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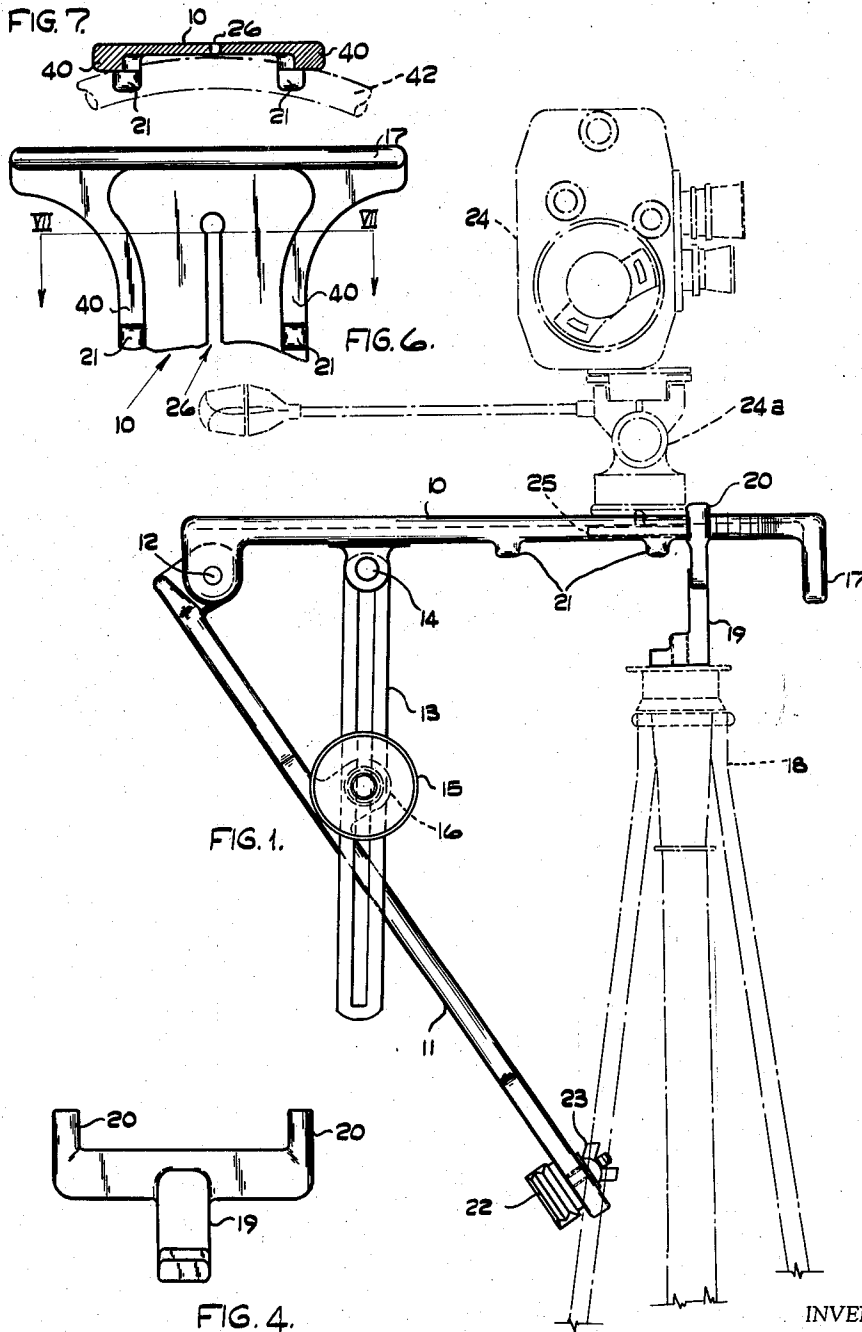
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3,146,984

ADJUSTABLE CAMERA SUPPORTING BRACKET DEVICE

Filed May 14, 1962

3 Sheets-Sheet 1



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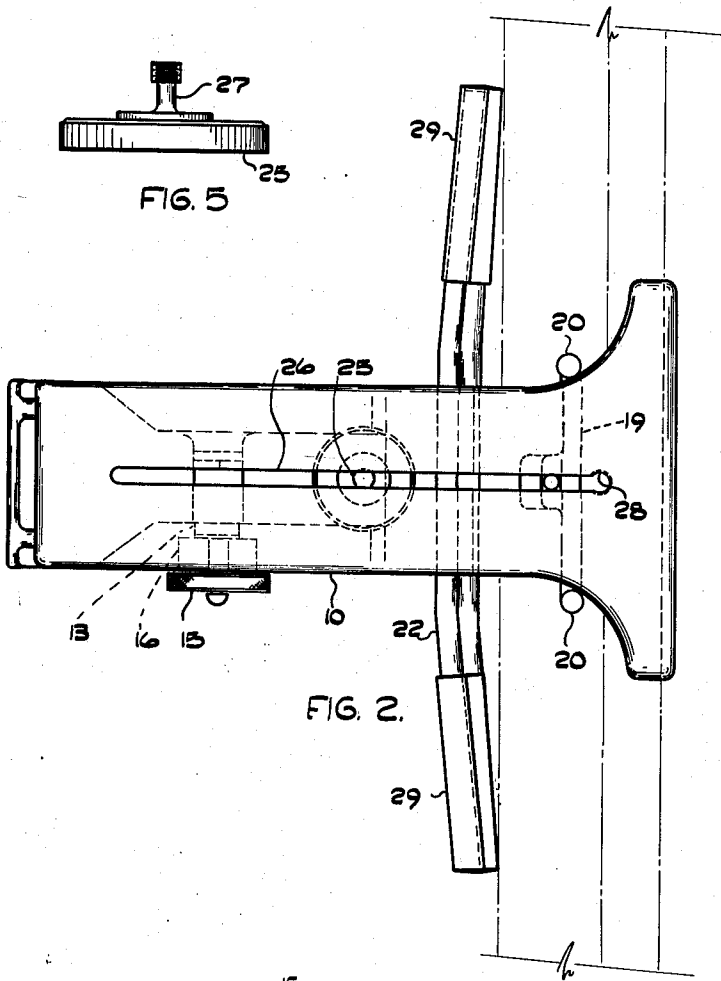
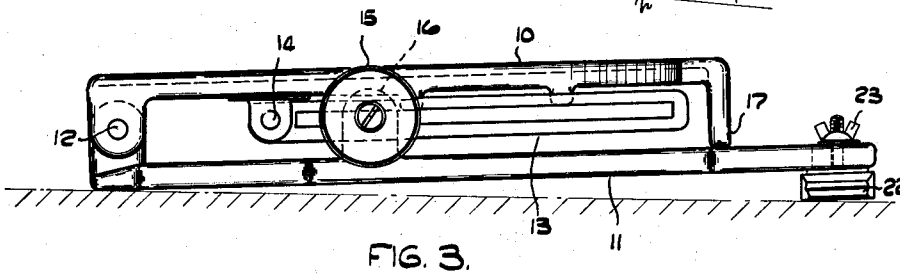
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3 Sheets-Sheet 2



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3 Sheets-Sheet 3

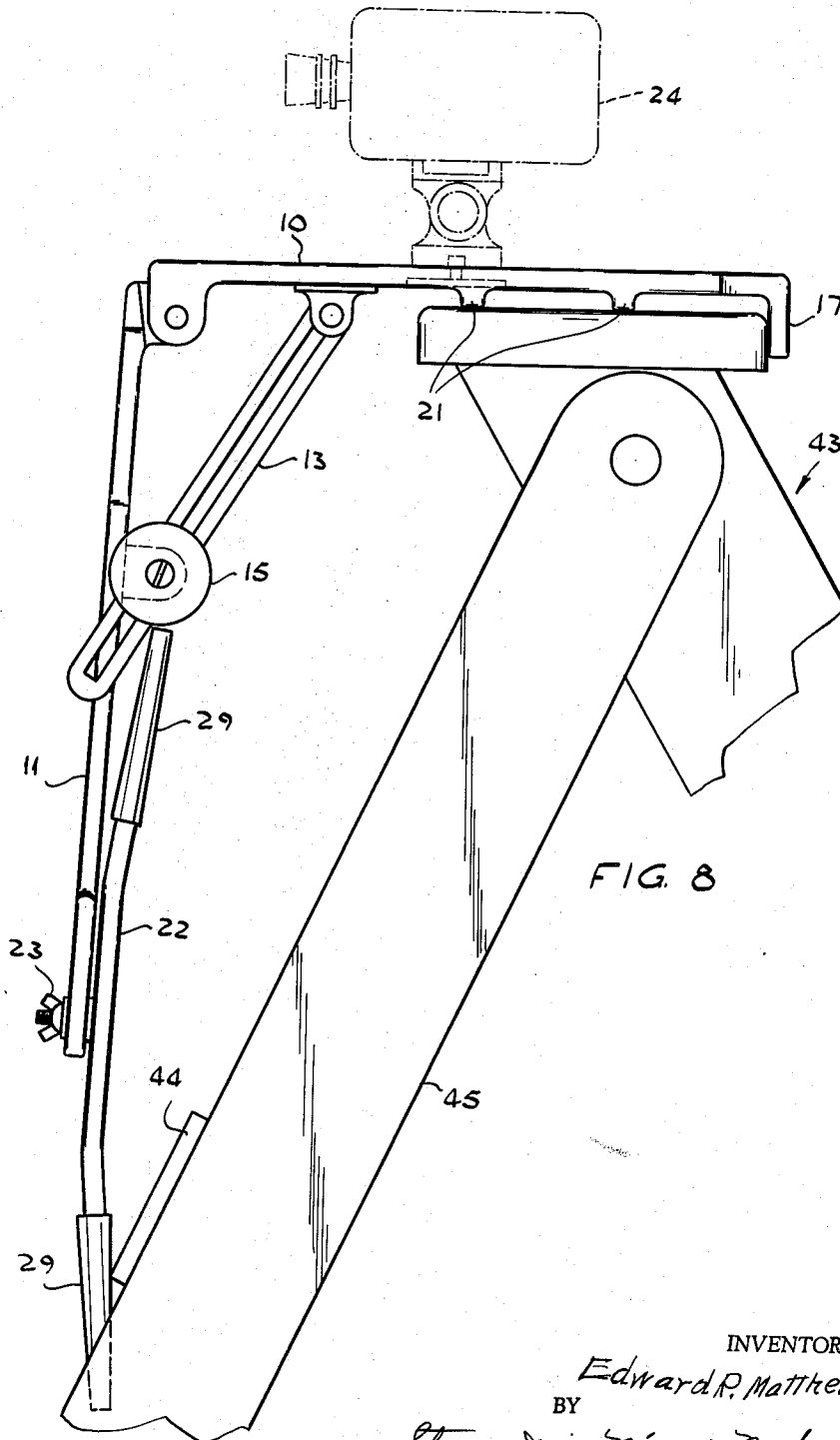


FIG. 8

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3,146,984

ADJUSTABLE CAMERA SUPPORTING BRACKET DEVICE

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Claims priority, application Republic of South Africa
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4 Claims. (Cl. 248—122)

This invention relates to an adjustable camera supporting bracket device which can be used in various ways to assist in the taking of cine and other photographs. The device is particularly useful for taking photographs from a motor vehicle, or from articles readily available in any average house or flat.

According to the invention, an adjustable camera supporting bracket device includes a top platform member provided with means for attaching a camera thereto, which platform member is preferably hingedly or pivotally connected at or near its rear end to the top end of a normally downwardly sloping or stay member, and wherein the two members are arranged to be adjustably fixable in different angular dispositions with respect to one another by means of adjustable strut link means extending between them.

It is to be understood that an attachment conventionally known as a pan-head can form part of the means for attaching a camera.

The free end of the platform member is provided with a downwardly extending abutment to act as stop means when the device is required to be supported by a transverse support member such as the bottom edge of a window opening, top of a chair back, wall top, or equivalent support means. In this case the free end of the platform member rests on the transverse support member, e.g. the bottom edge of such opening or the like, while the lower end of the stay member bears against that portion of the support member such as a door or wall which is below such transverse support member. Adjustment of the strut link means can then be used to vary the fore and aft inclination of the platform member.

A feature of the invention is that when the platform member is folded to lie parallel with the stay member, the device can be used for conveniently supporting a camera on a flat surface such as a table top. To increase the stability of the device in use, the lower end of the stay member may have a cross bar secured or securable to it, preferably in a removable manner. This crossbar may be provided with rubber projections on its underside to act as short legs when the device is in its folded or partly folded condition for table use. Alternatively the crossbar ends may be shod with rubber pads or the like. Otherwise when the device is used as a bracket, the cross bar will increase the effective width of the bearing region and consequently the stability obtainable when resting against a vertical or sloping surface. The crossbar may also be used to increase the effective length of the stay member by turning it to be parallel to the stay member and securing it in that position.

The adjustable strut link means preferably comprises a single longitudinally slotted metal strip pivotally attached by its top end to one side of the platform member, and with a clamping screw attached to the stay member and passing through the slot so that the strip is slidable with respect to the clamping screw and can be clamped by it at any position along the length of the slotted part thereof, according to the angular disposition required between the platform member and the stay member.

According to one construction, both the platform member and the stay member are made from pieces of wood. The platform member is provided at its front free end

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with a flange piece extending downwardly to provide abutment means, while its rear end is provided on its underside with a strip to which the hinge is connected. The top ends of two slotted metal strips forming the struts, are pivotally attached to small brackets secured to the underside of the platform member adjacent to the side edges thereof.

A clamping screw for the lower slotted ends of the struts is located in a cross piece fixed to the inside of the stay member and clamping is effected by a single knurled clamping nut. Alternatively and preferably, the device is made of a metal such as aluminium.

A camera or pan-head is arranged to be attached to the platform member by means of a clamping screw having a knurled head and projecting upwardly through a slot in the platform member. A friction washer of suitable material is interposed between the camera and the platform member and a spring, threaded on the clamping screw, enables the required degree of frictional contact pressure to be obtained, to allow the camera to be swung while at the same time being maintained steady.

To enable the device of the invention to be used with a tripod, a bracket element is provided which is attachable by its bottom end to the usual tripod screw, so that its top end provides a stop and support means adapted to co-act with the abutment means on the underside of the platform member.

To enable the invention to be more clearly understood and carried into practice, reference is now made to the accompanying drawings, in which like references denote like parts throughout the several views.

In the drawings:

FIGURE 1 is a side elevation of a device constructed according to the invention and shown in use on a tripod with a cine camera and pan-head mounted thereon;

FIGURE 2 is a plan view of the device of FIGURE 1 leaving out the camera, pan-head and the tripod;

FIGURE 3 is a side view showing the device of FIGURE 1 in its collapsed or folded condition for use on a flat surface such as a table, and with the camera clamping screw removed;

FIGURE 4 is a front elevation of the bracket element shown in use in FIGURE 1;

FIGURE 5 is a side elevation of the camera or pan-head clamping screw;

FIGURE 6 shows a part underside plan of the front part of the platform member;

FIGURE 7 shows a sectional view at VII—VII; and

FIGURE 8 is a side elevation of the device showing its use with the cross-bar positioned to increase the effective length of the stay member.

Referring to the drawings, reference 10 denotes the platform member pivotally connected at its rear end to what will be the top end of the stay member 11 by a pivot pin 12. A slotted strut link 13 is pivotally connected to the platform member 10 by its top end by means of the pivot pin 14 inwardly of the pivot pin 12, while a knurled-headed clamping screw 15 passing through the slot in the link 13 and co-acting with a tapped hole in a lug 16, provides the means for adjustably securing the two parts 10 and 11 in various angular dispositions with respect to one another.

The front free end of the platform member 10 is widened out and is provided with a downwardly directed flange 17 to co-act with a suitable transverse support member such as a window sill, the bottom edge of a car window opening, top of a chair back, wall top, or equivalent.

As shown in FIGURE 1, the device is supported on a tripod 18 by means of a bracket element 19 which is arranged to be screwed on to the usual camera or pan-head attachment screw on the top end of the tripod. This

bracket element 19 is provided with two spaced upstanding projections 20 between which the narrower portion of the platform member 10 is adapted to be located. Two pairs of downwardly directed projections 21 on the underside of the platform member 10 are provided to act as stop means. These are particularly useful when the platform member 10 is required to be set in an inclined position. They are also useful for hooking over the upper edge of the glass of a car window, for quick positioning of the camera inside or outside the car as desired. They also act as stops when the platform is used at a slope.

A cross bar 22 is arranged to be detachably secured to the lower end of the stay member 11 by means of a wingnut 23, which increases the stability of the device by bridging the space between two of the legs of the tripod 18, or the space between other convenient abutment means.

FIGURE 1 shows a cine camera 24 with pan-head 24a, attached to the platform member 10 by means of a knurled-headed clamping screw 25 which is arranged to pass through a longitudinal slot 26 therein so that it can be clamped in different positions therealong. The clamping screw 25 is provided with an annular groove or neck 27 inwardly from its top end to enable it to slide along the slot 26 without falling out. To enable it to enter the slot 26, a part-circular enlargement 28 is provided at one end thereof which is tapped to enable the screw-threaded end of the clamping screw 25 to be screwed therethrough so that the annular groove or neck 27 therein can engage slidably with the edges of the slot 26. The cross-bar 22 is preferably fitted with rubber thimbles 29 which are slipped tightly over its two ends and thereby tend to prevent slipping when resting against an abutment such as a wall, car door or the like as shown in broken outline in FIGURE 2.

Referring to FIGURES 6 and 7, by way of further development, the platform member 10 may include a pair of laterally spaced downwardly projecting flanges 40 or projections immediately behind the flange 17, and the projections 21, whereby the platform member 10 can rest with stability on the upper curved portion of a motor vehicle steering wheel 42.

FIGURE 8 shows use of the device in conjunction with supporting means consisting of a step ladder 43. In this case the crossbar 22 is clamped in a position substantially in line with the stay member 11 so that the downwardly depending end thereof will engage with the usual rear cross member 44 of the rear supports 45 of the step ladder. This view also shows the advantage of having

the flange 17 arranged to extend downwardly from the platform member 10, to a greater extent than the projections 21.

I claim:

1. An adjustable camera supporting bracket device which comprises, a top platform member having front and rear ends and provided with means for attaching a camera thereto, a stay hingedly connected to the rear end of the platform member, an adjustable strut link connecting the platform member to the stay and capable of fixing these two members in different angular dispositions with respect to one another, a downwardly directed front stop abutment at the front end of the platform member, at least one intermediate stop projection depending from the underside of the platform member inwardly from the said front stop abutment, a cross-bar pivotally securable to the free end of the stay for movement about an axis disposed substantially at right angles to the stay, and means for clamping it to the stay at various angular dispositions about its pivot axis.

2. An adjustable camera supporting bracket device as claimed in claim 1, including the provision of a coacting substantially T-shaped bracket element attachable by the bottom end of its middle limb to the usual camera attachment screw on the top end of a camera tripod, and capable of supporting the platform member on the two opposing limbs, constituting the top end thereof.

3. An adjustable camera supporting bracket device as claimed in claim 2, wherein the top end of the T-shaped bracket element is provided with two spaced upstanding projections between which the platform member is arranged to be located, and wherein the front end of the platform members is enlarged in a transverse direction to provide stop means coacting with such spaced upstanding projections.

4. An adjustable camera supporting bracket device as claimed in claim 1, wherein the front stop abutment extends downwardly from the underside of the platform member, to a greater extent than the intermediate stop projection.

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