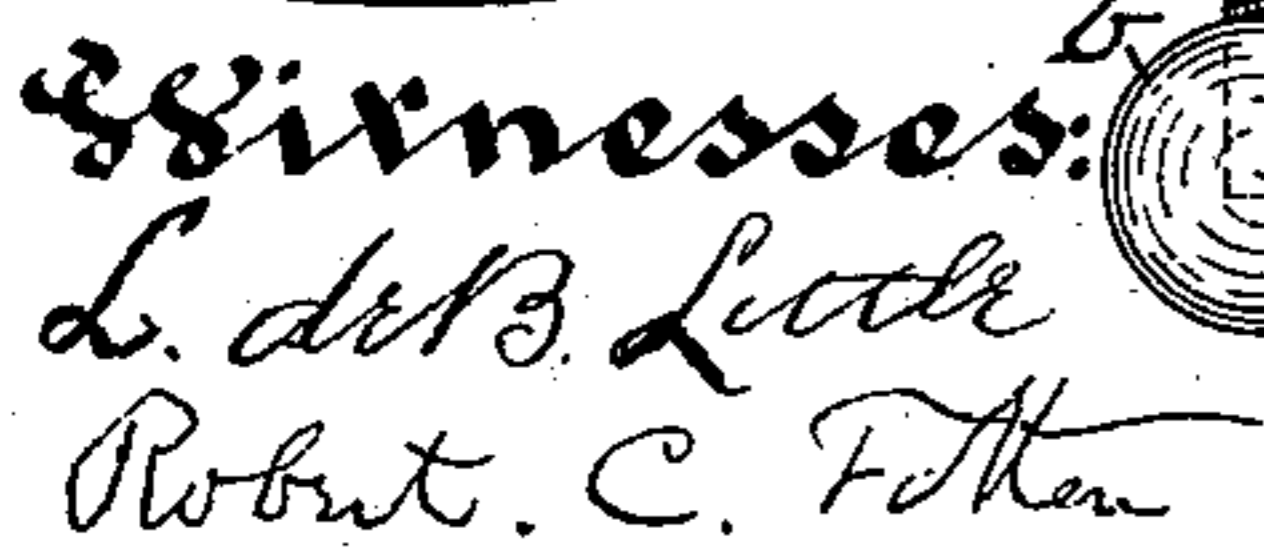


S. J. ADAMS.
FOOT SUPPORT.

Patented Oct. 15, 1895.



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UNITED STATES PATENT OFFICE.

STEPHEN JARVIS ADAMS, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO HENRY D. FULTON, OF SAME PLACE.

FOOT-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 548,024, dated October 15, 1895.

Application filed August 4, 1894. Serial No. 519,441. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN JARVIS ADAMS, a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have
5 invented a new and useful Improvement in Foot-Supports for Surgical Operations; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to foot-supports for
10 surgical operations, its object being to provide a foot-support which may be quickly secured to the bed, operating-table, or other suitable support, and adjusted at different angles, as different circumstances may require; and, furthermore, one which may be
15 compacted into such shape as to be conveniently carried in the pocket of the physician or surgeon. It comprises, generally stated, a portable foot-support for surgical operations
20 formed of a clamp and a body portion having a stirrup, which parts are collapsible or folding, so as to be closed into small space, the special construction of the stirrup and shaft of the body portion providing for the sliding of
25 the stirrup over the shaft on the same plane as the body of the stirrup, so that the shaft enters the stirrup and but little room is required.

To enable others skilled in the art to make
30 and use my invention, I will describe the same more fully, referring to the accompanying drawings, in which—

Figure 1 is a plan view of the foot-support secured to a horizontal support. Fig. 2 is a
35 side view. Fig. 3 is a side view of the foot-support secured to a vertical support. Figs. 4 and 5 are plan and side views, respectively, of the foot-support folded. Fig. 6 is an enlarged section on line 6 6, Fig. 4. Fig. 7 is an
40 enlarged view on line 7 7, Fig. 1.

My improved foot-support may be constructed of any suitable material, although I have found that aluminum, which combines strength with lightness, may be employed to
45 advantage in its construction.

The clamp a may be of any suitable form, having the thumb-screw b , by which it is clamped to the support b' . Projecting from the clamp a is the foot-support c , and in order
50 to provide for the turning of the said foot-support c at any angle with reference to the

clamp a , the lug or bearing a' on said clamp a is provided with a series of openings a^2 . A lug or bearing c' on said foot-support c is secured to the lug a' on said clamp a by means
55 of the bolt or pin d , which passes through openings in said lugs and the nut d' . The head d^2 of the bolt d is provided with the bearings d^3 , within which the crank-arm e is journaled. Secured to one end of the crank-
60 arm e is the pin e' , which passes down through an opening e^2 in the lug c' and enters one of the openings a^2 coincident with said opening e^2 . The opposite end of the crank-arm e is acted upon by the spring f , secured to the
65 foot-support c , said spring acting upon said crank-arm e in a manner to force the pin e' on the opposite end of said crank-arm e into one of the openings a^2 . Any other suitable form of stop device may be employed to give
70 this adjustability. It is apparent by the above construction that by pressing back the free end of the crank-arm e until the resistance offered by the spring f is overcome, the pin e' will be withdrawn from one of the openings
75 a^2 , whereupon the foot-support c is free to be moved, the lug c' thereof turning on the lug a' of the clamp a .

The body portion c of the foot-support, as shown in Fig. 1, extends to one side of the
80 clamp, so that it may swing along the side thereof, as shown in Fig. 5. It is provided with the shaft g , said shaft being angular in cross-section at or adjacent to its ends g' g^2 , the intermediate portion g^3 being circular.
85 Upon the shaft g is carried the heel-rest or stirrup h . The heel-rest h is provided with the sleeve h' , the interior of said sleeve corresponding to the angular portions g' g^2 of the shaft g , whereby said sleeve is free to
90 slide to and fro on the angular portions g' g^2 of said shaft g , and when engaging the circular portion g^3 said sleeve is free to turn thereon. The interior of the sleeve h' is provided with a spring h^2 , which tends to increase the
95 friction offered by the sliding of said sleeve on the angular portions g' g^2 of the shaft g and prevents said sleeve moving too freely thereon. It is to be noticed that this sleeve h' is on the same plane with the body of the
100 stirrup, so that when the foot-support is collapsed the shaft g passes into the interior of

the stirrup and occupies no extra space, and when the stirrup is brought into operative position it extends out in direct line from its support and is therefore more strongly supported. This part of the construction enables me to reduce the foot-support to a small, compact form, such as illustrated in Figs. 4 and 5, so that it may be conveniently carried in the pocket. The outer end of the shaft *g* is provided with the lug *g*¹ to prevent the withdrawal of the heel-rest from said shaft.

When my improved foot-support is to be put into service, the clamp *a* is clamped to the side boards of the bed, operating-table, or other suitable support *b*'. The foot-support *c* may then be adjusted at any desired angle by simply pressing the crank-arm *e* sufficiently to withdraw the pin *e*', moving the said foot-support the required distance and then upon relieving the pressure on the crank-arm *e* the pin *e*' will enter one of the other openings *a*² and so hold said support at that angle. Furthermore, the heel-rest *h* is adjustable at different angles, for by bringing the sleeve *h*' over the circular portion *g*³ of the shaft *g* said heel-rest may be turned and then slipped over the square bearings *g*' *g*², each quarter turn of said sleeve presenting the heel-rest at a different angle.

In Figs. 4 and 5, I have illustrated my improved foot-support in its collapsed or most compact form. In this case the stirrup is moved back to the circular portion *g*³ of the shaft and given a quarter-turn, the foot-support is turned around over the clamp, and the sleeve *h*' is moved back onto the square bearing *g*'. In this form the foot-support is in such compact shape as to be conveniently carried in the pocket.

By the use of my improved foot-support, which the physician or surgeon can carry about with him, he is enabled in private homes, where the operating table or chair is wanting, to so adjust the foot-support to the bed of the patient, to a table or other suitable support, as to give him the advantages of such operating table or chair.

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

1. A portable foot support for surgical operations formed of a clamp, a body portion pivoted thereon, and a stirrup having a sliding connection with the body portion on the plane of the stirrup, so as to be collapsible with the body portion, substantially as set forth.

2. A portable foot-support for surgical op-

eration consisting of a clamp and a body portion mounted thereon by an adjustable pivot joint adapted to lock the clamp and body portion together at any desired angle, and a stirrup having a sliding connection with the body portion on the plane of the stirrup so as to be collapsible with the body portion, substantially as set forth.

3. A portable foot-support for surgical operations having a stirrup provided with a sleeve at its end on the same plane as the body of the stirrup, and a supporting shaft fitting and sliding in the said sleeve and entering within the stirrup, substantially as set forth.

4. A portable foot-support for surgical operations having a stirrup provided with a sleeve at its end on the same plane as the body of the stirrup, and a supporting shaft fitting and sliding in the said sleeve and entering within the stirrup, said shaft having a lug or stop at its end, substantially as set forth.

5. A portable foot-support for surgical operations consisting of a clamp, a body portion mounted so as to be adjusted at any desired angle thereon and having a shaft having an angular end and a circular bearing, and a stirrup having an interiorly angular sleeve on the same plane with the body of the stirrup engaging with said shaft, substantially as set forth.

6. A portable foot support for surgical operations consisting of a clamp, a body portion mounted on said clamp, and having a shaft provided with angular bearings at its end, and a circular bearing between the ends, and a stirrup having a sleeve interiorly angular and on the same plane with the body of the stirrup which engages with said shaft, substantially as set forth.

7. A portable foot support for surgical operations consisting of a clamp, a body-portion mounted so as to be adjusted at any desired angle thereon, and having a shaft provided with an angular portion, and a stirrup having an interiorly angular sleeve on the same plane with the body of the stirrup engaging with said shaft, substantially as set forth.

In testimony whereof I, the said STEPHEN JARVIS ADAMS, have hereunto set my hand.

STEPHEN JARVIS ADAMS.

Witnesses:

JAMES I. KAY,

ROBERT C. TOTTEN.