

J. C. KING.
ARM SUPPORT AND BRACE.
APPLICATION FILED DEC. 13, 1904.

2 SHEETS—SHEET 1.

Fig. 1.

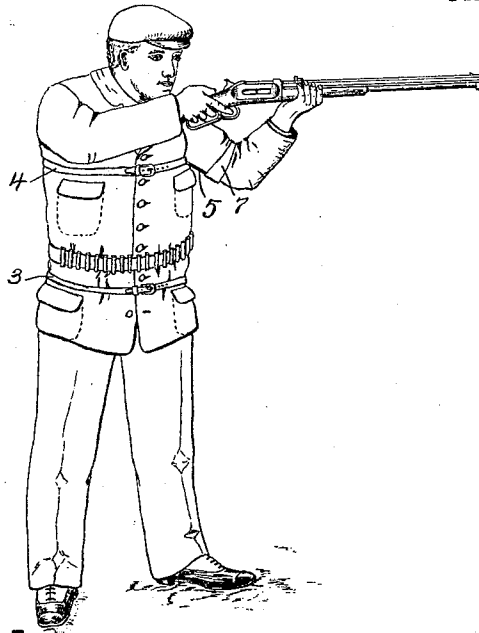


Fig. 3.

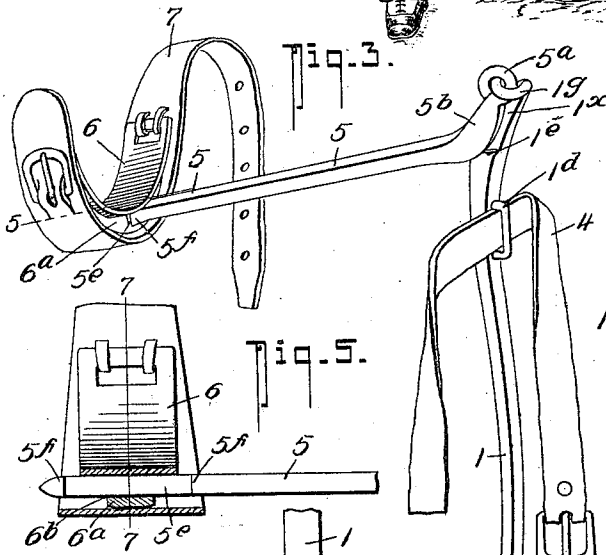


Fig. 5.

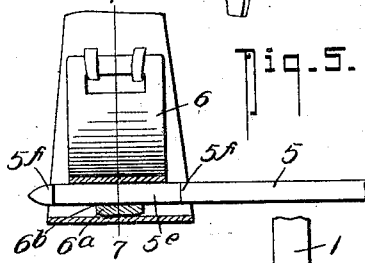


Fig. 6.

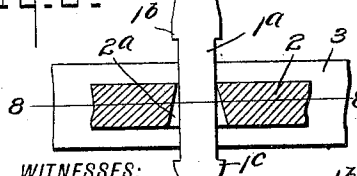
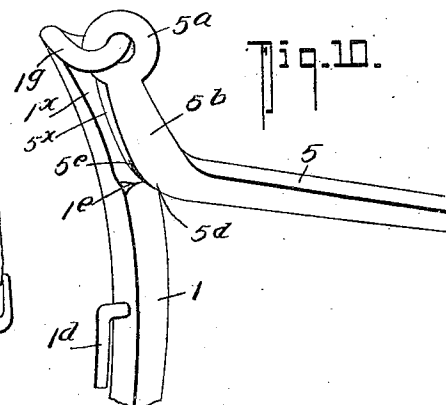


Fig. 10.

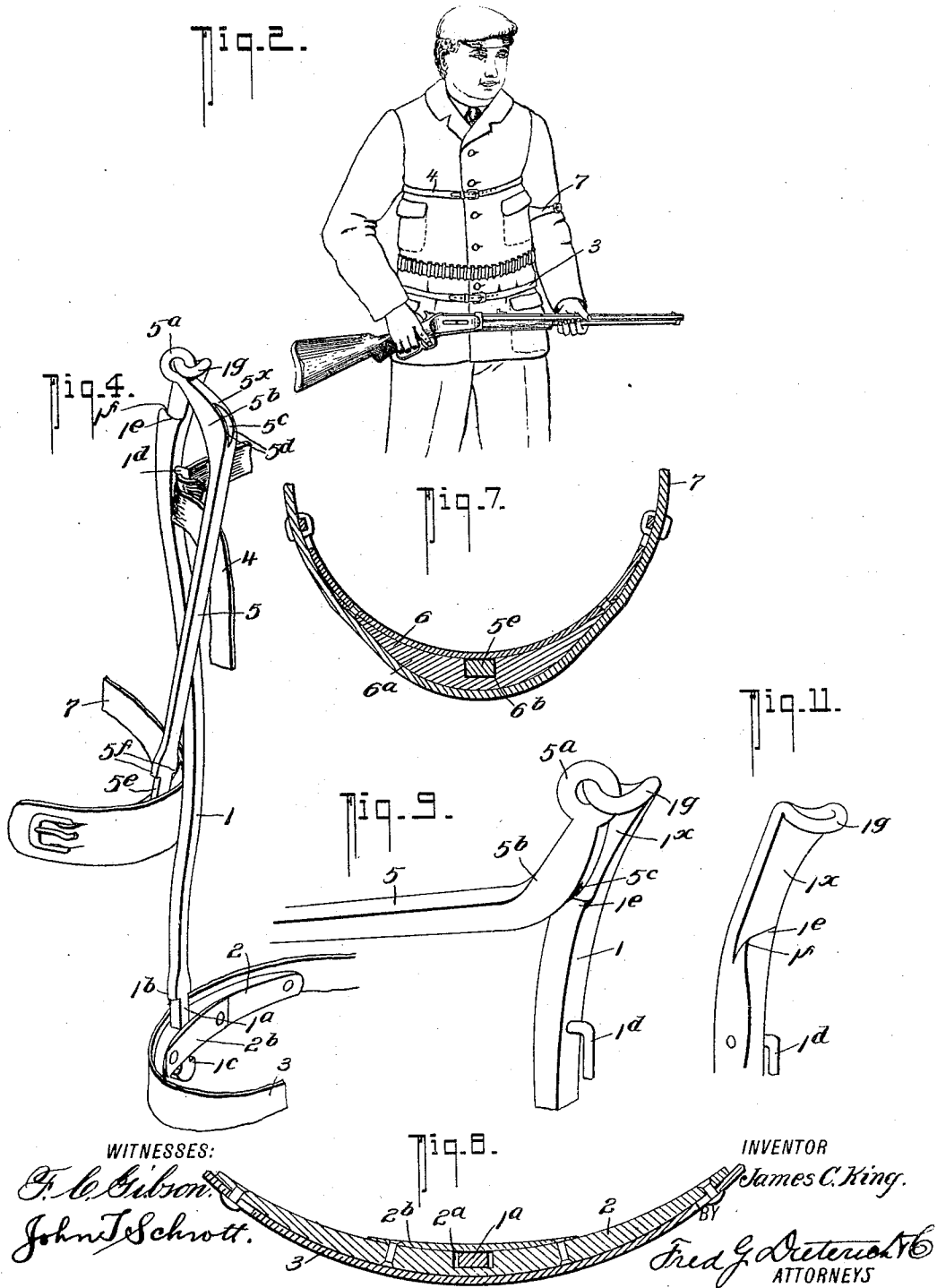


WITNESSES:
F. C. Gibson,
John Schwitt.

INVENTOR
James C. King.

BY
Fred G. Dietrich
ATTORNEYS

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BY *Fred G. Dietrich*
ATTORNEYS

UNITED STATES PATENT OFFICE.

JAMES C. KING, OF CALLAHAN, CALIFORNIA.

ARM SUPPORT AND BRACE.

No. 798,734.

Specification of Letters Patent.

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Application filed December 13, 1904. Serial No. 236,748.

To all whom it may concern:

Be it known that I, JAMES C. KING, residing at Callahan, in the county of Siskiyou and State of California, have invented certain new and useful Improvements in Arm Supports and Braces, of which the following is a specification.

My invention relates to certain new and useful improvements in braces and arm-supports; and it more particularly seeks to provide a device of this character of a very simple, durable, and effective nature which will readily serve its intended purposes and which can be easily manufactured at a very low cost.

Again, my invention seeks to provide a brace or support adapted to be secured to the body and arms of the wearer which will serve to brace or support his arm.

My invention is particularly adapted for sportsmen's use and for the use of soldiers, although it may be used whenever and by whomsoever it may be found desirable.

Generically the invention comprises a vertical brace portion adapted to be strapped or otherwise secured to the body of the wearer and a supplemental brace portion hingedly connected with the first brace portion which is adapted to be secured to the wearer's arm, and the brace members are so arranged that when they are in their operative position the first and second brace members are interlocked with each other to form, as it were, a single right-angled brace.

My invention also seeks to provide means whereby the brace can be adjusted to fit almost any person as well as to allow of free body movement of the wearer.

With other objects in view than have heretofore been referred to the invention also includes certain novel construction and arrangement of parts, all of which will be first described in detail and then be specifically pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view showing my invention in use, the operator being in the act of sighting or firing a gun. Fig. 2 is a similar view, the operator being shown in repose. Fig. 3 is a perspective view of my invention, showing the parts in the operative position shown in Fig. 1. Fig. 4 is a similar view showing the parts in the repose position shown in Fig. 2. Fig. 5 is a cross-section on the line 5 5 of Fig. 3. Fig. 6 is a similar view on the line 6 6 of Fig. 3. Figs. 7 and 8 are sections

on the line 7 7 and 8 8, respectively, of Figs. 5 and 6, respectively. Fig. 9 is a detail perspective view of the connecting ends of the two brace portions, showing their interlocking parts. Fig. 10 is a perspective view showing the device as arranged for use to support the right arm of the operator. Fig. 11 is a detail view of the upper end of the main brace-rod.

In the drawings, in which like numerals of reference indicate like parts in all of the figures, 1 designates the vertical brace-rod, which terminates at its lower end in the reduced portion 1^a and is formed with shoulders 1^b 1^c at either end of the reduced portion. Slidably connected with the rod 1 to cooperate with the reduced portion 1^a thereof is a body-engaging plate or guard member 2, which has a transverse slot 2^a of a V shape in longitudinal section to receive the portion 1^a of the rod 1 and to allow of the plate 2 having a limited movement in the vertical plane with respect to the rod 1, as well as allowing the plate to be moved up or down on the rod 1.

2^b designates a metallic strip riveted or otherwise secured to the plate 2 over the slot 2^a to hold the same on the rod 1.

Riveted or otherwise secured to the plate 2 is a strap 3, which passes around the hips or waist of the wearer, as shown in Fig. 1. Near the upper end the rod 1 is formed with a strap-receiving eye 1^d, to which a second strap 4 is secured, and the said strap 4 passes around the chest of the wearer and serves, together with the strap 3, to securely fasten the rod 1 to the body of the wearer.

The rod 1 near its upper end is curved inwardly and is provided with a shoulder 1^e, having a locking-groove 1^f for a purpose presently understood.

1^g designates a loop portion bent at right angles to the rod 1 on the shoulder side thereof and at the extreme upper edge of the rod to cooperate with the loop end 5^a of the second brace-rod 5. The rod 5 also includes a bent or curved portion 5^b and is provided with a groove 5^c and shoulders 5^d 5^d, which are adapted to interlock with the curve 1^f and shoulder 1^e in the rod 1, as clearly shown in Fig. 3.

The rods 1 and 5 where they join are provided with flat surfaces 1^x 5^x, which lie against each other when the parts are in the position shown in Figs. 1 and 3. At the free end the rod 5 is formed with a reduced portion 5^e and shoulders 5^f 5^f to cooperate with the transverse arm-receiving plate 6, to the under side

of which a bridge member 6^a, having a groove 6^b, is securely riveted or otherwise attached.

7 designates a strap secured to the plate 6, which is adapted to encircle the arm of the wearer above the elbow to hold the plate 6 in position against the wearer's arm.

In Figs. 1 to 8, inclusive, I have shown my invention as constructed for use to support the left arm of the wearer, while in Fig. 10 the invention is shown as constructed to support the right arm of the wearer, the connections between the rods 1 and 5 merely being reversed.

So far as described the manner in which my invention operates will be best explained by reference to Figs. 1 to 4, inclusive, from which it will be seen that when the parts are in the position shown in Figs. 1 and 3 they form a substantial brace or arm-rest, the joining ends of the rods 1 and 5 being, as it were, locked together. To release the rods 1 and 5 from their locked position to allow the arm of the operator to fall to his side, it is only necessary for the wearer to move his arm horizontally toward the left, which will then cause the interlocking portions of the rods 1 and 5 to become disengaged from each other to allow of the arm of the operator being moved to the position shown in Fig. 2, and the parts of the brace are then in the position shown more clearly in Fig. 4.

From the foregoing description, taken in connection with the accompanying drawings, it is thought the complete operation, construction, and many advantages of my invention will be readily understood by those skilled in the art to which it appertains, and I desire to call attention to the fact that by connecting the plate 6 to the rod 5 in the manner shown the same can be moved along the rod to allow of adjustment for different length arms. Also by joining the plate 2 to the rod 1 in the manner shown the same may be adjusted on the rod to allow of different body lengths and also to allow of the proper movement of the wearer's body without interfering therewith.

Slight changes in the detail construction, arrangement, and combination of parts may be made without departing from the scope of the invention or the appended claims.

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

1. A brace or support comprising a rod, an apertured body-engaging plate, said rod passing through said plate-aperture and having limiting-stops for limiting the movement of the body-plate on the rod, means for securing said plate to the body of the wearer, means attached to said rod near the other end for holding said rod against the body of the wearer, a second rod loosely connected with the other end of the first rod, an apertured arm-engaging plate adjustably connected with the free end of the second rod, said second

rod passing through said arm-plate aperture and having stops for limiting the movement of said arm-plate along the rod and means for securing said arm-engaging plate to the arm of the wearer substantially as shown and described.

2. A brace or support comprising a rod, a body-engaging plate adjustably mounted on one end of the said rod and transversely thereto and capable of longitudinal adjustment on said rod, said rod having stops for limiting the adjustment of the body-plate along the rod, means for securing said plate to the body of the wearer, means attached to said rod near the other end for holding said rod against the body of the wearer, a second rod loosely connected with the other end of the first rod, an arm-engaging plate adjustably connected with the free end of the second rod, and means for securing said arm-engaging plate to the arm of the wearer, said first and second rod members having interlocking portions adapted to interlock with one another to hold the second arm extended at an angle to the first arm, substantially as shown and described.

3. An apparatus of the character stated, comprising a rod having a curved upper end terminating in an eye, said rod near the eye end having an interlocking shoulder and a strap-receiving member secured to the rod, a strap carried by said strap-receiving portion for securing the rod to the body of the wearer, said rod at its lower end having a reduced portion and formed with shoulders, a body-engaging plate loosely mounted on said rod at said reduced portion for adjustment along said rod, a securing-strap carried by said body-engaging plate for attaching said plate to the body of the wearer, a second rod member having a curved portion provided with an interlocking groove and shoulders for interlocking with the interlocking shoulders of the first rod member, said second rod member having an eye for cooperating with the eye of the first rod member, said second rod member having its free end provided with a reduced portion and shoulders, an arm-engaging plate adjustably secured to the said arm at said reduced portion and movable between said shoulders, a securing strap or band carried by said arm-engaging plate for securing it to the arm of the wearer, substantially as shown and described.

4. An apparatus of the character stated, comprising a rod having a curved upper end terminating in an eye bent at right angles to the rod, said rod at the eye end being enlarged and provided with an interlocking grooved shoulder, a strap-receiving member secured to the rod below the interlocking shoulder, a strap passing through said strap-receiving member for securing the rod to the body of the wearer, said rod at its lower end being provided with an elongated reduced portion and formed with shoulders at each end of said

reduced portion, a body-engaging plate of less
width than the length of the reduced portion
of the rod, said body-engaging plate having
a V-shaped rod-receiving portion to receive
5 the elongated reduced portion of the rod, a
securing-strap secured to said body-engaging
plate for securing it to the body of the wearer,
second rod member having a curved end por-
tion terminating in an eye for interlocking
10 with the eye of the first-mentioned rod to
form a substantially universal connection
therewith, said second rod member at its
curved portion being provided with an inter-
locking groove and shoulders for interlock-
15 ing with the interlocking grooved shoulder

of the first rod member, said second rod mem-
ber having its free end provided with a re-
duced portion and shoulders at each end of
said reduced portion, an arm-engaging plate
20 mounted on said second rod at its reduced
portion for adjustment along the rod, said
arm-engaging plate extending transversely to
the rod, and a securing-strap carried by said
arm-engaging plate for securing it to the arm
25 of the wearer, substantially as shown and de-
scribed.

JAMES C. KING.

Witnesses:

GEO. T. HULMUTH,
W. W. LAFFERTY.