

No. 654,173.

Patented July 24, 1900.

E. C. MENDENHALL.  
SHOULDER BRACE.

(Application filed Mar. 15, 1900.)

(No Model.)

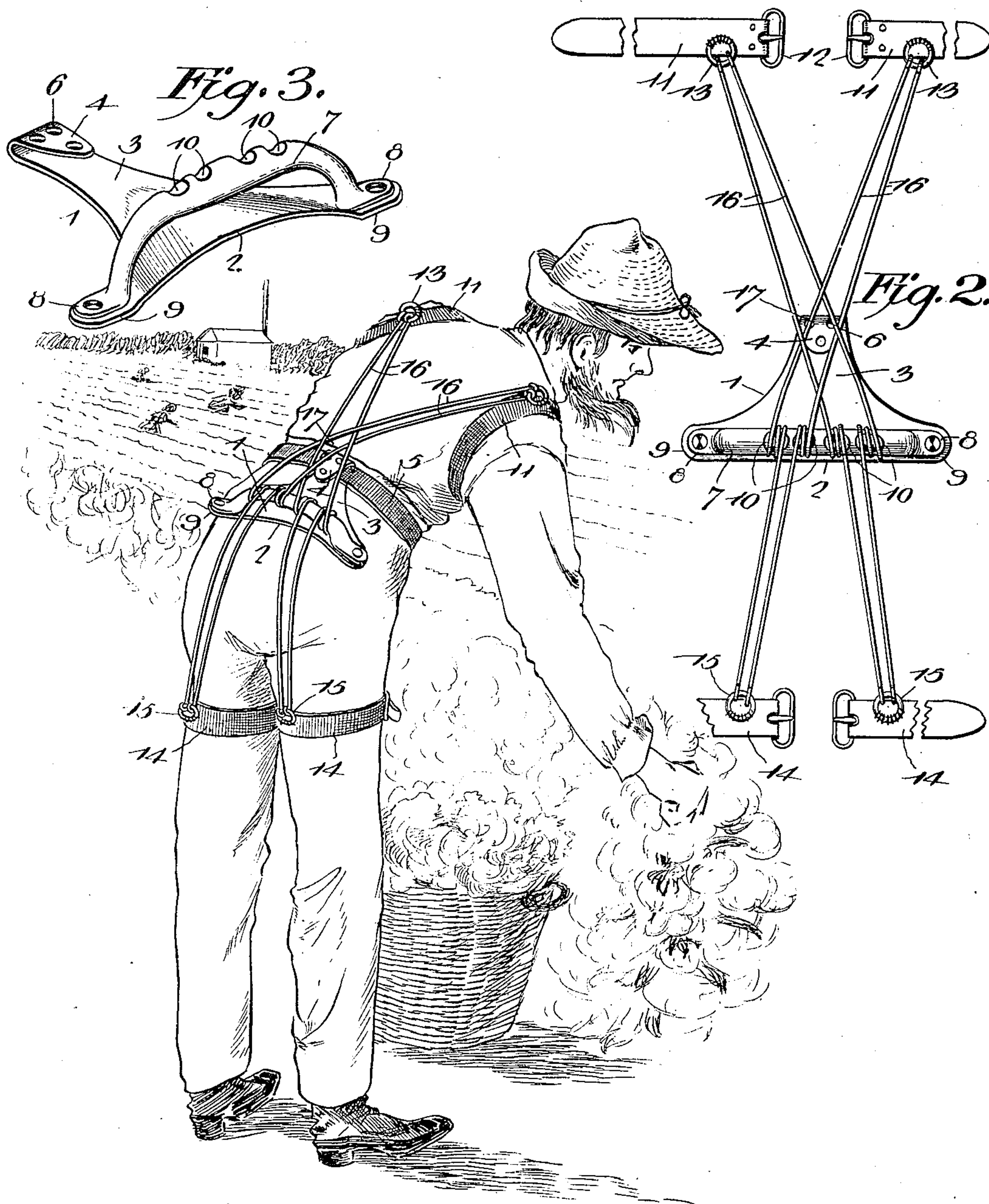


Fig. 1.

Witnesses

J. Frank Leavelle.

By His Attorneys,

Chas. S. Hoyer.

E. C. Mendenhall, Inventor.

C. A. Snow & Co.



# UNITED STATES PATENT OFFICE.

EDGAR C. MENDENHALL, OF MENDENHALL, ARKANSAS.

## SHOULDER-BRACE.

SPECIFICATION forming part of Letters Patent No. 654,173, dated July 24, 1900.

Application filed March 15, 1900. Serial No. 8,782. (No model.)

*To all whom it may concern:*

Be it known that I, EDGAR C. MENDENHALL, a citizen of the United States, residing at Mendenhall, in the county of Nevada and State of Arkansas, have invented a new and useful Back-Brace for Cotton-Pickers, of which the following is a specification.

This invention relates to a back-brace for cotton-pickers; and the object of the same is to make easy the tedious and laborious work of picking cotton or any other work which may require a stooping posture by the use of a simple and effective device which is applied to the shoulders, waist, and limbs and embodies an intermediate support which presses against the lower portion of the back of the wearer and exerts a bracing tension on a portion of the body which usually becomes most sensitive after a long stooping posture.

The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view showing the application and use of the improved back-brace. Fig. 2 is an elevation of the improved device. Fig. 3 is a detail perspective view of an intermediate support.

Similar numerals of reference are employed to represent corresponding parts in the several views.

The numeral 1 designates an intermediate support, which comprises a concave plate 2, extended at its lower portion in a transverse direction and having an upwardly-projecting arm 3, with a hook 4 to engage a waist-belt 5, the said hook being held in positive position on the waist-belt by suitable fastening devices passed through openings 6 in the outer portion thereof and the adjacent part of the said belt. The lower concave portion of the plate conforms to the contour of the body of the wearer of the brace at the point where it is applied. Across the lower portion of the plate a bridge-bar 7 extends and has its terminals 8 secured to ears 9 of the plate and the intermediate part formed with transverse seats 10 for a purpose which will be presently explained.

Shoulder bands or straps 11 are employed in connection with the improved device and are fastened by means of a buckle on each,

as shown by Fig. 2, and through the rear portion of the said bands or straps eyes or rings 13 are secured. Leg bands or straps 14 are also used and are substantially similar to the shoulder bands or straps 11 and in like manner may be easily attached or detached and have at the rear eyes or rings 15. Secured to the eyes or rings 13 are the upper extremities of brace-wires 16, which are arranged in pairs and crossed in alternation at a point slightly above the location of the waist-belt 5, as at 17, and are wound around the bridge-bar 7, the said wires being held spaced apart by the seats 10, and are then continued downwardly and fastened to the eyes or rings 15 of the leg bands or straps 14. By crossing the brace-wires in the manner set forth a support is instituted between the right limb and the left shoulder and the left limb and the right shoulder, and it is proposed to have the said brace-wires of such gage that they will exert a stiff resistance or efficiently perform the function of bracing the body. By having the intermediate support, which is produced by the bridge-bar and the plate connected thereto, that part of the back which ordinarily succumbs to strain or is affected by a tedious stooping posture is materially strengthened, and the shoulders are also relieved. The wire braces are resilient and will assume a normal position upon relaxation or when the wearer of the brace assumes an erect position.

The entire device is light in construction and quickly responds to the different movements of the body and does not produce an uncomfortable sensation when applied or tend to heat the body. By having the bridge-bar 7 stand outwardly from the plate or intermediate support the brace-bars are prevented from directly bearing on the parts of the body which they cross, and wear on the garments is thus avoided.

While the improved brace is particularly adapted for use by cotton-pickers, it is also equally useful in other occupations requiring a stooping posture—such as sawing wood, picking berries, and weeding. To suit different applications, it is proposed to change the form, proportions, size, and minor details; but such changes only will be made as reside within the scope of the invention.



Having thus described the invention, what is claimed as new is—

1. In a brace of the character set forth, the combination of shoulder and limb attaching devices, an intermediate support having an outstanding bridge-bar, and resilient brace-wires connected to said shoulder and limb attaching devices and to the bridge-bar.

2. In a brace of the character set forth, the combination of shoulder and limb attaching devices a waist-belt, an intermediate support attached to the waist-belt and having an outstanding bridge-bar with seats formed there-

in, resilient and brace wires connected to said shoulder and limb attaching devices and the bridge-bar, the said wires being crossed above the plane of the bridge-bar and wound around the latter at the points where the seats are formed. 15

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses. 20

EDGAR C. MENDENHALL.

Witnesses:

L. L. MENDENHALL,

L. B. MENDENHALL.