

March 24, 1925.

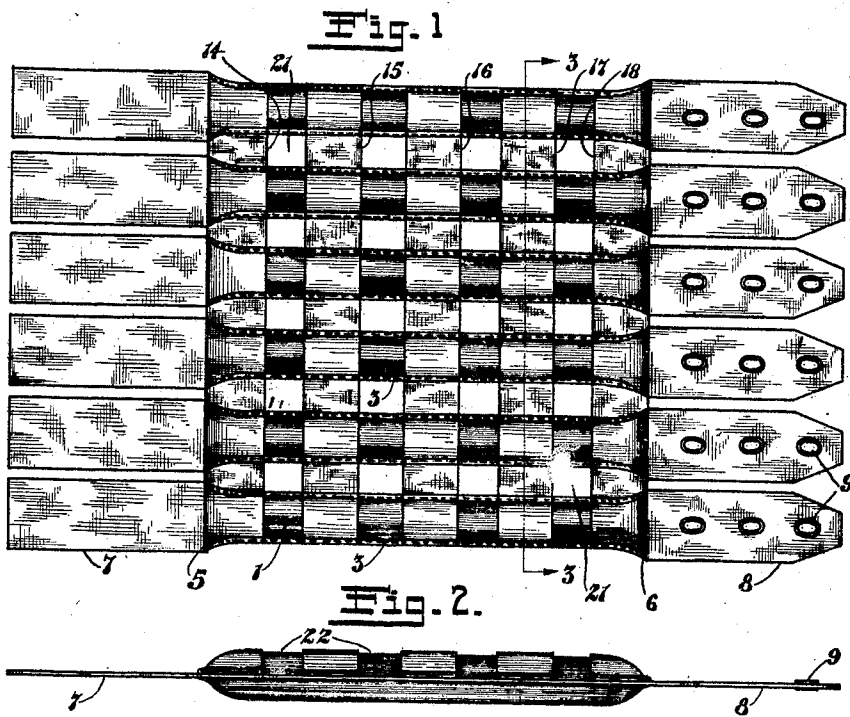
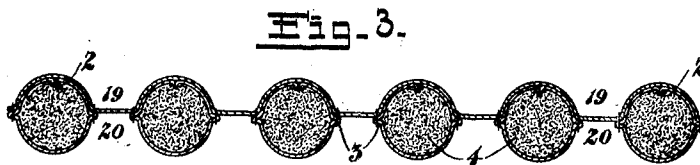
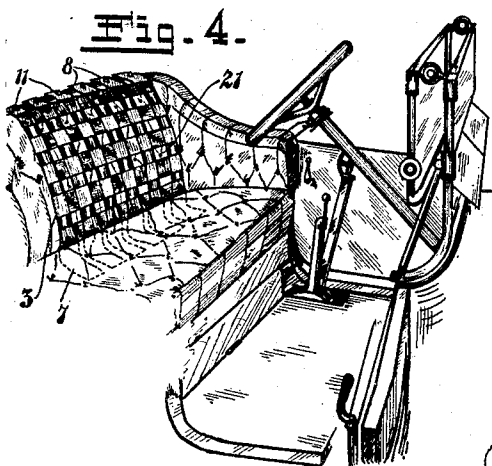
1,530,544

J. G. COOPER

COOLING CUSHION

Filed Nov. 28, 1921

2 Sheets-Sheet 1



INVENTOR
JAMES G. COOPER

BY *James H. Ramsey*
ATTORNEY

March 24, 1925.

J. G. COOPER

1,530,544

COOLING CUSHION

Filed Nov. 28, 1921

2 Sheets-Sheet 2

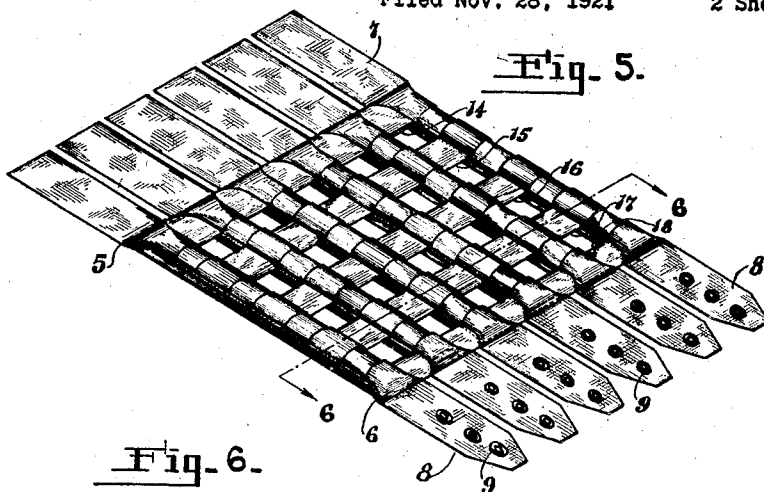
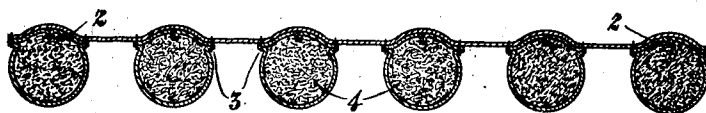


Fig. 7.

Fig. 8.

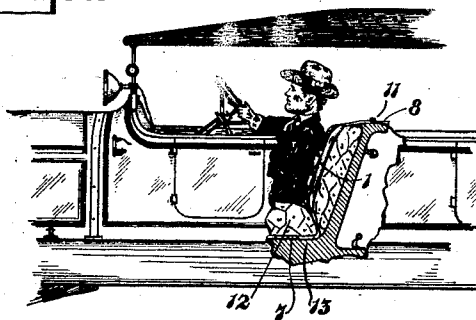


Fig. 10.

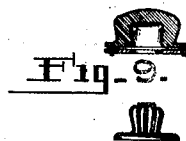


Fig. 9.



Fig. 11.

Fig. 12.

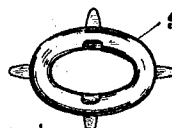


Fig. 13.



INVENTOR:
JAMES G. COOPER.

BY *James A. Ramsey*
ATTORNEY.

UNITED STATES PATENT OFFICE.

JAMES G. COOPER, OF CINCINNATI, OHIO.

COOLING CUSHION.

Application filed November 23, 1921. Serial No. 518,287.

To all whom it may concern:

Be it known that I, JAMES G. COOPER, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Cooling Cushions, of which the following is a specification:

My invention relates to cooling cushions and more particularly to open work cushions adapted for use upon the backs of automobile seats, and it may also be used in various other ways.

The object of my invention is to provide a cushion that will be comfortable and cool to the user and which prevents the usual tired feeling in the back and shoulders of a person when driving a car for any considerable distance or length of time. Other objects and advantages are attained, some of which will be hereinafter noted.

My invention consists in a plurality of tubular stuffed cushions spaced apart from each other and held by cross-strips or members also spaced apart from each other.

My invention also consists in the parts and in the construction, combination and arrangement of parts as herein set forth and claimed.

In the drawings:

Fig. 1 is a plan view of the cushion showing the cross-strips sewed on the sides of the tubular cushions 2;

Fig. 2 is a side elevation of Fig. 1;

Fig. 3 is a cross-section taken on the line 3—3 of Fig. 1;

Fig. 4 is a front perspective showing the cushion placed in an automobile;

Fig. 5 is a perspective view of the cushion showing the cross-strips sewed or otherwise suitably held on the top of the respective tubular cushions;

Fig. 6 is a cross-section taken on the line 6—6 of Fig. 5;

Fig. 7 is a side elevation of part of the car broken away at the side to show the position of the cooling cushion in relation to the driver's back;

Fig. 8 is a plan and vertical section of the cap for the snap;

Fig. 9 is a side elevation and plan view of the snap;

Fig. 10 is a plan view of a modified construction of snap;

Fig. 11 is a side view thereof;

Fig. 12 is a plan view of a modified form of eyelet; and

Fig. 13 is a side elevation thereof.

In the embodiment of my invention as illustrated and which shows preferred constructions I provide a plurality of cloth tubes 1 formed from a strip of material having its longitudinal edges seamed together and turned inwardly as shown at 2 and having the cloth along opposite sides turned outwardly to form ribs 3 as shown in Fig. 3. The tubes are then stuffed with horse or other hair or cotton or other suitable flexible material 4 throughout the greater portion thereof. The tubes are then closed by stitches 5 and 6 leaving at each end flaps 7 and 8 respectively which flaps are suitably hemmed at their ends. Upon one series of the flaps which are preferably formed tapering at their free ends I provide a plurality of metal eyelets 9 which are adapted to engage suitable snaps 10 on or near the top of the backs of the seats and be held thereon by buttons 11. The flaps at each end are preferably formed flat, flaps 8 resting firmly against the back of the seat and flaps 7 fitting between the usual seat cushion 12 and the bottom of the seat frame 13 which when the user is seated thereon holds the cooling cushion in fixed and proper position and keeps it from shifting out of place. The several tubular cushions thus formed are spaced apart from each other and secured in such spaced apart relation by means of cloth strips 14, 15, 16, 17 and 18 which are stitched to the respective ribs 3, and end strips 14 and 18 are sewed at their outer edges to the ends of the respective cushions. In the construction just described and illustrated in Figs 1, 2 and 3 the respective cushions are joined together centrally of the respective sides, thereby leaving air spaces 19 and 20 both at the front and rear of the cushion. The transversely extending binding strips are spaced apart from each other leaving air passages 21 between the adjacent cushion tubes and binding strips respectively, for the free circulation of the air. The several binding strips being secured upon the respective tubular cushions in spaced apart relation leaves air ducts 22 extending from each air space to the adjacent air space between the respective cushion tubes and the user, thus providing for a maximum circulation of air between the cushion and the user. The space 19 between the respective tubes 1 provides for the free circulation of air between the back of the

seat and the cross-strips and the space 20 permits the free circulation of air between said cross-strips and the user. This permits the air not only to pass upwardly and downwardly between the user and said cross-strips but also upwardly and downwardly between said cross-strips and the seat. The strips further provide for the free circulation of air through the air passages 21.

10 The cushion constructed as above described can be readily adjusted to seats of varying sizes by engaging the proper eyelets with the snaps attached to the back of the seat.

15 My invention is capable of considerable modification without departure from its scope or spirit as for instance, the cross-strips 14 to 18 may be secured to the front sides of the respective tubular cushions, as seen in Figs. 5 and 6 in which case the major portion of the air space is between the respective tubular cushions and back of the respective cross-binding-strips but in this construction there is also some circulation 25 between the user and the cross-strips at points between the respective tubular cushions.

While I have shown and described the cushions as tubular in cross-section it will 30 be understood that I do not limit myself thereto as change in the form of the cushions may be made without departing from the scope or spirit of my invention.

The flaps 8 may be secured to the back 35 of the seat by means of the snaps shown in Figs. 8 or 9 or those shown in Figs. 10 to 13 inclusive or in any other suitable manner; or the cushion may be held in position by the flap 7 and the pressure of the user 40 against the cushion with fairly good results.

An important advantage of the use of my invention and which I have found from actual experience in making long drives at 45 high speed in warm weather is that the free circulation of air between the driver and the cooling cushion prevents overheating of the driver, thereby preventing sweating, damp clothing resulting therefrom and consequent colds and other illness.

50 Furthermore, I have shown by actual experience that the cooling cushion serves as a bracing support to the back which prevents it from readily becoming tired while

operating the wheel, which under ordinary 55 conditions is rather nerve-racking but which with the use of my invention renders driving a perfect pleasure. While I have illustrated and described my invention as particularly adapted for cooling cushions for 60 the backs of automobile seats they may also be used either with or without the flaps for seat cushions either for automobiles or upon chairs and the like.

Having described my invention, its nature 65 and various uses, what I claim as new and desire to secure by Letters Patent is:

1. In a cooling cushion, a plurality of elongated cushions spaced apart from each other and a plurality of flat strips of flexible material spaced apart from each other 70 transversely of said cushions and sewed thereto, whereby a plurality of air passages and air spaces are formed between the respective cushions, substantially as set forth 75 and for the purposes specified.

2. In a cooling cushion, a plurality of elongated flexible cushions spaced apart from each other, a plurality of flexible holding and spacing strips spaced apart from 80 each other transversely of said cushions and secured thereto at points between said cushions, whereby a plurality of air passages and air spaces are formed between the respective cushions, substantially as set 85 forth and for the purposes specified.

3. In a cooling cushion, a plurality of elongated cushions spaced apart from each other, a plurality of strips spaced apart from each other transversely of said cushions 90 and secured to the opposite sides of said cushions, respectively, whereby a plurality of air passages and air spaces are formed between the respective cushions and a flap at the end of each elongated cushion adapted 95 to hold said cooling cushion in fixed position for use, substantially as set forth and for the purposes specified.

4. In a cooling cushion, a plurality of elongated cushions, each having a rib upon 100 each side thereof and a plurality of strips spaced apart from each other and stitched to said ribs respectively, whereby a plurality of air passages and air spaces are formed between the respective cushions, substantially as set forth and for the purposes 105 specified.

JAMES G. COOPER.