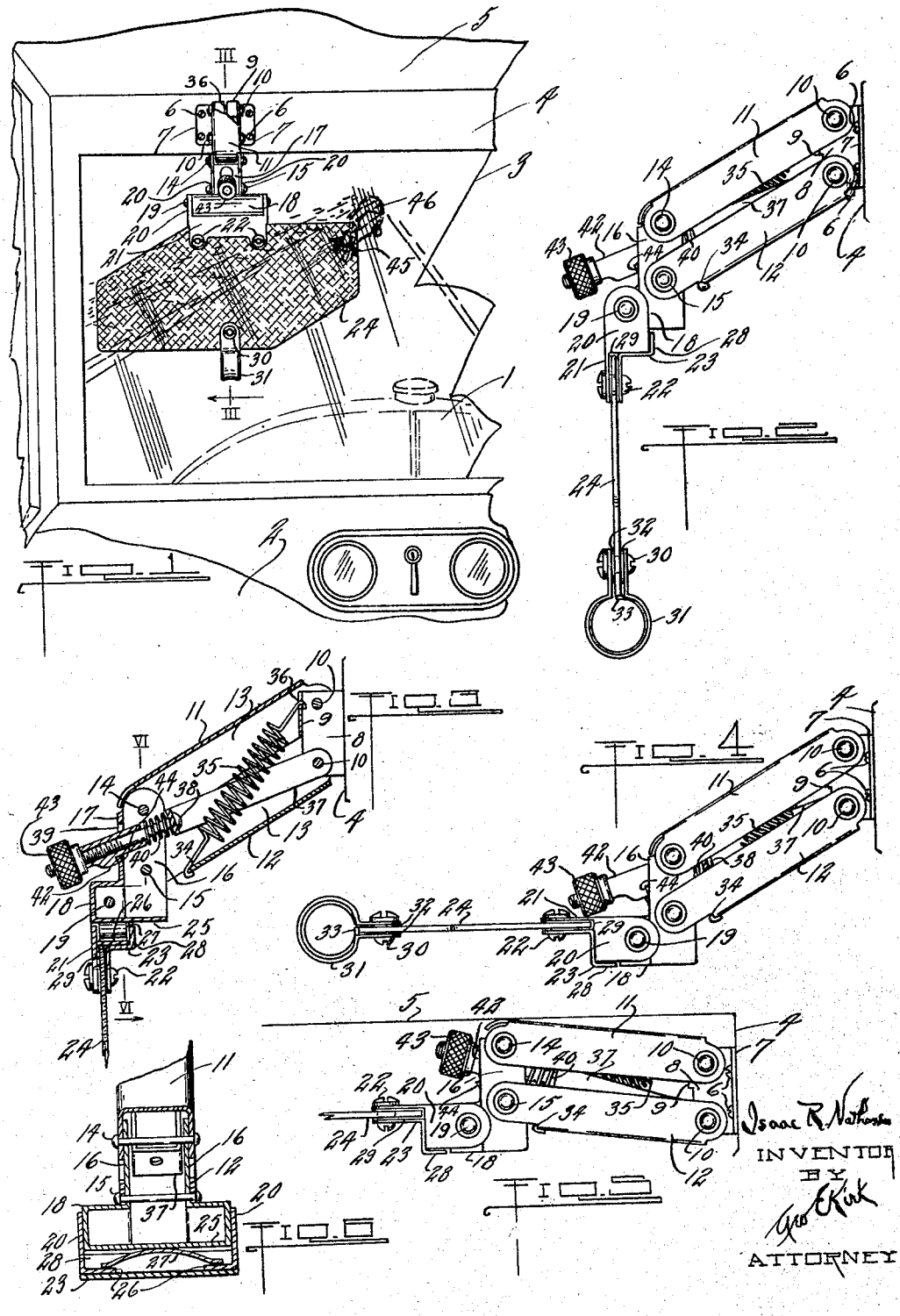
Oct. 2, 1928. 1,686,341

I. R. NATHANSON

GLARE SHIELD

Filed Dec. 14, 1925



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Patented Oct. 2, 1928. 1,686,341

UNITED STATES PATENT OFFICE.

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GLARE SHIELD.

Application filed December 14, 1925. Serial No. 75,319.

This invention relates to adjustable light screens for motor vehicle operators.

This invention has utility when incorporated in transparencies mounted rearwardly of the windshield on an automobile.

Referring to the drawings:

Fig. 1 is a fragmentary view from the operator's station of a motor vehicle showing an embodiment of the invention incorporated therewith;

Fig. 2 is a side view on an enlarged scale of the glare shield and its mounting as shown in Fig. 1, the shield being in position for use;

Fig. 3 is a partial section on the line III—III, Fig. 1;

Fig. 4 shows the shield of Fig. 2 in position about to be tripped;

Fig. 5 shows the shield of Fig. 2 as tripped and automatically retracted; and

Fig. 6 is a section on the line VI—VI, Fig. 3.

Motor vehicle 1 is shown as provided with operator's station 2, and windshield 3 having upper frame portion 4 adjacent top or ceiling 5 of the vehicle over the operator's station 2. Mounted on this frame portion 4 by screws 6 are flanges 7 having intermediate outwardly extending channel side portions 8 opposing each other and connected by web 9. Through these opposing outwardly extending portions 8 extend rivets 10 mounting upper channel link member 11 as opposing lower channel link member 12. These members 11, 12, have their channel portions 13 extending toward each other to provide a box. The free end of the link 11 is provided with pivot pin 14 and the free end of the link 12 is provided with pivot pin 15. These pivot pins 14, 15, are spaced similarly from each other, as the pivot pins or rivets 10, by upstanding ears 16 of member having connecting web 17. This member 16, 17, has a lower offset box portion 18 for pivot pin 19 as a bearing engaging ears 20 of plate 21 connected by bolts 22 with clip member 23 to anchor therebetween glare shield 24, as a light screen or transparency which may preferably be of a character to minimize sight blurring action from intense light. To this end, amber tint or shade for this plate glass 24 is desirable.

The box-extension 18 of the bearing-providing member has lower web portion 25 between the upstanding portions 16, and this web portion 25 coacts with inwardly projecting ears 26 in providing seat or pocket for flat spring 27 as retained between the plate 21 and upstanding portion 28 from the clip 23. Packing 29, between the plate 21 and the clip 23 and about the bolts 22, serves as sealing supplemental holding means for the transparency 24.

The lower edge of the transparency 24 has mounted thereon by bolt 30, ring or handle 31 as clamped against packing 32. This handle 31 has seat portions 33 abutting the lower edge of the plate 24 to hold this ring against rocking relatively to the plate 24. The action of the spring 27 against the web or box side 25 tends to hold the plane of this plate 24 parallel to the plane through the mounting pins or rivets 14, 15, and parallel to the mounting of the rivets 10. Accordingly, the pair of links 11, 12, constitute a parallel motion device in mounting this bearing 19.

Lower channel 12 has its web cut away portion or seat 34 with which may engage tension helical spring 35 extending to have its hook 36 engage the connecting web 9 between the portions 8 of the channel 8, 9. This spring 35, accordingly, has a lifting action against lower positioning of this bearing 19.

Pivotally mounted on the lower rivet 10 is U-shaped member 37 extending in the box provided by the channel portions 13, of the members 11, 12, between the bearing member 16, 17, 18, 19, where this member 37 carries bolt 38 protruding through opening 39 in the web 17. About this bolt 38 is compression spring 40 abutting trigger 42 as adjusted by knurled nut 43. This trigger 42 may coact with ledge or seat 44 and thus provide a rigid holding means against the spring 35 swinging the parallel motion device upward into a position which would tend to lengthen the distance from the lower rivet 10 to the seat 44. The spring 35 holds this member 16 and the transparency 24 against descent, and there is, accordingly, an adjusted position herein shown as vertical or parallel to the windshield 3 for this transparency 24. By manipulating this knurled nut 43, the desired position for the particular driver of the car 1 may be located for positioning the shield 24 as to lights 45, of approaching vehicle 46, which lights, as the vehicles approach each other, determine a line approximating the longer dimension diagonally of this transparency or screen 24.

As the emergency for the use of this screen passes, or the driver, for other purposes, wishes unobstructed view ahead independ-

ently of the screen, the driver may engage the ring 31, swing it toward the position in Fig. 4 thereby causing the plate 21 to strike the knurled nut 43 and swing such U-member 37 upon the pivot pin 10 to have the trigger 42 clear the seat 44 thus allowing action of the spring 35 to come into play to snap or retract the device against the ceiling 5 of the vehicle as shown in Fig. 5. There is, accordingly, provided herein an automatic retracting device for a glare shield with a shield which may be compactly and simply mounted in a wide range of positions as may be desired by the operator of the car.

What is claimed and it is desired to secure by United States Letters Patent is:

1. A light screen, a mounting bearing as a hinge support for the screen, said bearing being provided with an angular position determining stop for the screen as to said bearing, a fixed support, a bracket from said support providing a swingable mounting for the bearing, and directing means for the bearing as shiftable in said mounting relatively to the support.

2. A light screen, a mounting bearing as a hinge support for the screen, said bearing being provided with an angular position determining stop for the screen as to said bearing, a fixed support, and a bracket from said support providing a parallel motion mounting device for the bearing for definitely directing the shifted bearing relatively to said mounting.

3. A light screen, a mounting bearing as a hinge support for the screen, said bearing being provided with an angular position determining stop for the screen as to said bearing, a fixed support, a bracket from said support providing a parallel motion mounting device for the bearing for directing the shifted bearing to be in line relatively to said mounting, and an adjusting device coacting between said bearing and mounting device for determining the screen position for use.

4. A light screen, a mounting bearing as a hinge support for the screen, said bearing being provided with an angular position determining stop for the screen as to said bearing, a fixed support, a bracket from said support providing a parallel motion mounting device for the bearing for directing the shifted bearing to be in line relatively to said mounting, an adjusting device coacting between said bearing and mounting device for determining the screen position for use, and retracting means for the screen.

5. A light screen, a mounting bearing as a hinge support for the screen, said bearing being provided with an angular position determining stop for the screen as to said bearing, a fixed support, a bracket from said support providing a swingable mounting device for the bearing, retracting means for the screen, a trigger holding the screen against the action of said retracting means and provided with screen position determining adjusting means coacting between said bearing and mounting device and releasable by swinging said screen on said bearing for rendering said retracting means operative.

In witness whereof I affix my signature.

ISAAC R. NATHANSON.