Aug. 23, 1938. J. P. HEIL 2,128,046

TABLE

Filed April 25, 1936

Fig. 2

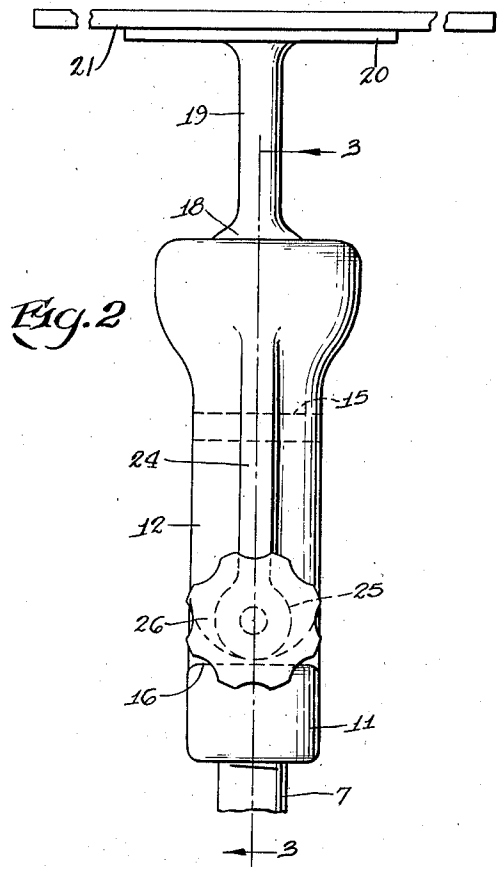


Fig. 3

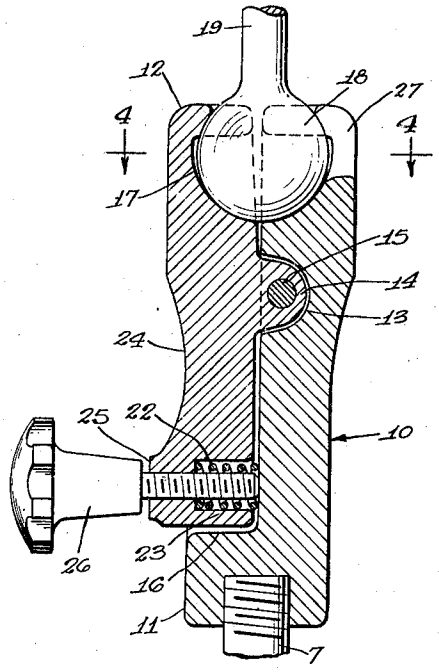


Fig. 4

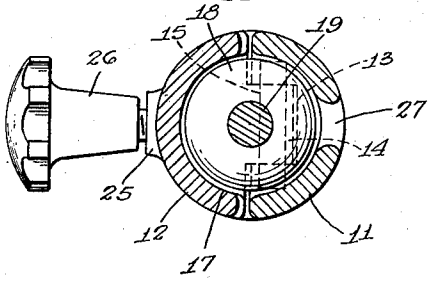
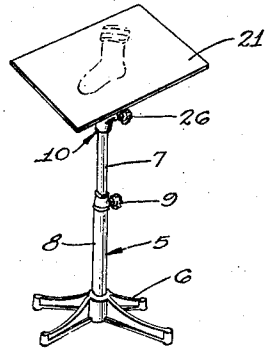


Fig. 1



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TABLE

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Application April 25, 1936, Serial No. 76,329

1 Claim. (Cl. 248—181)

This invention relates to tables and especially those adapted for use by photographers, artists and the like and the primary object is to facilitate positioning subjects to be reproduced to obtain the most advantageous perspective thereof.

Another important object is to retain the table top against undesired displacement while orienting the subject thereon and to positively secure the top against displacement when the desired perspective is attained.

Further objects are to afford a substantially universal movement of the table top so that it may be moved into an infinite number of differentiated angular positions; to employ relatively moveable parts and to apply a strong tension on one of the parts while the subject is being oriented; and to supplement the tension by positively acting means when the desired perspective has been attained.

Still further objects of my invention are to provide a ball and socket joint in the support for the table top; to so relieve the contact between the ball and socket that the ball and socket will be in contact only at spaced intervals; to form the socket in relatively moveable parts; to support one of said parts on a stand or the like and to yieldingly urge the other of said parts toward the first part while the subject is being oriented; and to employ positively operating means to firmly clamp the ball in the socket when the desired perspective is attained.

A selected embodiment of my invention is illustrated in the accompanying drawing wherein

Fig. 1 is a perspective view of my novel table;

Fig. 2 is a side elevation of the table top and the upper part of the support therefor;

Fig. 3 is a vertical sectional view taken substantially on the line 3—3 on Fig. 2; and

Fig. 4 is a horizontal sectional view taken substantially on the line 4—4 on Fig. 3.

The preferred form of my invention illustrated in the accompanying drawing includes a standard generally indicated by 5 having a suitable base 6 at the lower end thereof and comprising telescopically interfitted relatively moveable sections 7 and 8 whereby the height of the table may be varied, a hand screw 9 being provided to secure the sections 7 and 8 against relative movement.

As best illustrated in Figs. 2 and 3, the upper end of the section 7 is threaded into the lower end of an elongated substantially cylindrical body 10 although it is to be understood that the section may be secured in said body in any desired way without departing from the ambit of my invention. That part of the body 10 above the lower end thereof whereat the section 7 is secured is divided on the center line thereof into a fixed part 11 and a moveable part 12, said fixed part 11 being unitary with that part of the body 10 in which the section 7 is secured.

A pocket 13 extends inwardly from the face of the part 11 disposed toward the part 12 and is located substantially medially transversely of said face and slightly above the median line longitudinally of said face. A tongue 14 is formed on the face of part 12 disposed toward the part 11 and is extended into the pocket 13. A pin 15 is extended transversely across the part 12 and through the tongue 14 whereby the part 12 is pivotally connected to the part 11. The lower end of the part 11 is spaced from the shoulder 16 on that section of the part 11 disposed below the part 12 whereby said part 12 may pivot on the pin 15 relative to the part 11.

As best shown in Fig. 2, the upper ends of the parts 11 and 12 are enlarged whereby a socket 17 may be formed therein to receive a ball 18, said socket opening through the upper walls of the parts 11 and 12 whereby a part of the ball 18 extends above the upper ends of said parts when disposed in said socket. One end of a stem 19 is unitary with that part of the ball 18 extending above the upper ends of the parts 11 and 12. A circular plate 20 is provided at the other end of the stem 19 and the table top 21 is suitably secured thereto.

Subjects to be photographed or otherwise reproduced may be placed on the table top 21 and the table top may then be moved into a multiplicity of positions until the most advantageous perspective of the subject is obtained inasmuch as the ball and socket joint provided in the support for the table top permits universal movement thereof. A photographer or the like using the table may adjust the table top into a multiplicity of positions before a suitable perspective is obtained and it is therefore desirable that the table top be retained in various positions into which it may be moved. Furthermore, it is desirable that when a proper perspective is attained that the table top be held against displacement until the subject has been photographed or otherwise reproduced. In order that the foregoing may be accomplished I provide means which permit the table top to be moved into a multiplicity of positions while the subject is being oriented but which nevertheless retain the table top in positions into which it is moved and I provide further means for fixing the table

top against movement when a desired perspective has been attained.

I employ a spring 22 to apply tension on the moveable part of the support while the table top is being adjusted to obtain a desired perspective and I mount this spring in a pocket 23 provided near the lower end of the moveable part 12 and opening into the face of the part 12 disposed toward the part 11. The spring 22 seats against the bottom of the pocket 23 and the adjacent face of the part 11 and urges the lower section of the part 12 outwardly whereby that part of the socket 17 formed in the part 12 is urged tightly against the ball 18 whereby said ball is firmly clamped in the socket 17.

I have found it advantageous to so relieve the socket 17 that the wall thereof contacts with the ball 18 only at spaced intervals for this facilitates movement of the ball in the socket and also enables firm clamping of the ball in the socket. The spring 22 has sufficient tension to prevent undesired movement of the ball 18 in the socket 17 and therefore retains the table top in positions into which it is moved but at the same time this spring enables the table top to be moved into desired positions.

A reinforcing rib 24 is provided on the face of the part 12 opposite that disposed toward the part 11 and the lower end of this rib is enlarged to provide a boss 25 in alignment with the pocket 23. The stem of a hand screw 26 is passed through a tapped opening in this boss and extends through the spring 22 and the pocket 23 and is engageable with the face of the part 11 disposed toward the part 12. Therefore, after the table top 21 has been moved into the position affording the desired perspective of a subject thereon, the hand screw 26 may be run into firm engagement with the part 11 whereby that part of the socket 17 in the part 12 will be firmly seated on the ball 18 so as to hold said ball and therefore the table top 21 firmly against movement.

It may be desirable to move the table top into a vertical position and to this end I provide a slot 27 in the wall of that part of the socket 17 formed in the part 11 into which the stem 19 may pass when the table top 21 is to be disposed in such vertical position.

It will be seen from the foregoing description that I have provided a table which may be advantageously used by photographers, artists and the like inasmuch as subjects may be placed on the top of the table which may then be adjusted into a variety of positions until a desirable perspective of the subject is attained. During such adjustment the hand screw 26 is loosened but the spring 22 affords sufficient tension to prevent undesired movement of the table top but at the same time does not so retard movement of the table top that adjustment thereof is impaired. Furthermore, the hand screw 26 enables the table to be fixed against displacement once a desired perspective has been attained.

I have illustrated and described a preferred form of my invention but it is to be understood that this is capable of variation and modification and I therefore do not wish to be limited to the precise details set forth but desire to avail myself of such variations and modifications as fall within the purview of the following claim.

I claim:

In a table for use by photographers or the like and which has a top and a standard, the combination of a fixed part on said standard and having a recess therein, a moveable part including a lug pivotally mounted in said recess, said parts including cooperating portions constructed and arranged to provide a socket, a ball mounted in said socket and connected to said top, a spring between said fixed and moveable parts and acting on said moveable part to hold this part in frictional engagement with said ball and thereby retain said top in the positions into which it is moved, and means mounted on the moveable part and engageable with the fixed part for positively locking said moveable part against said ball to retain said ball and top in a selected fixed position.

JOHN P. HEIL.