

Feb. 1, 1949.

A. V. LEWIS

2,460,589

ARM SUPPORT

Filed July 27, 1945

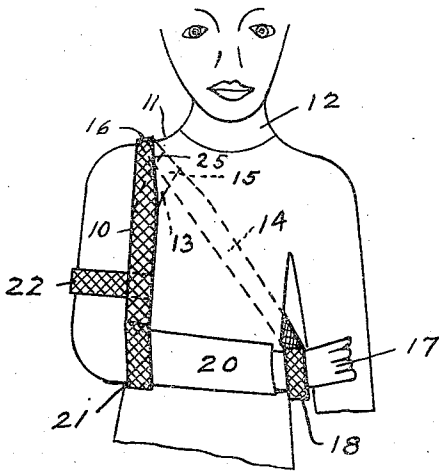


FIG. 1.

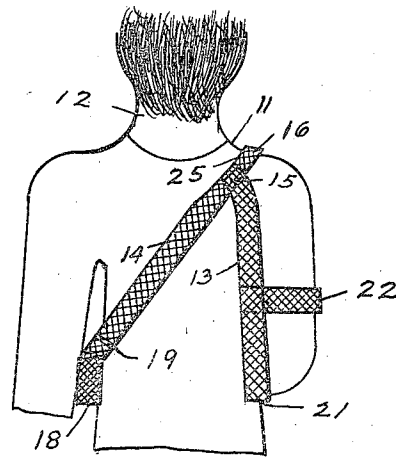


FIG. 2.

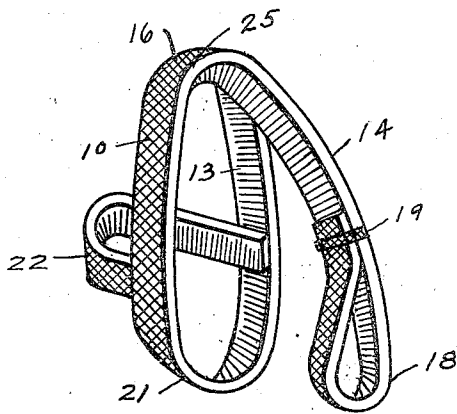


FIG. 3.

Inventor  
ADA V. LEWIS.

334  
Howard J. Whelan,  
Attorney

# UNITED STATES PATENT OFFICE

2,460,589

## ARM SUPPORT

Ada V. Lewis, Baltimore, Md.

Application July 27, 1945, Serial No. 607,314

1 Claim. (Cl. 128-94)

1

This invention relates to medical aids and more particularly to arm slings for supporting an injured or diseased arm.

In a particular form, it has been customary to provide a sling for supporting an injured arm, so made that the weight was carried by a strap passing around the body adjacent to the neck, which has a tendency to bend the user over and press on the muscles around both shoulders close to the spinal column. In addition the arm has a tendency to swing forward from the body at the elbow and greatly interfere with the healing of injuries of the arm at the arm pit and shoulder. It also had a strap crossing over at the chest, which interfered with the breathing and in case of women also exerted a more or less distressing pressure on the bosom.

It is an object of this invention to provide a new and improved sling for an injured arm that will avoid one or more of the disadvantages and limitations in the prior art.

Another object is to provide a new and improved arm sling that will hold the injured arm in a convenient and comfortable manner, and hold it from swinging away from the body in a manner tending to produce stresses and injurious movements to a healing arm.

In a selected structure embodying this invention, illustrated in the drawings and described in the specifications, while its scope is outlined in the claim.

Figure 1 is a front view of a sling embodying the invention, shown applied to an individual in its use as a support for his arm;

Figure 2 is a back view of Figure 1, and

Figure 3 is a perspective view of the sling shown in Figure 1 as it appears when not in actual use.

Similar reference characters refer to similar parts throughout the drawings.

The structure of the sling comprises a shoulder suspension strap 10 arranged for vertical placement from one shoulder 11 of a user 12 down beyond the elbow of the arm in front and looped backwardly and upwardly to provide a back strap 13. The back strap 13, meets the cross-strap 14 at a point 15 on the back of the user, just below the shoulder looping apex portion 16. The cross-strap 14 continues behind the back of the user 12 in a diagonal direction and comes forward to the front of the patient to engage and hold his hand or wrist 17 with a loop portion 18 of the strap 14. The loop portion is made adjustable by the use of a buckle or sleeve 19, and engages the wrist of the arm 20 held in the sling and bent

2

to cross horizontally in front as indicated to the opposite side. The loop 18 restrains the arm at the wrist from swinging forward in cooperation with the elbow loop 21 of the injured arm. In addition a brace loop 22 engages around the arm just above the elbow portion, to prevent it from moving laterally from the body.

It can be appreciated that the arm so held in the sling has its weight supported on one shoulder and away from the neck of the user. It restrains the arm so it cannot swing either to the front or side and does so in a convenient and effective manner. No pressure is exerted on the chest or bosom of the user by the device. It is preferably of fabric and sewed together at any connections between the straps necessary. It has no tendency to injure the bosom of the user or interfere with his or her breathing while its structure is simple, economical and effective. The elbow portion 21, has a dart in it to allow the material to be bent to suit the taper of the arm. This dart consists in changing the material 10 slightly to an angle and anchoring or sewing it in that position.

The device can be used in connection with conventional clothing and has the advantage of not obstructing the closure and opening of such as required in customary use. It is preferred that the straps be relatively wide to distribute their pressures over larger surfaces and reduces the possibilities for crinkling.

The apex portion 16 is narrower at 25 to fit around the shoulder.

While but one general form of the invention is shown in the drawings and described in the specifications it is not desired to limit this application for patent to this particular form or in any other way otherwise than limited by the scope thereof, as it is appreciated that other forms could be made that would use the same principles and come within the scope of the appended claim.

Having thus described the invention, what is claimed is:

1. An arm sling of the class described comprising a single shoulder strap formed of a continuous band of flexible material arranged for placement over one shoulder of a wearer on the side of the injured arm to straddle the shoulder and extend in front of the wearer alongside the injured arm down to the elbow, forming a loop around the forearm adjacent the elbow and folding back along the back side of the injured arm to a point where it joins and is secured to the portion of the band on the back side of the wearer, the band

3

extending from this point diagonally across the back of the wearer towards the other arm and away from the armpit and terminating in a loop portion reaching from the back under the arm to the front of the body and of predetermined size to slip on and encircle the wrist portion of the injured arm, and a brace loop fastened in two places to said shoulder strap adjacent the portion looped around the injured forearm so as to restrain the arm from outward movement from the body, said portion of the strap extending diagonally across the back of the wearer constituting the only connection between the shoulder portion of the strap and the portion thereof looped around the wrist of the wearer.

ADA V. LEWIS.

4

#### REFERENCES CITED

The following references are of record in the file of this patent:

#### UNITED STATES PATENTS

Number	Name	Date
1,490,381	Gobar	Apr. 15, 1924

#### OTHER REFERENCES

Journal Bone and Joint Surgery, July 1944, vol. XXVI, No. 3, pp. 597-598-599.

15