

E. E. CHILDS.
SUPPORTING DEVICE.
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1,228,649.

Patented June 5, 1917.

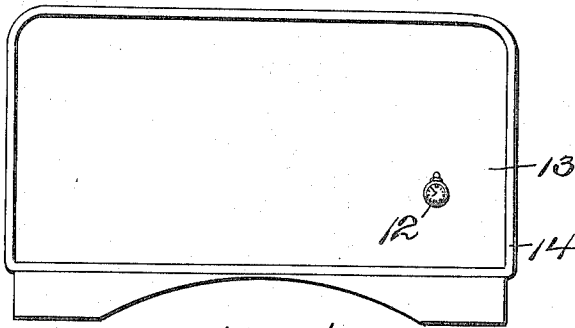


Fig. 1

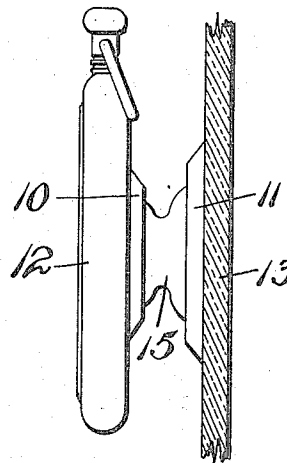


Fig. 2

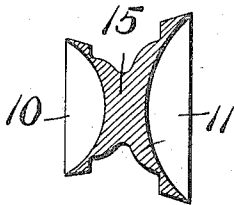


Fig. 3

Fig. 4

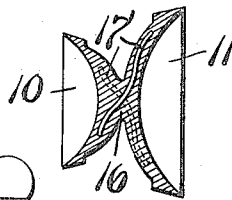
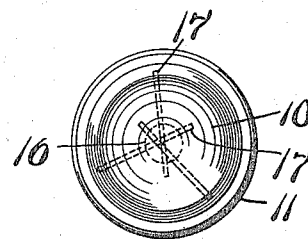


Fig. 5

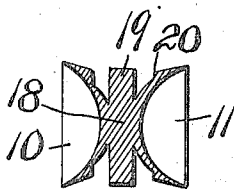


Fig. 6

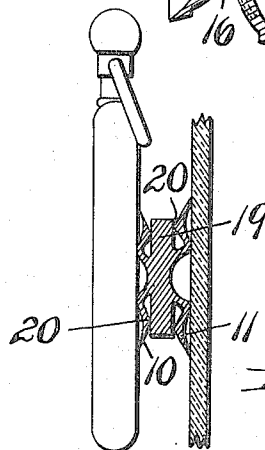


Fig. 7

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SUPPORTING DEVICE.

1,228,649.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ELMER ELLSWORTH CHILDS, a citizen of the United States, and a resident of Lyons, county of Somerset, and State of New Jersey, have invented certain new and useful Improvements in Supporting Devices, of which the following is a specification.

This invention relates to an improved means for holding a timepiece, such as a watch or a small clock, against a flat surface so that its position can be adjusted easily and it can be placed in any position at will, being particularly adapted for use on the windshields of automobiles.

The present invention is designed to permit the placing of a watch or clock on a windshield and place it so as not to interfere with the vision of the driver and to be arranged on the windshield to conform to whether the driver sits on the right or left hand side of the car, and furthermore, the timepiece can be placed so that a slight shifting of the eyes will enable the driver of the car to assure himself of the time without diverting his eyes, to any great extent, from the road.

It has been customary to carry watches or small clocks on automobiles, but the usual place of location has been on the dash or underneath the projection from the hood within the dash, which is an inconvenient place for a number of reasons, first on account of the inconvenience in winding a timepiece in such position, such timepieces being removable with difficulty or not removable at all, and second, it diverts the gaze of the driver from the road, when looking at the clock, to an extent to make it even difficult to indirectly see anything on the road ahead.

The present invention overcomes these objections, and it has the added advantage of placing the timepiece so that, in the case of a touring car, passengers in the back seat can also see the timepiece, making it unnecessary to ask the driver of the car for the time, which request in turn causes him, as previously set forth, to look from the road, to a considerable extent, to observe a timepiece on the dash.

The present invention is made preferably as a one-piece article and comprises suction cups disposed so as to provide a firm, safe and easily attached or detached means for holding a timepiece on the windshield or,

if desired, in any other convenient position, and hold the timepiece against excessive vibration, thus also preventing rattling noises and at the same time providing enough resiliency to protect the works of the clock or watch from severe jars incidental to the running of the car.

The invention is illustrated in the accompanying drawing, in which Figure 1 is a view of a windshield of a car showing a watch in position on said windshield as it will appear when secured by the improved fastening means. Fig. 2 is a side view of one form of device showing a fragment of the glass of the windshield in section. Fig. 3 is a detail view of the fastening device shown in Fig. 2, this view showing the device when it is not attached. Fig. 4 is a view similar to Fig. 3, but showing a modified form of construction, and Fig. 5 is an end view of the device shown in Fig. 4. Fig. 6 is a vertical section, detached, of still another modification, and Fig. 7 is a detail of the device shown in Fig. 6, but in position suspending a watch on a pane of glass, part of said pane being shown in section.

The invention comprises, primarily, suction cups placed back to back and suitably secured together, such securing being usually accomplished by making the device in one piece, the material that is preferably employed being rubber, although other suitable materials might be used if found advisable. In such suction cups placed back to back, precaution must be taken against too frail a structure between the suction cups, such frail structure permitting the sagging of the watch or clock out of a vertical plane and incidentally tending to destroy the suction of one of the cups and permitting the detachment of the device from the windshield. It will be understood that in this specification when windshield is spoken of, it also embraces other glass plates or similar surfaces against which the device might be used, the windshield being especially mentioned in view of the fact that this device is particularly adapted for such use.

In Figs. 2 and 3 I show a device comprising suction cups 10 and 11 which can be properly proportioned and made of different relative sizes, but in these views the suction cup 10 is smaller than the other, the smaller one being adapted to be attached by forcing it, preferably with its edges mois-

tened, against the back of a watch 12, the suction cup 11 being adapted to be similarly attached by pressing it against the plate 13 of the windshield 14. When the device
5 simply consists of two cups arranged back to back in this manner, it is necessary to make the connecting neck 15 thick enough to give sufficient stability to the device to prevent undue shaking or agitation of the
10 clock or watch when it is held in position. If it is desired to reduce the material of the neck portion, as shown in the modification in Figs. 4 and 5, said neck portion 16, when thus made smaller, is strengthened by any
15 desired form of reinforcing means, these two figures illustrating wires 17 suitably formed and adapted to be molded within the material of the neck and extending part way into the suction cups of the device, the number of these strands being varied according to the requirements which the device is expected to fulfil, the drawing, particularly Fig. 5, showing such wires as being arranged radially and being three in number.
25 Any other desired number or arrangement can be employed, as will be understood. The stiffening, whether by such reinforcing means embedded in the cups and the connecting neck, or whether it is due to the material of the neck being made thicker in
30 diameter, interposes enough stiffening to hold the suction cups substantially parallel or in a substantially predetermined relation without undue shaking or rattling, and another form of such interposed steadying means is shown in the modification illustrated in Figs. 6 and 7. In this form the suction cups 10 and 11 have the neck 18 connecting them provided with an annular collar 19 which is preferably made in the same
40 piece as the two cups and being thick enough to permit the outer corners 20 of the suction

cup to be forced in contact with its outer faces when the suction cups are forced into holding position, as shown in Fig. 7. When
45 thus forced into position, any tilting of the watch is prevented by the presence of this washer which holds the different parts alined by reason of being in contact with the opposed faces of the two suction cups. It
50 will be understood that various other forms of washers can be used, of any desired cross section or material.

Having thus described my invention, I
claim: 55

1. A holding device for sustaining an article free of any other support comprising two suction cups arranged stiffly back to back and substantially in line and connected by a relatively stiff and short connecting portion. 60

2. A holding means adapted to hold an article without any other support and adapted to be concealed from the front by the supported article comprising a pair of
65 suction cups arranged close together and back to back and with a relatively stiff connecting portion between them.

3. A holding device comprising a pair of suction cups, a neck connecting the cups, and means between the cups against which the backs of the cups are forced when the cups are flattened to a holding position. 70

4. A holding device comprising a pair of suction cups arranged back to back, a neck
75 between the cups, and a collar on the neck and adapted to prevent undue relative tilting of the cups by engagement with the backs of the cup.

In testimony that I claim the foregoing, I hereto set my hand, this 10th day of November, 1916.

ELMER ELLSWORTH CHILDS.