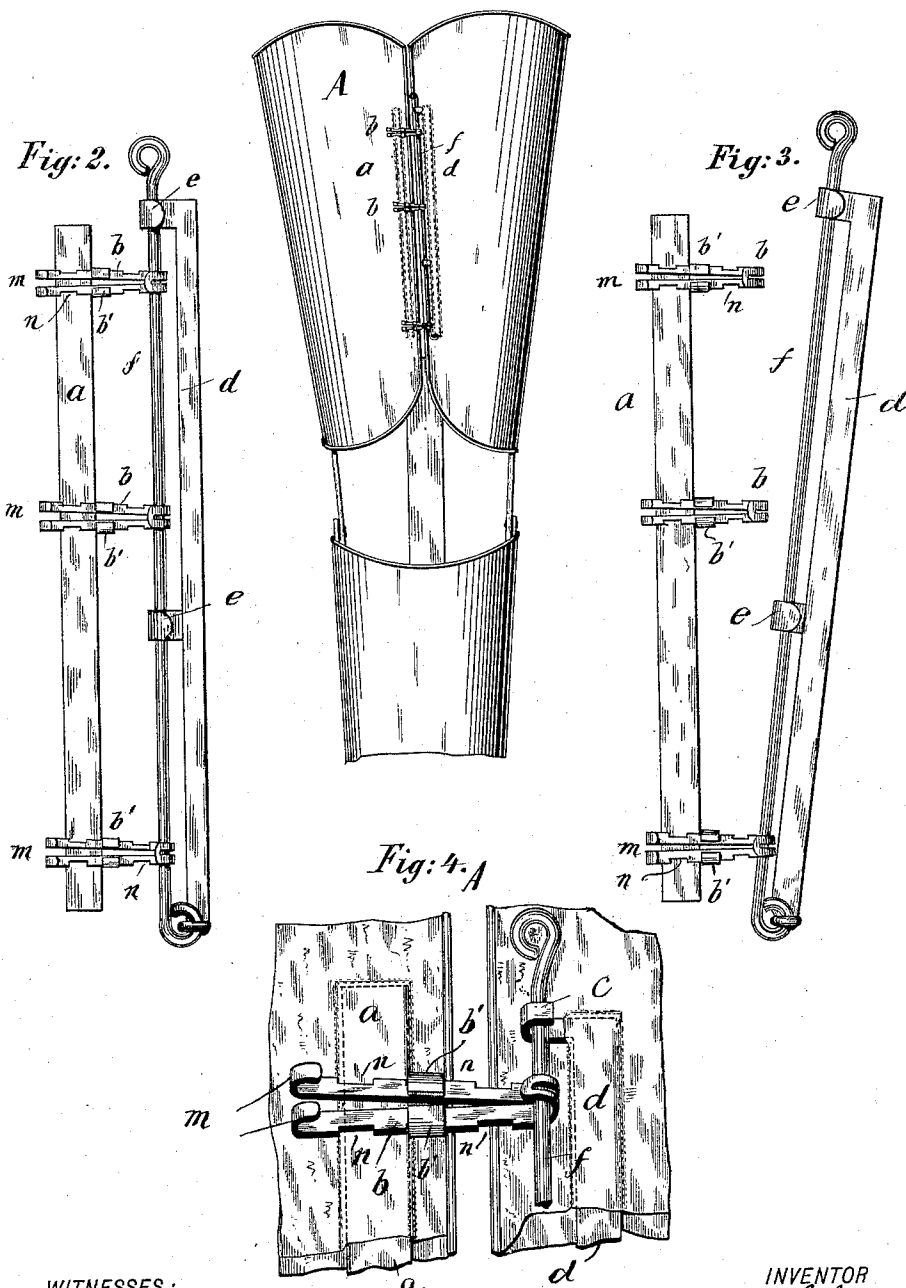
(No Model.)

J. SCHMID.
ARTIFICIAL LEG.

No. 473,671.

Patented Apr. 26, 1892.

Fig: 1.



WITNESSES:
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ARTIFICIAL LEG.

SPECIFICATION forming part of Letters Patent No. 473,671, dated April 26, 1892.

Application filed March 4, 1892. Serial No. 423,738. (No model.)

To all whom it may concern:

Be it known that I, JOHN SCHMID, a citizen of the United States, and a resident of Eatontown, in the county of Monmouth and State of New Jersey, have invented certain new and useful Improvements in Artificial Legs, of which the following is a specification.

This invention relates to an improved fastening for the thigh portion of artificial legs, so that the lacing of the same can be dispensed with and a quick and convenient attaching and detaching of the artificial leg be produced; and the invention consists of a fastening device for the thigh portion of artificial legs, which comprises a strap provided with adjustable hooks that can be set to cause the thigh portion to fit more or less snugly or easily to the thigh, and a pivoted connecting-rod by which the hooks arranged at one edge of the thigh portion are connected with the hooks on the strap of the other thigh portion, as will be fully described hereinafter, and finally pointed out in the claims.

In the accompanying drawings, Figure 1 represents a front elevation of the upper or thigh portion of an artificial leg with my improved fastening device for the same. Figs. 2 and 3 are side elevations of the fastening device drawn on a larger scale and showing the same respectively after connecting and in the act of connecting the parts of the upper or thigh portion. Fig. 4 is a detail view, drawn on a still larger scale, of one of the adjustable hooks of my improved fastening device.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the upper or thigh portion of my improved artificial leg. The said thigh portion is provided with a fastening device that is composed of a strap *a*, that is attached thereto along one edge of the front opening, said strap being provided with adjustable hooks *b*, and of a second strap *d*, that is attached to the thigh portion along the other edge and provided with fixed hooks *e*, which are preferably made integral with the strap *d*, the adjustable hooks *b* of the strap *a* being connected with the hooks *e* of the strap *d* by the interlocking rod *f*, that is pivoted at its lower end to the strap *d* and adapted to engage the hooks of both straps *a* and *d* when the parts are locked together for

attaching the thigh portion A firmly to the stump. The hooks *b* are arranged immediately between the hooks *e*. The hooks *b* are made adjustable for the purpose of permitting the adjustment of the thigh portion, so as to permit either a snug fit or a loose fit of the same to the stump, whereby the thigh portion A can be readily adapted to the changing conditions of the stump. In some cases, when the stump is sore, it is preferable to have the thigh portion fit easily, while at other times it is preferable to have the same fit snugly to the stump. For this purpose the strap *a* is provided with projections having bent-over flanges which form keepers *b'*, into which are inserted the recessed hooks *b*, which are locked to the keepers by the spring action imparted to the shanks of the hooks, which spring action is produced by making the adjustable hooks *b* of V shape, having the apex at the hook portion, and the shanks of which are made to diverge from the hook portion or apex, so that they exert a binding action on the keepers *b'*. The outer edges of the shanks of the V-shaped hook *b* are provided with recesses *n*, which are somewhat wider than the keepers *b'*, so that when the recesses are set to the keeper the hooks *b* are adjusted farther from or closer to the strap *a*, according as the keeper engages the recesses which are nearer to or farther from the hook or apex. The free ends of the hook-shanks are also bent up, the bent-up portions serving as handles *m* for taking hold of the hooks *b* by means of the finger. By pressing the free ends of the shanks together the recessed portions can be readily detached from the keepers, so that the hooks can be pushed forward or backward, according as the hook end is to be adjusted nearer to or farther from the strap *a*. When the thigh portion A is to be adjusted snugly to the stump, the hook ends are adjusted closer to the straps *a*, while if an easy fit of the thigh portion is desired the hooks are adjusted farther away from the strap *a*. To produce the closing of the front edges of the thigh portion, the pivoted connecting-rod *f* is taken hold of at the upper end and is first placed in the lowermost adjustable hook, after which it is placed into the hooks *e* of the strap *d*, the upper end of the connecting-rod *f* being then moved over, so as to take the strap *d* along until the rod en-

gages the other adjustable hooks *b* of the strap *a*, as shown in Fig. 2, and produces thereby the reliable interlocking of the fastening device arranged at the front edges of the thigh portion.

For detaching the thigh portion the fastening device is disconnected in the inverse order, which is accomplished like the fastening in a quick and easy manner, so that very little time is lost in applying and removing the artificial leg from the stump. This is a great convenience, as thereby the time consumed by lacing when attaching the thigh portion and the unlacing of the same when removing the same is dispensed with and an artificial leg obtained, the thigh portion of which can not only be adjusted to the varying conditions of the stump, but also applied to and removed from the same with great facility and speed.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A fastening device for the thigh portions of artificial legs, composed of a strap attached to one edge of the thigh portion and provided with hooks, a second strap attached to the opposite edge of the thigh portion and also provided with hooks intermediately between the hooks of the first strap, and a connecting-rod pivoted to the lower end of the second

strap and adapted to interlock with the hooks of both straps, substantially as set forth.

2. In a fastening device for thigh portions of artificial legs, the combination, with a strap attached to one edge of the thigh portion, said strap being provided with keepers, of V-shaped spring-hooks having recesses at their outer edges, so as to be adapted to engage the keepers of the strap, substantially as set forth.

3. The combination, with a strap attached to one edge of the thigh portion of an artificial leg, said strap being provided with keepers, of adjustable hooks having spring-shanks recessed at the outer edges so as to be adjusted in said keepers, a strap attached to the adjoining edge of the thigh portion and provided with hooks intermediately between the adjustable hooks of the first strap, and a connecting-rod pivoted to the lower end of the second strap and adapted to interlock with the hooks of both straps, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

JOHN SCHMID.

Witnesses:

PAUL GOEPEL,
MARION HALL.