

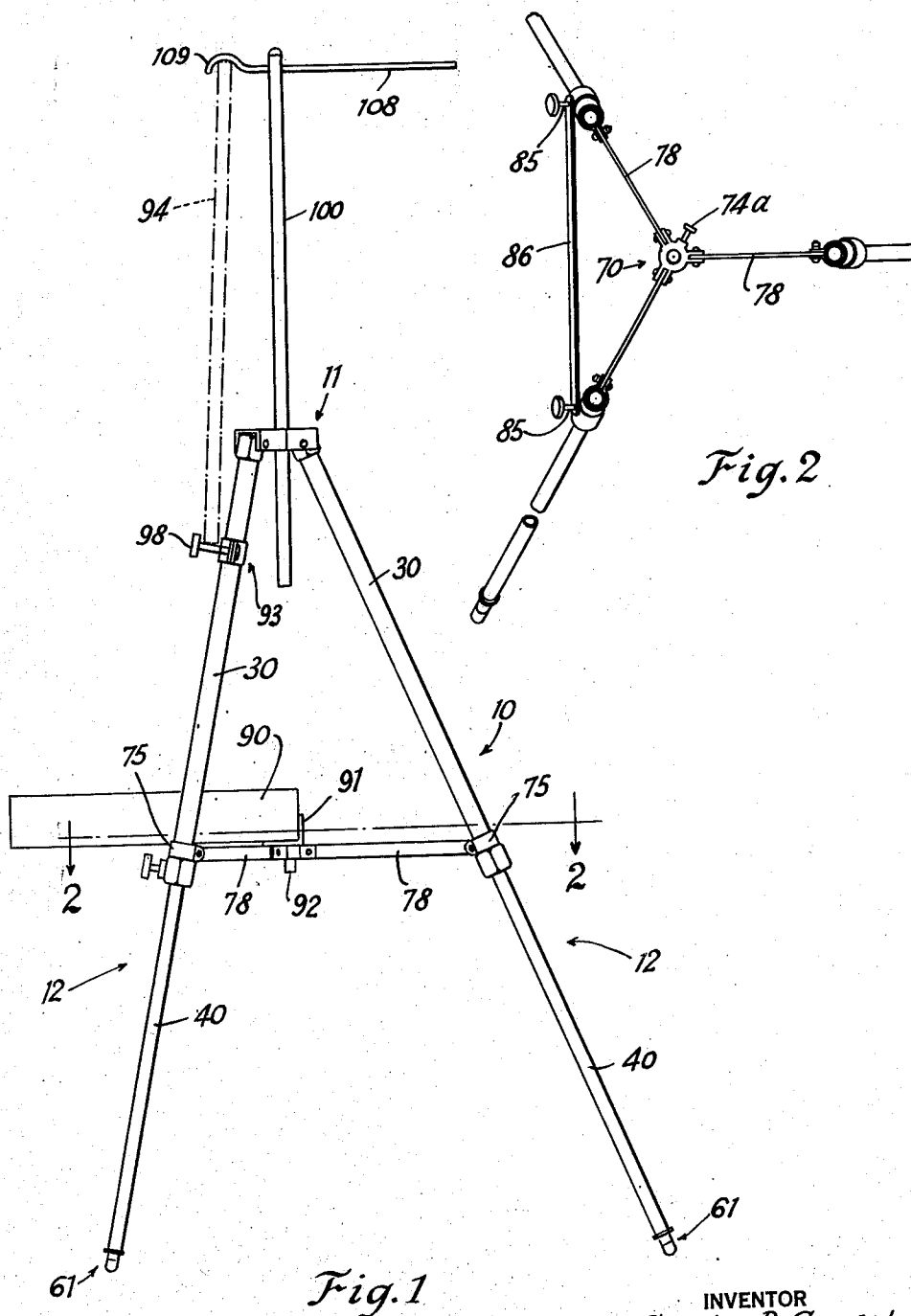
**April 24, 1951**

**C. B. GOODSTEIN**  
**EASEL**

**2,550,550**

Filed Oct. 17, 1946

4 Sheets-Sheet 1



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4 Sheets-Sheet 2

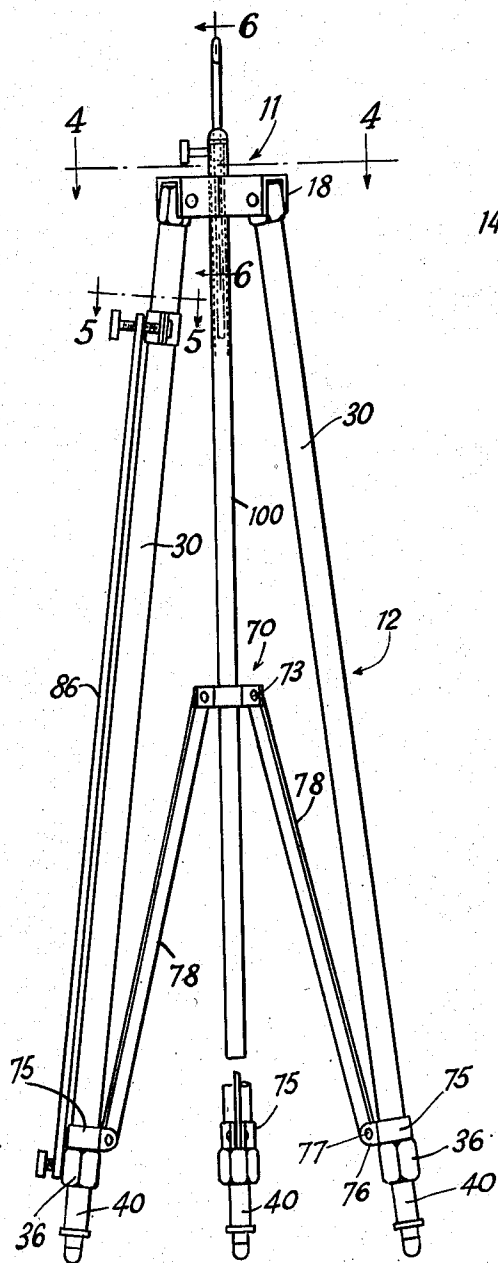


Fig. 3

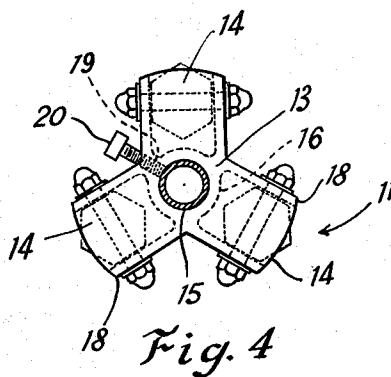


Fig. 4

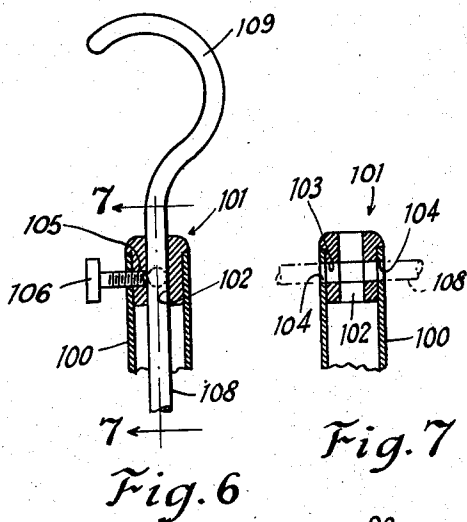


Fig. 6

Fig. 7

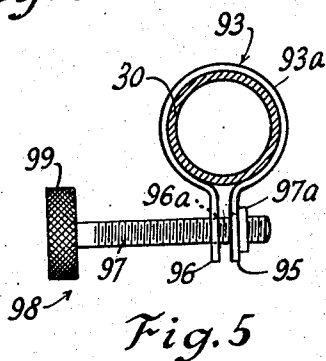


Fig. 5

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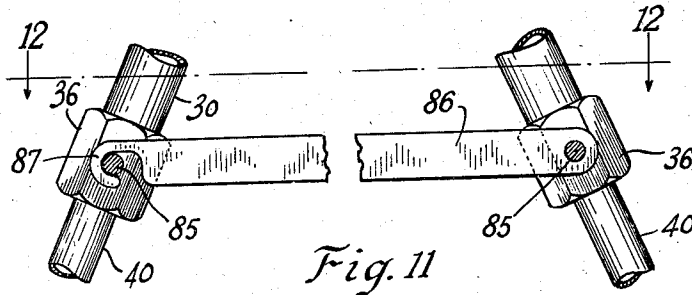
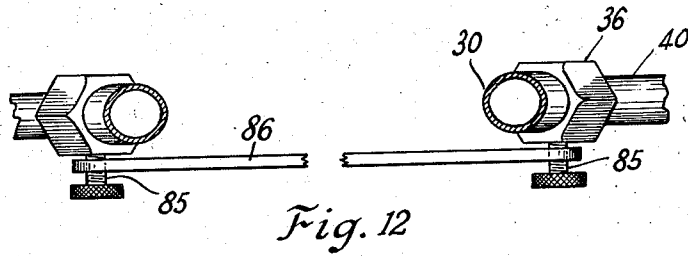
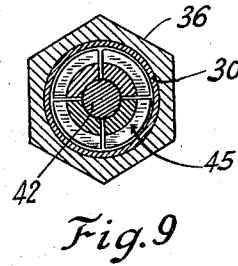
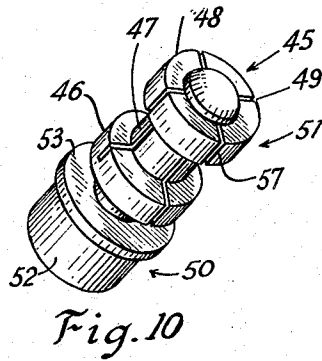
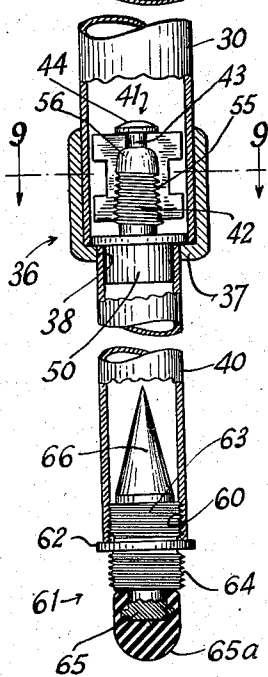
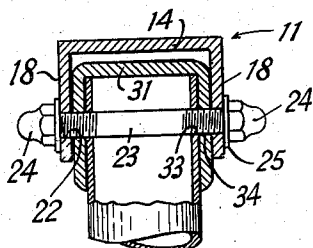
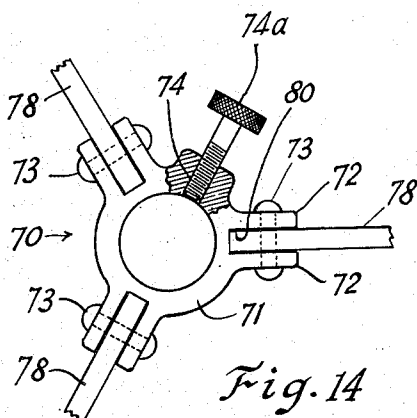
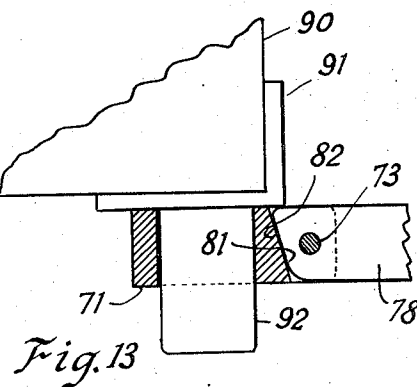


Fig. 8



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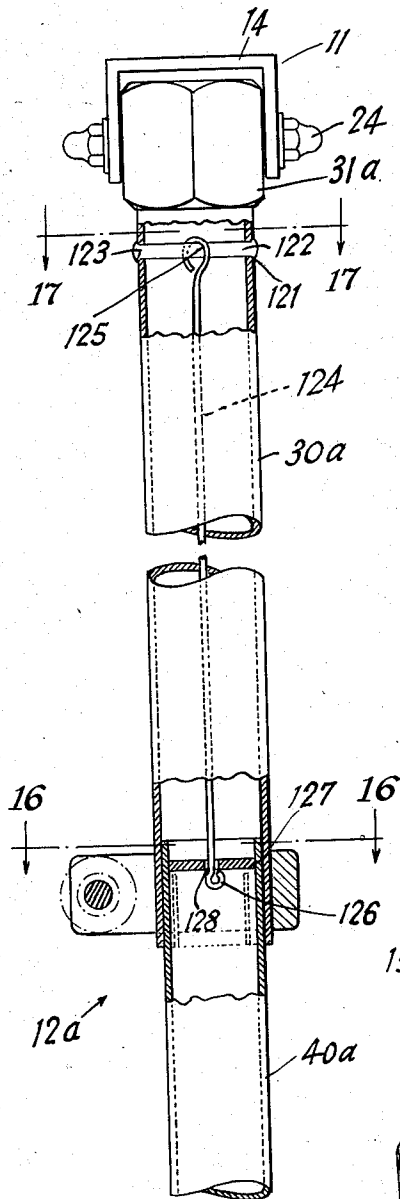


Fig. 15

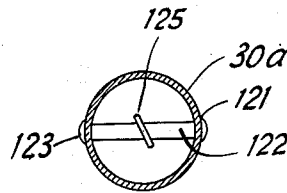


Fig. 17

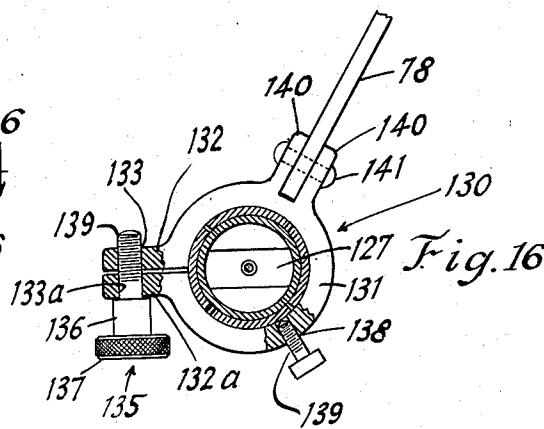


Fig. 16

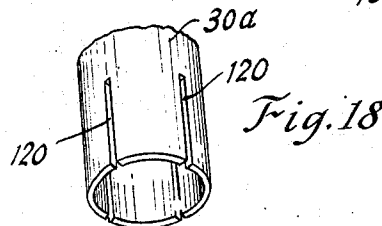


Fig. 18

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## UNITED STATES PATENT OFFICE

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EASEL

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6 Claims. (Cl. 248—195)

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This invention relates to easels. It is particularly directed to a collapsible artist's easel for supporting a framed canvas and paint box, in position for use.

An object of this invention is to provide an easel of the character described having means for supporting a framed canvas in various positions adjustable as to height above the ground and angle, and which will accommodate frames of various heights and widths.

Another object of this invention is to provide a tripod type easel having extensible legs, and improved means to fix the legs at various adjusted lengths.

Another object of this invention is to provide an easel of the character described comprising a plurality of extensible legs pivoted to an end member at the apex of the tripod, and a rod slidable on said apex member, and adapted to be fixed in vertically adjusted position, means on said rod to engage the upper edge of a frame canvas, and means adjustable on a pair of said legs adapted to engage the lower edge of said frame.

Yet a further object of this invention is to provide a tripod type easel comprising a plurality of legs hinged to an apex member, and a plurality of links hinged at their outer ends to said legs, and at their inner ends to a central member, said central member and apex member being formed with aligned openings to receive an axial rod adjustable in height, and means on said rod to engage the upper edge of a frame canvas, said last means being adjustable to vary the inclination or angle of the frame canvas, said means comprising a bar formed with a hook at one end, and said axial rod having means to receive the straight portion of the bar when the easel is not in use.

Yet a further object of this invention is to provide an easel of the character described, so constructed that when the easel is opened up for use, the links which connect the central member with the extensible legs serve to support a paint box and the opening in said central member being adapted to receive a pin on the paint box, a link being further provided to interconnect a pair of said legs and said link further serving as a support beneath the paint box.

Yet another object of this invention is to provide an easel of the character described, which may be compactly packed, which may be easily adjusted and collapsed and opened up, and which shall yet be practical and efficient to a high degree in use.

Other objects of this invention will in part be obvious and in part hereinafter pointed out.

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The invention accordingly consists in the features of construction, combinations of elements, and arrangement of parts which will be exemplified in the construction hereinafter described, and of which the scope of application will be indicated in the following claims.

In the accompanying drawing, in which is shown various possible illustrative embodiments of this invention,

Fig. 1 is a side elevational view of an easel embodying the invention opened up in the position for use;

Fig. 2 is a cross-sectional view taken on line 2—2 of Fig. 1;

Fig. 3 is a side elevational view of the easel partly collapsed;

Fig. 4 is a cross-sectional view taken on line 4—4 of Fig. 3;

Fig. 5 is a cross-sectional view taken on line 5—5 of Fig. 3;

Fig. 6 is a cross-sectional view taken on line 6—6 of Fig. 3;

Fig. 7 is a cross-sectional view taken on line 7—7 of Fig. 6;

Fig. 8 is an enlarged axial cross-sectional view of one of the extensible legs;

Fig. 9 is a cross-sectional view taken on line 9—9 of Fig. 8;

Fig. 10 is a perspective view of one of the expanding nuts shown in Fig. 8;

Fig. 11 is a partial front view of the easel opened up and in position for use;

Fig. 12 is a cross-sectional view taken on line 12—12 of Fig. 11;

Fig. 13 is a partial enlarged view showing the paint box in position supported by the central member;

Fig. 14 is a top plan view of the central member showing the links which connect the same to the extensible legs;

Fig. 15 is an enlarged, axial, cross-sectional view of a modification of one of the extensible legs;

Fig. 16 is a cross-sectional view taken on line 16—16 of Fig. 15;

Fig. 17 is a cross-sectional view taken on line 17—17 of Fig. 15; and

Fig. 18 is a perspective view of the lower portion of the fixed tube shown in Fig. 15.

Referring now in detail to the drawing, 10 designates an easel embodying the invention. The same comprises an apex member 11 to which are pivoted three extensible legs 12. The apex member 11 comprises a top wall 13 having three radial extensions or wings 14. The top wall 13

is formed with a central opening 15. Extending downwardly from the top wall is an annular wall 16 surrounding the central opening 15. Also extending downwardly from the wings 14 of the top wall are side flanges 18. The annular wall 16 is formed with a screw threaded horizontal radial opening 19 communicating with the central opening 15 and screwed therein is a set screw 20. Each pair of side flanges 18 is formed with a pair of aligned openings 22. Extending through each pair of openings 22 is a screw 23 threaded at opposite ends. Screwed to the outer ends of member 23 are nuts 24. Washers 25 may be interposed between the nuts 24 and the flanges 18.

Each leg 12 comprises a tube 30. Fixed over the upper end of each tube 30 is a cap 31 which may be attached to the tube in any suitable manner. The tube 30 and the cap 31 are formed with openings 33 and 34 registering with the openings 22 and the screws 23 pass through said openings. Thus the tubes 30 are hinged to the apex member 14. Fitted over the lower end of each tube 30 and fixed thereto in any suitable manner, is a sleeve 36 having at the bottom, an annular flange 37 formed with a central opening 38 of smaller diameter than the inner diameter of the tube 30. Telescopingly slidable within each tube 30 is a tube 40. The outer diameter of tube 40 is substantially equal to the diameter of opening 38 so that said tube 40 may slide upwardly through said opening 38 into tube 30.

Fixed to the upper end of tube 40 is a member 50 forming part of an expanding clutch 51. Member 50 comprises a plug portion 52 which fits into the upper end of tube 40 and is fixed thereto by force fit or in any other suitable manner. At the upper end of plug 52 is an annular flange 53 of enlarged diameter adapted to contact flange 37 and slidable within tube 30. Extending upwardly from plug 52 is a stem 41 having an externally screw threaded tapering portion 42. The screw threaded portion 42 decreases in diameter upwardly. Extending from the threaded portion 42 is a portion 43 of reduced diameter from which there extends a substantially flat head 44.

Mounted on the stem 41 are a pair of similar symmetrically disposed clutch members 45. The members 45 fit onto the stem 41. Each member 45 comprises a semi-annular flange 46, a semi-annular portion 47 of reduced diameter, and a semi-annular flange 48 substantially similar to portion 46. Each member 45 is formed with a longitudinal radial slit 49 which extends to the upper end of said member, but terminates short of the lower surface thereof. Each member 45 is furthermore formed on its inner side with a threaded portion 55 receiving the threaded portion of the stem. Each member 45 furthermore comprises a portion 56 engaging the stem 43 and the underside of the head 44. It will be noted that members 45 have opposed parallel surfaces 57. The inner tube 40 may be slidably moved longitudinally of tube 30 and at any point rotation of member 40 in one direction will force members 45 apart into gripping engagement with the inner surface of tube 30, thereby fixing tube 40 to tube 30. When it is desired to change the length of the leg 12, tube 40 is rotated in an opposite direction, permitting members 45 to be moved toward each other and thus becoming loose with respect to tube 30. The tube 40 may then be moved up or down. It will now be understood that leg 12 is extensible to any desired position and the length of the leg may be fixed in any desired position by a mere twist of tube 40.

The lower end of each tube 40 is internally screw threaded as at 60. Screwed therein is a foot member 61. Each foot member 61 comprises an intermediate flange 62. At opposite sides of flange 62 are externally screw threaded portions 63 and 64. Extending from screw threaded portion 64 is a stem 65 on which is fitted a rubber tread member 65a. Extending upwardly from screw portion 63 is a conical point 66. When the easel is used indoors, members 61 are attached to the lower ends of the legs in the manner shown in Fig. 8, with the soft tread member 65a exposed. If the easel is used outdoors, member 61 may be unscrewed and then turned around 15 and rescrewed into legs 40 with portions 64 engaging the threads 60. Then the conical points 66 project downwardly, enabling the easel to stand outdoors.

Means is provided to interconnect the tubes 30 and to hold them in outwardly swung position for use. To this end, there is provided a central member 70 co-axial with the apex member 11. Member 70 comprises an annular ring 71 formed with equal-angularly spaced pairs of radially extending apertured ears 72. Each pair of apertured ears 72 carries a transverse pivot pin 73. Ring 71 is formed with a radial screw threaded opening 74 receiving a set screw 74a. On each tube 30 and contacting member 36 is a strap 75 formed with a pair of spaced parallel apertured ears 76 carrying a transverse pivot pin 77. Each pair of ears 72 is aligned with a pair of ears 76. Interconnecting the pins 73 and 77 is a link 78. When the easel is collapsed, central member 70 is moved upwardly toward the apex member 11. When the legs are swung outwardly, the central member 70 moves downwardly to a position where the links 78 are horizontal. Between each pair of apertured ears 72 is a slot 80. The inner edge 81 of each slot 80 is inclined downwardly and outwardly and the inner end edge of each link 78 is similarly inclined so that when the links 78 are in horizontal position, edges 82 contact edges 81 to retain the central member 71 and the links 78 in horizontal position.

Fixed to members 36 on the front two legs 12 are pins 85. Pivoted to one of the pins 85 is one end of a bar 86. Said bar is formed at its opposite end with a hook 87 adapted to engage the pin 85 on the other front leg when the easel is opened up. When the easel is opened up, it is in a position to support a paint box 90. Attached to the rear of the paint box 90 is an angle iron 91 from which there extends downwardly a pin 92. The pin 92 may be engaged in the central opening of the ring 71 and the paint box will then rest on bar 86 and project forwardly of the easel so as to be in convenient position to be used by the artist.

Means is provided to support the lower edges of a framed canvas on the easel. To this end, there is slidably mounted on the tubes 30 of the two front legs, a strap 93. Each strap 93 comprises an annular portion 93a surrounding the tube 30 and a pair of parallel apertured ears 95, 96, extending from the ends thereof.

The ear 96 is formed with a threaded opening 96a to which there is screwed the shank 97 of a screw 98. Screw 98 has a knurled head 99. The shank 97 is rotatably and non-slidably connected to the ear 95. Such connection may be accomplished by passing the shank 97 through a clearance hole in ear 95 with nuts 97a screwed to the shank 97 on opposite sides of ear 95. The nuts 97a may be fixed to the shank in any suitable

manner. As the screw 98 is turned in one direction, the strap 93 is tightened on tube 30. As said screw is turned in an opposite direction, the strap is loosened so that it may be moved up and down on tube 30 or rotated.

When the screws 98 are in the position shown in Fig. 1, the lower edge of the framed canvas 94 may be supported thereon. Upon loosening the screw slightly, straps 93 may be moved up or down on tubes 30 to any desired height. It will be noted that as the straps 93 are moved downwardly, they are moved further apart so as to accommodate either wider or narrower frames 94. The bar 86 is pivoted as shown in the drawing to a pin 85 on one of the front legs. When the easel is collapsed, said bar 86 may be disengaged from the pin 85 of the other front leg and the hook 87 may be engaged within the shank of screw 93 on the front leg to which bar 86 is pivoted as illustrated in Fig. 3 of the drawing. When the easel is collapsed, the strap 93 on the other front leg may be rotated to bring its screw 98 inwardly so that it does not project very much from the collapsed easel.

Means is provided to support the upper edge of the framed canvas 94. To this end, there is slidably mounted in apex member 11 and central member 70, a vertical tube 100. The tube 100 passes through the central opening 15 in the apex member 11 and through the central opening in the ring portion 71 of the central member 70 when the easel is collapsed.

At the upper end of tube 100 is a plug 101 formed with a central axial opening 102. The plug 101 is also formed with diametrically opposed openings 103. Tube 100 is formed with openings 104 registering with the openings 103. The tube 100 and plug 101 are also formed with registering screw threaded openings 105 at right angles to the openings 103. Screwed into the threaded openings 105 is a set screw 106. Extending through the opening 102 is a rod 108. Rod 108 is formed at its upper end with a hook 109. The set screw 106 may be tightened against the rod 108 to keep it fixed.

Furthermore, the set screw 29 may be tightened against the tube 100 to keep it adjusted in any position. When the set screw is loosened, tube 100 may be slidably moved up and down to any desired height. When the easel is to be used, set screw 106 is loosened, rod 108 is pulled up out of tube 100. The rod 108 is then inserted in the position shown in Figs. 1 and 7 by passing said rod through the openings 103, 104. The position of the rod may be adjusted and fixed in place by the set screw 106. It will be noted that the set screw is in alignment with the openings 103, 104 so that it can be pressed against the rod 108 whether it is in the position of Fig. 6 or in the position of Fig. 7.

It will now be understood that the hook 109 engages the upper edge of the framed canvas 94. If the rod 108 is pushed more forwardly, the inclination of the frame canvas varies. When the easel is in use, tube 100 comes out of the central member 70 as shown in Fig. 1, whereby to permit the paint box to be mounted in position for use as shown in said figure.

In Fig. 15 is shown a modification of the adjustable leg portion of the easel. The leg designated as 12a comprises a fixed tube 30a and a movable tube 40a which is telescoped within the fixed tube 30a. The upper portion of the tube 30a has suitably attached thereto, a cap 31 similar to that previously described in Fig. 8. The tube

30a and cap 31 are provided with registering openings as described in connection with the leg structure shown in Fig. 8. The tube 30a is hinged to the radial wing 14 of the apex member 11 by means of a screw and nut assembly 24 passing through appropriate registering openings in the radial wing 14, the cap 31 and the tube 30a.

The lower extremity of the tube 30a is formed with longitudinal equiangularly spaced slots 120. The slots 120 extend inwardly from the edge of the tube. In the upper portion of the tube 30a opposed openings 120 are provided.

A pin 122 is mounted within the tube 30a and passes through the opposed openings 120 in the tube walls. The pin 122 is fixedly engaged with the tube 30a by rivet head portions 123. A rod wire or similar element 124 is arranged axially within the bore of the tube 30a, and at its upper extremity has a hooked portion 125 which engages the pin 122. The rod or wire 124 is of a length just short of the longitudinal dimension of the tube 30a and terminates in an enlarged portion 126, for the purpose hereinafter described.

The lower, movable tube 40a is telescopically engaged within the bore of the fixed tube 30a. The tube 40a has a member 127 suitably mounted inwardly of the upper extremity thereof and fixedly attached thereto. The member 127 has a perforation 128 in the center thereof. The wire or rod element 124 passes through the perforation 128 in the member 127. The enlarged portion 126 of the wire is in engaging relationship with the under portion of the member 127 when the tube is fully extended. The diameter of the perforation 128 in the disc 127 is such that it permits free longitudinal movement of the tube 40a within the tube 30a. It is apparent that the length of the wire 124 will determine the maximum extensibility of the tube 40a with respect to the tube 30a by reason of the enlarged portion 126 of wire which acts as a stop for the tube 40a.

The movable tube 40a may be fixed in any desired position with respect to the tube 30a by means of a clamp member 130. The member 130 comprises an annular ring 131 which is split. The split portions of the ring are extended and project radially from the circumference of the ring to form parallel, opposed ears 132, 132a. The ear 132 is provided with a threaded opening 133 which receives a tightening screw 135. The ear 132a has a through opening 133a.

The screw 135 has an unthreaded shoulder portion 136, a threaded shank 134 of reduced diameter and a knurled head 137. The ring 131 is formed with a radial screw threaded opening 138 which receives a set screw 139, which presses against tube 30a. The ring 131 is also formed with a pair of radially extending apertured ears 140. The apertured ears 140 carry a transverse pivot pin 141. The axially extended portions 132, the ears 140 and the threaded opening 138 may be spaced equiangularly with respect to the circumference of the ring 131. The transverse pivot pin 141 is connected to the outer end of the link 78 previously described and illustrated in Fig. 3.

The clamp member 130 embraces the fixed tube 30a at its lower extremity. When the movable tube 40a is extended with respect to the fixed tube 30a to a desired position, it may be fixed in such position by tightening the screw 135. This action compresses the slit portions of the lower extremity of the fixed tube 30a, with respect to the inner, movable tube 40a at the desired position.

It will thus be seen that there is provided a device in which the several objects of this invention

are achieved, and which is well adapted to meet the conditions of practical use.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiments above set forth, it is to be understood that all matter herein set forth or shown in the accompanying drawing is to be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. An easel comprising an apex member, outer tubes pivoted at their upper ends to said apex member, and extending radially, inner tubes telescoped within said outer tubes, means to fix the inner tubes to the outer tubes in longitudinally-adjusted positions, a central member aligned with said apex member, links interconnecting the outer ends of said outer tubes to said central member, said central member and links being removable to a coplanar horizontal position, means to retain said central member and links in said horizontal position, and a brace member pivoted to one of said outer tubes and means to disengageably engage said brace member with another of said outer tubes in the horizontal plane of said links and said central member.

2. An easel comprising an apex member, outer tubes pivoted at their upper ends to said apex member, and extending radially, inner tubes telescoped within said outer tubes, means to fix the inner tubes to the outer tubes in longitudinally-adjusted positions, a central member aligned with said apex member, links interconnecting the outer ends of said outer tubes to said central member, said central member and apex member being formed with aligned openings, a vertical member longitudinally mounted in the opening in said apex member, means to fix said vertical member to said apex member in adjusted position, means on a pair of said outer tubes to engage the underside of a framed canvas, and hook means slidably mounted on said vertical member to engage the upper end of said framed canvas.

3. An easel comprising a tripod having a pair of front legs, and a rear leg, means on the front legs to support the lower edge of a framed canvas, said means being longitudinally adjustable on said front legs, a member mounted for adjustment vertically relative to said tripod, a member movable at right angles to the first member, means on the second member to engage the upper edge of said framed canvas, the legs of said tripod being extensible, means to fix said legs at various adjusted lengths, and a horizontal member interconnecting the front legs of said tripod, said horizontal member being pivoted to one of said front legs and adapted to engage the support means on the leg to which it is pivoted, when said tripod is in collapsed condition.

4. An easel comprising a tripod having a pair of front legs, and a rear leg, means on the front legs to support the lower edge of a framed canvas,

said means being longitudinally adjustable on said front legs, a member mounted for adjustment vertically relative to said tripod, a member movable at right angles to the first member, means on the second member to engage the upper edge of said framed canvas, the legs of said tripod being extensible, means to fix said legs at various adjusted lengths, a horizontal member interconnecting the front legs of said tripod, and means to interconnect the three legs of the tripod comprising a central member, and links interconnecting the central member with said three legs, said horizontal member and said central member forming a support when said tripod is in extended position.

5. In an easel comprising an apex member, a plurality of extensible legs pivoted to said apex member, each extensible leg comprising an outer tube and an inner tube telescoped therewith, the inner tube being longitudinally movable relative to its outer tube, the lower extremity of said outer tube being slotted, a clamping means engaging said slotted portion of said outer tube, a member in said inner tube formed with a hole, a wire fixed to said outer tube and passing through said hole, and a head on said wire to engage said last member when said inner tube is fully extended.

6. An easel comprising an apex member, equiangularly spaced coextensible legs pivoted at their upper ends to said apex member and extending radially therefrom, a central member aligned with said apex member, links connecting said central member with said legs, said central member and said links being movable to a coplanar horizontal position, means to retain said central member and said links in said horizontal position, and a horizontal brace member interconnecting a pair of said leg members and disposed substantially in the horizontal plane of said links, said central member being formed with a central vertically extending through opening whereby a paint box having a pin fixed thereto and extending downwardly therefrom may be set at rest upon the brace member and the links with the pin passing downwardly through the central opening in said central member.

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#### REFERENCES CITED

The following references are of record in the file of this patent:

#### UNITED STATES PATENTS

| Number    | Name      | Date          |
|-----------|-----------|---------------|
| 298,257   | Vail      | May 6, 1884   |
| 364,991   | Cross     | June 14, 1887 |
| 576,803   | Bernstein | Feb. 9, 1897  |
| 755,403   | Sipe      | Mar. 22, 1904 |
| 1,280,923 | Whiteside | Oct. 8, 1918  |
| 1,994,225 | Lurcott   | Mar. 12, 1935 |
| 2,019,214 | Denny     | Oct. 29, 1935 |
| 2,064,232 | Tepper    | Dec. 15, 1936 |
| 2,282,285 | Olson     | May 5, 1942   |
| 2,290,400 | Wirgin    | July 21, 1942 |