

(No Model.)

J. D. McKINNEY.  
GARDENER'S AND COTTON PICKER'S BRACE.

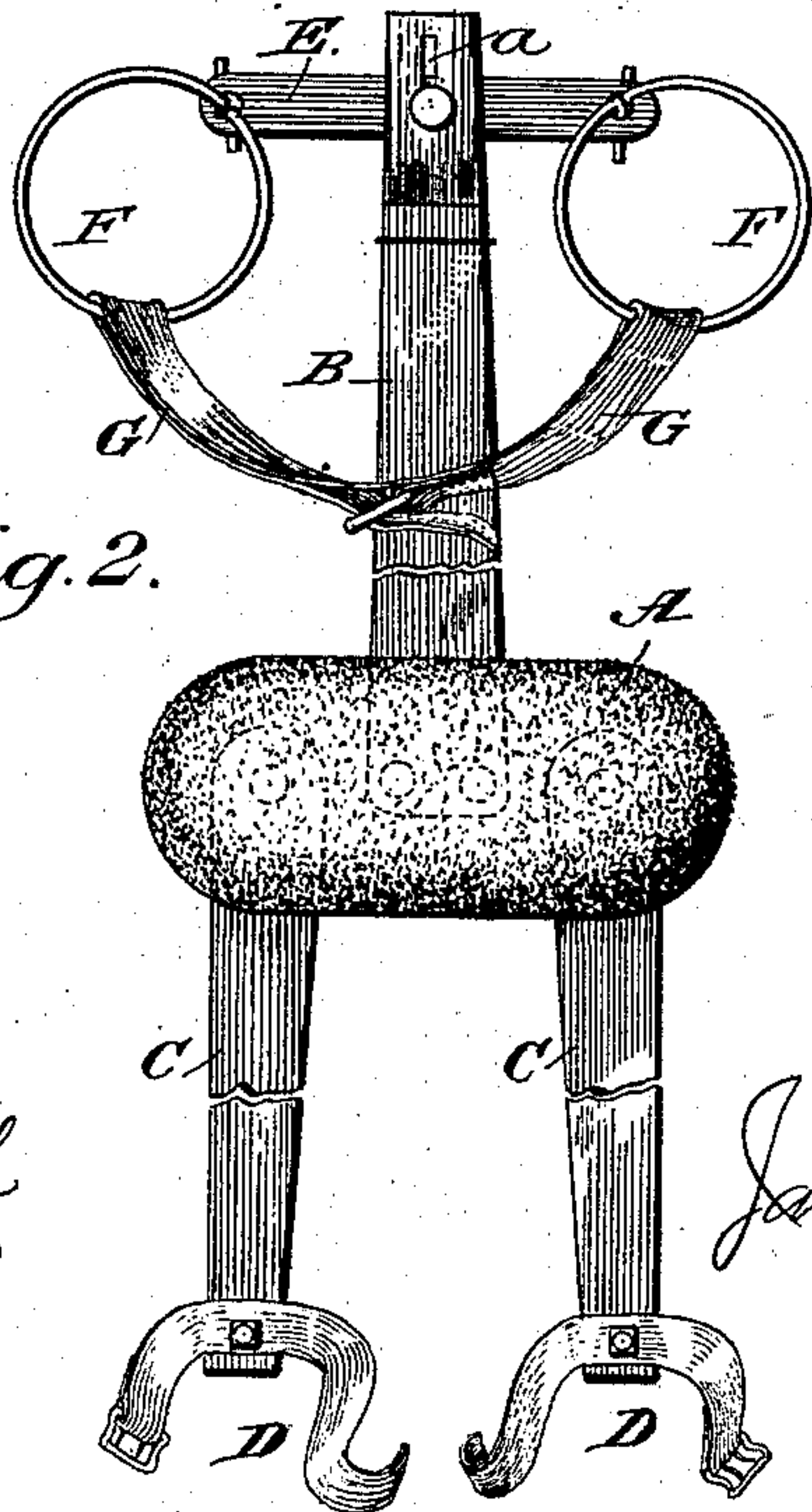
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*Fig. 1.*



*Fig. 2.*



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

JAMES D. MCKINNEY, OF MOSSY CREEK, GEORGIA.

## GARDENER'S AND COTTON-PICKER'S BRACE.

SPECIFICATION forming part of Letters Patent No. 406,663, dated July 9, 1889.

Application filed November 13, 1888. Serial No. 290,751. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES D. MCKINNEY, of Mossy Creek, in the county of White and State of Georgia, have invented a new and useful Improvement in Gardeners' and Cotton-Pickers' Braces, of which the following is a specification.

My invention is in the nature of an improved brace for the use of gardeners, cotton-pickers, truckmen, and others whose occupation requires them to do a great deal of stooping, the object being to relieve the muscles of the back, loins, and thighs of the severe strain by affording a support for the upper part of the body when in the bent position.

Figure 1 is a view of my improved brace shown applied to a workman, and Fig. 2 is a plan view of the brace laid out flat.

A is a pad designed to bear just above the hips or thigh-bones and against the pelvis.

B is a spring fastened securely to the middle of the pad and extending up the middle line of the back to a point between the shoulders, where it is jointed to a cross-bar E. At the point of connection between the spring B and the elastic cross-bar E there is a slot *a*, that permits the cross-bar to be adjusted higher or lower, according to the length of the back of the workman. At the outer ends of the cross-bar E are the arm-rings F, to which are connected the two ends of the breast-strap G.

C C are flat springs attached to the pad A on each side of the spring B and extending downwardly. These springs have at their lower ends straps or hooks D D, adapted to be fastened around the legs of the workman above the knee.

This brace is applied, as shown in Fig. 1, with the pad A just above the hips and resting against the pelvis, the two springs C extending down behind the legs and strapped to them above the knee, the spring B extending up along the backbone, the bar E extending across the shoulders, the rings F receiving the arms close up to the shoulders, and the strap G fastened across the breast. When thus adjusted the pad A fulfills the same

office to springs B and C that the pelvis does to the muscles of the thigh and back.

The elasticity of the springs B and C permits the body to be bent to a stooping posture, and yet the tension or resilience of these springs serves to support the weight of the upper part of the body, concentrating the strain upon the pad A as a fulcrum-point on the pelvis, which is the natural support of the upper half of the body. By this means the muscles of the back, loins, and thighs are relieved of the exhausting strain due to the cramped position, and as this kind of work is rendered more easy and comfortable the efficiency of the workman is greatly increased.

In making use of my invention I may dispense with the arm-rings F and adjust the elastic cross-bar E with its straps so as to pass around the breast just below the arms like a belt. Instead of flexible straps D for the legs, I may also use hoops or hooks of metal or other material.

Having thus described my invention, what I claim as new is—

1. A brace for gardeners, cotton-pickers, &c., consisting of a fulcrum-pad adapted to bear upon the pelvis and having two springs attached thereto and extending downwardly behind the legs and provided with fastenings, and a middle spring extending upwardly, and fastening devices for connecting its upper end to the arms or shoulders, substantially as and for the purpose described.

2. A brace for gardeners, cotton-pickers, &c., consisting of the combination of a fulcrum-pad A, two springs C C, extending downwardly therefrom and provided with straps D D, for securing the same to the legs, a middle spring B, extending upwardly, and a cross-bar E, connected to the top of spring B and provided at its ends with arm-rings F and strap G, substantially as and for the purpose described.

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Witnesses:

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