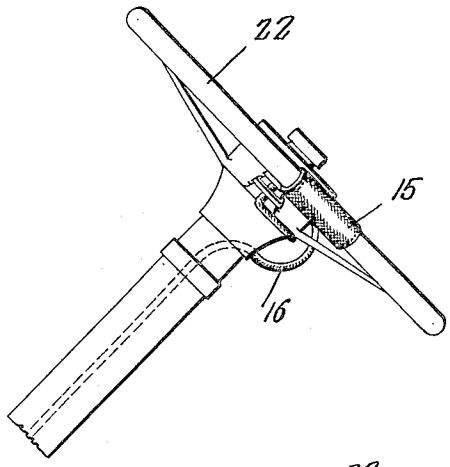
March 18, 1930. C. SCHAAF 1,751,365

THUMB AND FINGER WARMER

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Fig. 1.



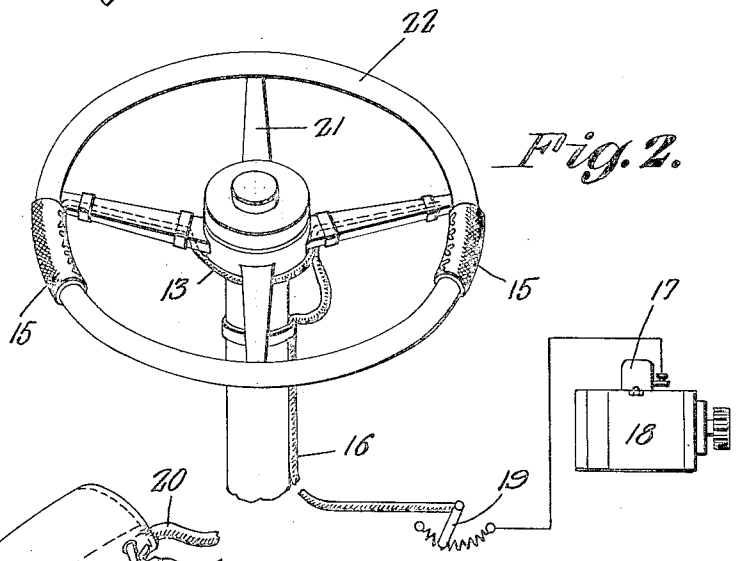




Fig. 2.

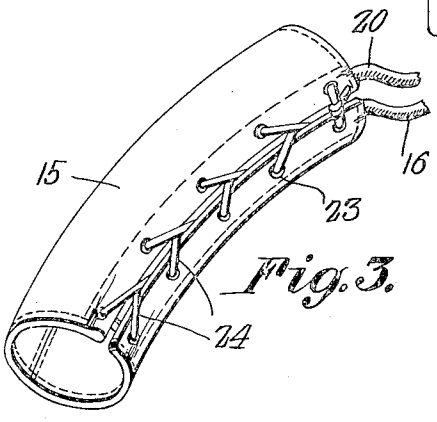



Fig. 3.

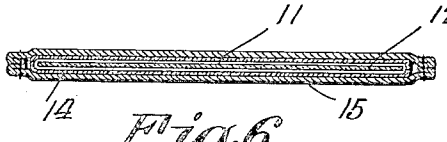



Fig. 6.

Charles Schaaf,
INVENTOR

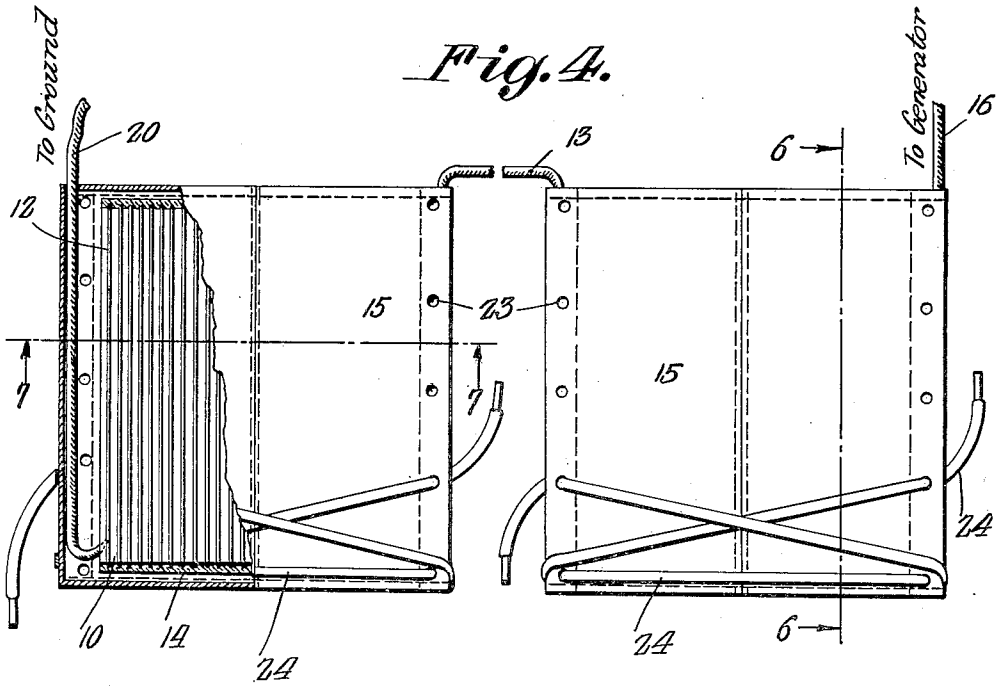
BY Victor J. Evans
ATTORNEY

March 18, 1930. C. SCHAAF 1,751,365

THUMB AND FINGER WARMER

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Fig. 4.



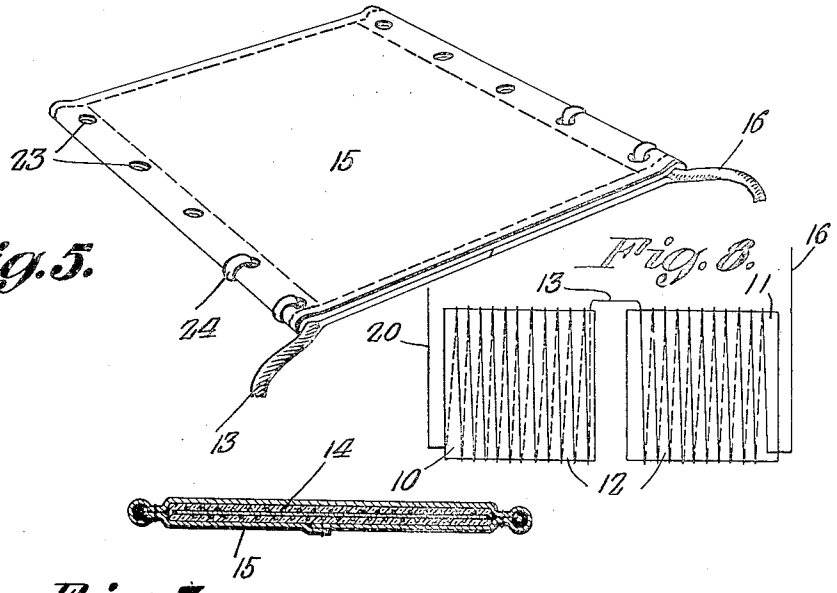




Fig. 5.

Fig. 6.




Fig. 7.

Charles Schaaf,
INVENTOR

BY Victor J. Evans
ATTORNEY

Patented Mar. 18, 1930

1,751,365

# UNITED STATES PATENT OFFICE

CHARLES SCHAAF, OF CHICAGO, ILLINOIS

## THUMB AND FINGER WARMER

Application filed December 21, 1928. Serial No. 327,668.

This invention relates to heating and warming devices adapted to be carried upon the steering wheels of motor vehicles and the like to warm the fingers and hands of the driver during cold weather.

An object of the invention contemplates resistance coils carried within parcels and wrapped about the steering wheel.

More specifically stated the parcels for the resistance coils are covered with suitable material whereby the bare hands may grasp the heating devices to obviate use of gloves, mittens and etc.

With the above and other objects in view, the invention further consists of the following novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawing and pointed out in the appended claim.

In the drawing:—

Figure 1 is a fragmentary elevation of a motor vehicle steering wheel and column therefor illustrating the application of the invention.

Figure 2 is a perspective view of the steering wheel with the warming devices applied and connected in circuit with the cut-out on a generator.

Figure 3 is a perspective view of one of the warming devices per se.

Figure 4 is an elevation of the warming devices wired in series and partly broken away to illustrate the construction thereof.

Figure 5 is a perspective view of one of the warming devices precedent to being wrapped about the steering wheel.

Figure 6 is a longitudinal sectional view taken on line 6—6 of Figure 4.

Figure 7 is a horizontal sectional view taken on line 7—7 of Figure 4.

Figure 8 is a plan view of the resistance coils per se.

Referring to the drawing in detail, wherein like characters of reference denote corresponding parts, the reference characters 10 and 11 indicate cards preferably formed of fabric and other insulating material of a resilient character. Coils 12, wound upon each of the cards 10 and 11 and having the convolutions thereof spaced apart for appreciable distances, are connected in series through a lead wire 13. The convolutions of the coils 12 are then coated with asbestos or other insulating coverings, such as indicated at 14, and subsequently enclosed within pocket members 15.

A conducting wire 16, connected with the cut-out 17 upon a generator 18 and controlled by a switch member 19, is adapted for connection at its opposite end with the outermost convolution of one of the coils 12. The opposed terminal of the remaining resistance coil is connected with a wire 20 suitably grounded upon one of the spokes or arms, such as indicated at 21, supporting the steering wheel 22. The opposite side edges of the pocket members 15 are apertured, as at 23, to accommodate shoe laces or other ties 24 to apply and attach the warming devices about the steering wheel 12.

The invention is susceptible of various changes in its form, proportions and minor details of construction, and the right is herein reserved to make such changes as properly fall within the scope of the appended claim.

Having described the invention, what is claimed is:—

A hand and finger warmer for use upon the steering wheels of motor vehicles comprising pockets forming parallel horizontally apertured sleeves upon the opposed side edges thereof, laces for the pockets passed through the horizontal apertures of the sleeves to conveniently apply the pockets about the steering wheel, resistance coils series wound upon cards arranged within the pockets and connected in circuit through communicating lead wires passed through the adjacent sleeves, and the coils being energized from the generating circuit of the vehicle by lead wires passed through the remaining sleeves of the pockets.

In testimony whereof I affix my signature.

CHARLES SCHAAF.