

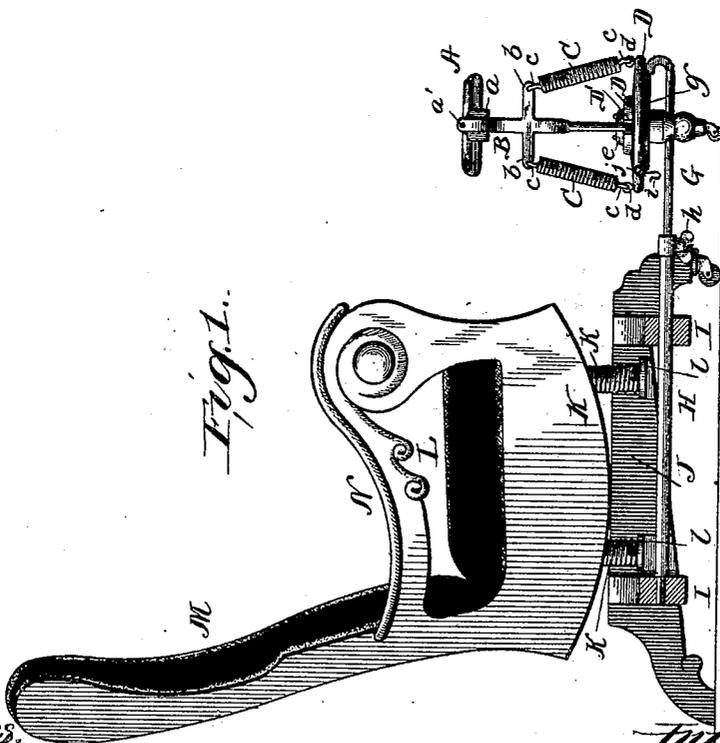
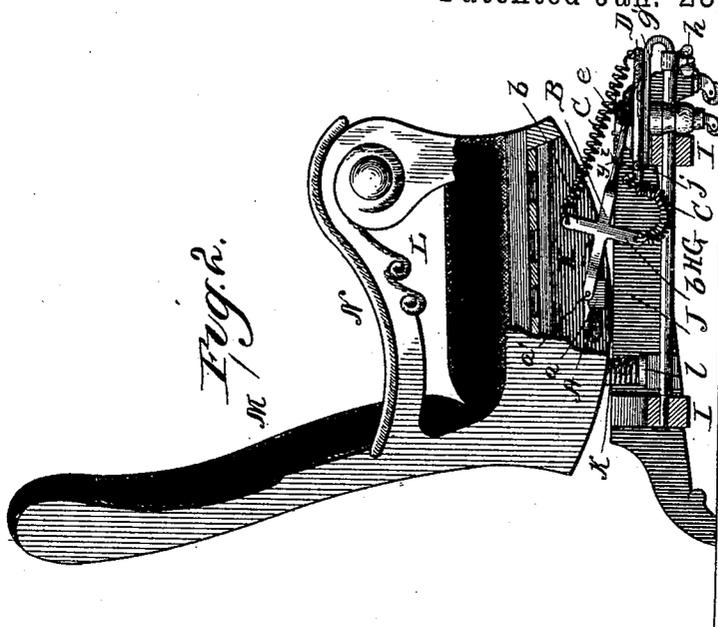
(No Model.)

3 Sheets—Sheet 1.

L. E. ARMSTRONG.  
FOOT REST FOR ROCKING CHAIRS.

No. 513,170.

Patented Jan. 23, 1894.



Witnesses:  
 Wm. M. Rheem  
 J. M. J. Ford

Inventor:  
 Louis E. Armstrong

(No Model.)

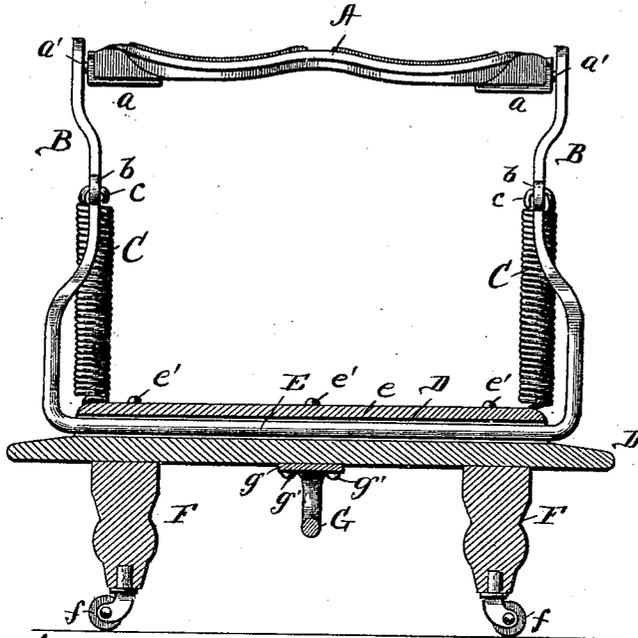
3 Sheets—Sheet 2.

L. E. ARMSTRONG.  
FOOT REST FOR ROCKING CHAIRS.

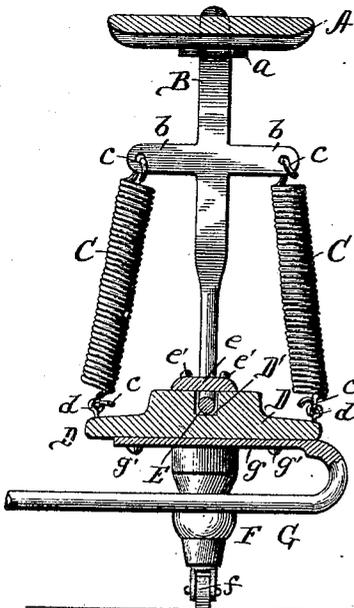
No. 513,170.

Patented Jan. 23, 1894.

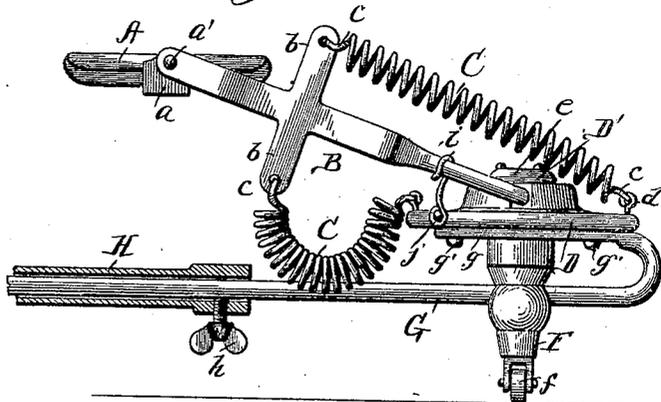
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



Witnesses  
 Wm. M. Rheem.  
 J. M. J. J. J.

Inventor  
 Louis E. Armstrong

L. E. ARMSTRONG.  
FOOT REST FOR ROCKING CHAIRS.

No. 513,170.

Patented Jan. 23, 1894.

Fig. 6. A

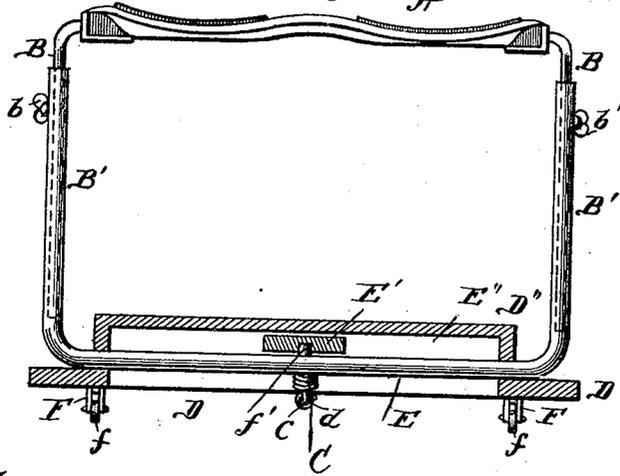


Fig. 7.

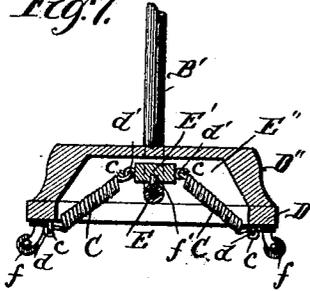


Fig. 8. 2'

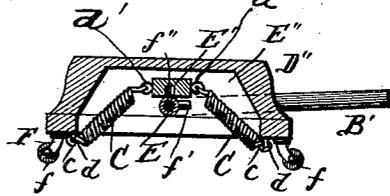
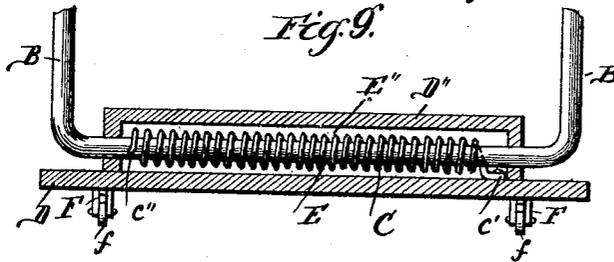


Fig. 9.



Witnesses:

W. M. Rheem.

J. W. Scott.

Inventor:

Louis E. Armstrong

# UNITED STATES PATENT OFFICE.

LOUIS E. ARMSTRONG, OF FORT DODGE, IOWA.

## FOOT-REST FOR ROCKING-CHAIRS.

SPECIFICATION forming part of Letters Patent No. 513,170, dated January 23, 1894.

Application filed November 10, 1891. Serial No. 411,528. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS E. ARMSTRONG, a citizen of the United States, residing at Fort Dodge, in the county of Webster and State of Iowa, have invented certain new and useful Improvements in Foot-Rests for Rocking-Chairs; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, forming a part hereof, in which—

Figure 1 is a side elevation with the base in section, and the foot-rest extended and in its normal position. Fig. 2 is a side elevation with the rocker partly broken away, the base in section, and the foot-rest folded and beneath the chair. Fig. 3 is a longitudinal section of the base for the foot-rest with the foot-rest and its supporting frame or yoke and controlling springs in elevation. Fig. 4 is a cross section through the foot-rest. Fig. 5 is a side elevation showing the foot-rest folded. Figs. 3, 4 and 5 are enlarged, as compared with Figs. 1 and 2. Fig. 6 is a longitudinal section of the base for the foot-rest showing a modification in the construction of the arms or yoke carrying the foot-rest, and a modification in the arrangement and location of the controlling springs. Figs. 7 and 8 are cross sections through the base shown in Fig. 6, showing the supporting arm or yoke for the foot-rest in an upright position, for use, and folded down for entering the rest beneath the chair. Fig. 9 is a detail showing the base for the foot-rest in elevation, and showing a modification in the location and arrangement of the controlling springs.

This invention relates to foot-rests intended for use with rocking chairs; and has for its objects to construct a foot-rest which will be self-returned to its normal position in use, and which will furnish a support for the limbs of the occupant, having a forward and back oscillation or swing coincident with the movement of the chair; which can be adjusted to suit the occupant of the chair, and when adjusted, furnish an easy and natural support for the limbs of the occupant, and which can be folded up and placed beneath the chair, where it will be out of the way and

not interfere with the use of the rocking chair in the ordinary way without a foot-rest; and its nature consists in the several parts and combinations of parts hereinafter described and pointed out in the claims as new.

In the drawings, A represents the foot-rest, which can be made of wood or other suitable material, and which can be of the shape or design shown, or other desired shape or design.

The foot-rest at each end has a plate or bracket *a*, with a pin or trunnion *a'*, which pins or trunnions form pivots on which the foot-rest A can turn.

B are arms, one for each end of the foot-rest, each arm in its upper end receiving the pin or journal *a'*, at the end of the foot-rest, and each arm B has on each side a side arm *b*, as shown in Figs. 1, 2, 4 and 5.

C are coiled springs, each spring having at its ends a hook *c*, and each spring, at its upper end, has its hook *c* entered into an eye or hole in the arm *b*.

D is a base which can be made of wood or other suitable material, and can be of the shape or design shown or other suitable shape or design. The front and back edges of the base D have eyes *d*, to receive the hooks *c* on the lower ends of the coiled springs C, so that when the hooks *c* of the springs C are hooked into the arms *b* and the eyes *d*, the springs C will be under normal tension and of an equal power on both sides of the base, maintaining the arms B normally erect, as shown in Figs. 1 and 4, and at the same time, the springs will yield with the swing of the arms B, allowing the foot-rest to swing forward and back from the swing of the arms.

E is a supporting rod or shaft, which can be formed with the arms B, making a frame or yoke supporting the foot-rest A, or the arms or rod and shaft can be formed of separate pieces united to form a frame or yoke. This rod or shaft is located in a recess or groove D' in the base D, and is held in the groove or recess by a cap *e* attached to the base by screws or nails *e'*, so that with the swing of the foot rest, the rod or shaft E cannot be withdrawn from the groove or recess D'.

F are legs supporting the base D, one leg at each end of the base, and each leg has a caster wheel *f* to give an easy movement in

withdrawing and pushing the foot-rest beneath the chair, and also giving a rolling support in moving the chair with the foot-rest attached thereto.

5 G is a rod having a flattened portion *g*, for attachment to the bottom of the base D, by screws or nails *g'*.

H is a hollow tube or sleeve receiving the rod G, which rod is locked in any adjusted  
10 position desired by means of a set screw *h* in the tube or sleeve H, and the tube or sleeve H is attached in any firm manner to the base of the chair.

I are the front and rear cross pieces of the  
15 chair base, in which the tube or sleeve H is secured.

J are the side rails of the chair base, each having, in the construction shown, at the forward end a caster wheel for rolling the chair  
20 around.

The foot-rest, when folded down, as shown in Fig. 5, for pushing it underneath the chair, as shown in Fig. 2, is held down by a hook *i* pivoted by a pin or pivot *j* to the base D,  
25 which hook goes over the arm B, as shown in Fig. 5.

K are the rockers for the chair, each rocker working on a side rail J of the chair.

L is the seat of the chair.

30 M is the back of the chair.

N are the arms of the chair.

The parts I, J, K, L, M, and N, can be of the construction and arrangement shown, or of any other well known form and construction for a rocking chair, and the tube or sleeve  
35 H, instead of being secured to cross bars I, can be secured to any part of the chair base which will hold the rod or sleeve permanently and firmly in position.

40 The plates *a*, each with its pivot *a'*, is secured in any firm manner to the ends of the foot-rest A, and the pivots *a'* are inserted in the upper ends of the arms B, and the arms B, with the cross bar or rod E, are placed on  
45 the base D, with the cross bar in the groove D', and the cap is placed over the groove and cross bar and secured by the screws or nails *e'*; the upper end of each spring C is attached by its hook *c*, with an arm *b*, and the lower  
50 end of each spring is attached by its hook *c* with an eye *d* on the base D; the legs F, with the rollers or caster wheels *f*, are secured, one at each end, to the base D, and the forward  
55 end of the rod G is attached to the base D; the sleeve or tube H is secured to the base of the chair, and the rod G inserted in such tube or sleeve, attaching the foot-rest to the chair, ready for use, when the foot-rest is drawn out to the position required.

60 The adjustment of the foot-rest is had by loosening the thumb screw *h*, and moving the rod G forward or back, as required for the adjustment, and when the proper position for the foot-rest is had, the rod G is locked by  
65 the thumb screw *h*, holding the foot-rest in its adjusted position.

In use, the limbs of the occupant of the

chair are placed on the foot-rest A, and as the chair rocks forward, the engagement of the limbs with the foot-rest A will swing the arms  
70 B forward, carrying with the arms the foot-rest A, and with the return rock of the chair the engagement of the limbs of the occupant with the foot-rest, swings the arms B backward, carrying with the arms the foot-rest,  
75 and this forward and back swing of the arms and foot-rest is permitted by the yield of the springs C, and at the same time these springs C perfectly control the movements of the arms and foot-rest under swing, as the springs prevent the arms and foot-rest from falling  
80 either forward or back with the rock of the chair, and these springs also act to return the foot-rest to its normal position with each movement of the chair, as the springs on one  
85 side or the other are always under a tension for the recoil to return the arms and foot-rest. It will thus be seen that the foot-rest is held normally in an upright position, and is maintained in such position by the action of the  
90 springs C, and at the same time these springs allow the necessary yield for the arms and foot-rest to have a free swing forward and back, without any exertion on the part of the occupant of the chair, and the foot-rest will  
95 always be in position for use without any attention on the part of the occupant, as the springs C act to give the necessary support and tension to hold the foot-rest in position and allow it to swing freely forward and back. 100

The foot-rest can be folded down and placed beneath the chair where it will be out of the way, as shown in Figs. 2 and 5, to do which all that is required is to draw the arms B rearward until such arms and the foot-rest are  
105 horizontally inclined, and when in this position, the arms and the foot-rest are held against rising by engaging the hook *i* with an arm B, and when thus held down, the arms and foot-rest can be slipped beneath the chair,  
110 as shown in Fig. 2, out of the way, and when beneath the chair, the rod G can be locked against withdrawal by the set screw *h*, and with the withdrawal of the foot-rest by loosening the set screw *h*, and pulling out the rod  
115 G, and then locking the rod when the foot-rest is adjusted, the arms and foot-rest will assume the normal position shown in Figs. 1 and 4, on the release of the hook *i*, through the action of the springs C, and without any  
120 adjustment or attention from the user of the chair. The arms B are held against side draw by the springs C having an equal force, or approximately so, and by the long bearing or support for such arms furnished by the  
125 cross rod E, and its support on the base D; and the pivots *a*, allow the foot-rest A to maintain a horizontal or level position with the forward and back swing of the arms B, so that the foot-rest is always flat beneath the  
130 limbs of the occupant, and furnishes an easy support for the limbs, without any turning up edgewise, in use.

The foot-rest A, as shown in Figs. 1 to 5,

inclusive, is supported by non-adjustable arms, but such foot-rest can be supported so as to be adjusted up and down, and an arrangement for this purpose is shown in Fig. 6, in which the arms B slide in tubes or sleeves B', and can be raised or lowered, and when adjusted to the proper height for the foot-rest, the arms can be locked by the set screws b'.

10 The essential feature of the present invention is giving a free forward and back oscillation or swing for the foot-rest under perfect spring control, and to attain this end the springs can be arranged in various ways, so long as they furnish a perfect control for the foot-rest.

The springs shown in Figs. 6, 7 and 8, are located beneath the top D'' of the base D, which top is formed to leave a chamber E'', to receive the springs, and with the construction shown in Figs. 6, 7, and 8, one end c of each spring is hooked into an eye d on the base D, and as shown, two springs only are used, located midway of the length of the base D, and on opposite sides of the rod or shaft E, and the upper end of each spring has a hook c entering an eye d' projecting out from a block E', mounted on the rod or shaft E, which block has a hole f'' to receive a pin f' on the rod or shaft G, when the parts are in position for use, which locks the block E' to the shaft E, so that the springs C control the swing of the arms B with the forward and back rock of the chair, and in order to lay the foot-rest down to be slipped beneath the chair, the arms B and B' are turned down, withdrawing the pin f' from the hole f'', allowing the arms to lie horizontal for insertion beneath the chair, and by raising the arms B, B', to a vertical position, the pin f' enters the hole f'', and locks the block E' to the shaft E, ready for the springs C to operate on the swinging support for the foot-rest.

A spring controlling the movements of the foot-rest can be coiled around the shaft E, as shown in Fig. 9, one end c' being firmly secured to the base D, and the other end, c'', being secured to the shaft E, which will give the necessary torsion to the spring to return the foot-rest to its normal position by the action of the spring on the shaft E.

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

1. The combination, in a rocking chair foot rest, of a rest for the limbs of the occupant, a support carrying the rest and swinging from a vertical to a horizontal position, and springs on opposite sides of and connected to the support for the support to swing freely forward

and back under spring tension in both directions to be returned to a vertical position, and free to be folded down without removal of the springs, substantially as and for the purposes specified.

2. The combination in a rocking chair foot rest, of a rest for the limbs of the occupant, swinging arms carrying and supporting the rest, and swinging from a vertical to a horizontal position, and springs on opposite sides of and connected to the arms for the rest to swing forward and back under spring tension in both directions to be returned to a vertical position, and for the arms free to be folded down without removal of the rest and springs, substantially as and for the purposes specified.

3. The combination in a rocking chair foot rest, of a rest for the limbs of the occupant, swinging arms carrying and supporting the rest and swinging from a vertical to a horizontal position, a cross bar connecting the arms and forming with the arms the support for the rest, a base supporting the cross-bar and springs on opposite sides of the support for the rest, and connected to the support and base for the rest to swing forward and back under spring tension in both directions to be returned to a vertical position, and for the arms to be folded down without removal of the rest and springs, substantially as and for the purposes specified.

4. The rest A and supporting arms B carrying the rest, and swinging from a vertical to a horizontal position forward and back, in combination with the springs C, and base D, having the springs C attached thereto and to the arms B, for the springs to act on opposite sides of the arms and return the arms to a vertical position form a swing in either direction forward and back, and have the arms free to fold down, substantially as and for the purposes specified.

5. The rest A, arms B, carrying the rest A, and cross-bar E, connecting the arms B, for the arms to swing forward and back, and forming with the arms a support for the rest A, whereby the rest can swing from a vertical to a horizontal position, in combination with the springs C attached for the rest to be returned to a vertical position after each swing and to be folded down, base D, and connecting rod E, substantially as and for the purposes specified.

LOUIS E. ARMSTRONG.

Witnesses:

L. A. GERHARDT,  
M. F. HEALY.