BOOTH WITH A ROTATABLE DOOR AND SEAT

Filed Jan. 19, 1968
ABSTRACT OF THE DISCLOSURE

An enclosure construction that has a support means, a wall mounted on the support means partially enclosing the booth. Advantageously a rotatable door and corotatable seat are pivotally mounted on the support means, the door and wall cooperating to form an enclosure when the door is in the closed position. A spring is provided for biasing the door and the door into the closed position.

The present invention relates to a booth, and more particularly, to a novel booth construction having a rotating door and seat assembly.

Previous booths such as those for enclosing telephones and booths such as those providing an enclosure to protect the user from adverse weather conditions have failed to provide a convenient, relatively inexpensive construction that allows for ready entrance and departure by the user and automatically keeps the bolt closed when not in use.

It is an object of the present invention to provide a novel booth construction that has a highly advantageous corotating door and seat assembly that allows for convenient entrance and departure by the user.

It is another object of the present invention to provide such a booth that automatically closes after the user has left the booth.

It has also been found that the foregoing and related objects can be readily attained in an enclosure construction having support means and a wall mounted on the support means for partially enclosing the booth. Advantageously a rotatable door and a corotatable seat are pivotally mounted on the support means to provide a highly desirable construction. The door and the wall cooperate to form an enclosure when the door is in the closed position. The seat is connected to the door for corotation therewith and spring means are provided for biasing the seat and the door into the closed position.

The support means may have a base and a vertical support extending upwardly from the base. The rotatable door is pivotally mounted on the vertical support and the rotatable seat is pivotally mounted on the base. The vertical support may be a pair of supports disposed on opposite sides of the base and extending upwardly therefrom. In order to rotateably mount the door, a cantilever may be provided having a member extending between the upper portions of the pair of vertical supports and another member extending horizontally therefrom which pivotally mounts the rotating door. If desired, a roof may be placed on the top of the enclosure and attached to the vertical support.

The spring means may be torsion spring with one end fixedly attached to the seat and its opposite end fixedly attached to the base and adapted to bias the seat and the door toward the closed position. The spring means may also be attached to the door on one end or to the support means on the other end.

The wall supported by the vertical support means may be of semicircular configuration and the rotatable door may also be of a semicircular configuration so that these parts cooperate to form an enclosure of a circular configuration. The rotating door and seat are mounted to rotate to the right or left so that the user of the booth may conveniently enter or exit from either side.

It is an additional object of this invention to provide such a booth construction which is relatively simple and economical to manufacture.

Other objects and advantages will be apparent from the detailed specification, claims and drawings wherein:

FIG. 1 is a top view of the booth of this invention with a rotating door and seat construction.

FIG. 2 is a side elevation view of the booth of this invention.

FIG. 3 is a view similar to FIG. 2 with the door and rotating seat in the open position.

Referring now to the drawings there is illustrated the booth with a rotating door and seat of this invention, generally designated by the numeral 10, having a base 12 and a pair of spaced vertical structural supports 14 disposed on opposite sides of the base 12 and attached thereto at their lower ends. The vertical structural supports 14 are connected at their upper ends by a horizontal structural member 16, extending therebetween, that has a cantilever 18 extending horizontally away therefrom. A vertical stationary wall 20 of semi-circular configuration is provided on one side of the booth 10 with its vertical sides attached to the pair of spaced supports 14 and its lower edge supported by the base 12. A Plexiglas window 22 may be provided in the stationary wall 20 for the convenience of the user. A circular shaped roof 24 supported by the structural member 16 may be provided to protect the interior of the booth 10.

Advantageously, this invention provides for a rotating door 26 and a corotating seat 28 which furnish highly desirable benefits for the user of the booth 10. The rotating door 26 is also of semi-circular configuration and has a Plexiglas window for the convenience of the user. The rotating door 26 is rotatably mounted at its upper end on the cantilever 18 by means of a horizontal top portion 30 extending across the upper edge of the rotating door 26 and having a shaft 31 extending therefrom that is rotatably engaged by the cantilever 18. The shaft 31 has suitable bearing surfaces to rotatably support the weight of the door 26. The lower portion of the rotatable door 26 is rigidly attached to the seat 28 by means of a bar 32 extending from the seat 28 to the inner surface of the rotating door 26.

In order to provide the advantages of this invention, the seat 28 is rotatably mounted on the base 12 by means of a hollow post 34 which extends from the base 12 upwardly to a suitable height to support the seat 28 in a convenient position for the user. The seat 28 is rotatably mounted on the post 34 by a bearing 36 which is adapted to rotatably support the weight of the seat 28 and the weight of the body of the user of the booth 10. The shaft 31, the post 34 and the bearing 36 cooperate to allow the rotating door 26 to move into the positions illustrated in dotted lines in FIGURE 1.

A torsion spring 38 is disposed in the post 34 and has its upper end rigidly attached to the seat 28 and its lower end rigidly attached to the base 12. The spring 38 is in its neutral position when the rotating door 26 is in the closed position illustrated in FIGURE 2. However, when the door 26 is opened to the position in FIGURE 3, the spring 38 applies a closing rotational bias to the rotating door 26, through the seat 28 and the bars 32, tending to return the rotating door 26 and seat 28 to the closed position of FIGURE 2.

As illustrated in FIGURES 2 and 3, the rotating door 26 may be conveniently opened by the user by grasping the handle 40 and moving the door 26 into the position illustrated in FIGURE 3 whereupon, the user may
readily position himself upon the seat 28 and rotate the door 26 and seat 28 back into the closed position of FIGURE 2 so that the user is positioned within the booth upon the seat 28. Conveniently, when the user wishes to depart from the booth 10, he may swing the rotating door 26 and seat 28 either to the right or to the left as illustrated in dotted lines in FIGURE 1 so that he can readily depart from the booth on either side. Whereupon, he can release the rotating door 26 and allow it to return to its initial position shown in FIGURE 2 due to the bias of the torsion spring 38.

Accordingly, the booth 10 of this invention provides a highly convenient and effective booth whereby the user can conveniently enter and exit from either side of the booth and wherein the booth will automatically return to the closed position. The booth of this invention provides these advantages with a minimum expenditure for mechanical parts and effort by the user. Thus, the booth of this invention is readily adaptable for use in such places as an enclosure for an attendant in a gasoline station or for a telephone booth and similar uses where it is highly desirable to have the advantages of convenient entrance and departure and at the same time provide for automatically closing the booth after use.

It will be understood that the foregoing description with the details of exemplary structure is not to be construed in any way to limit the invention, but that modification may be made thereto without departing from the scope of the invention as set forth in the following claims.

Having thus described my invention I claim:

1. An enclosure construction comprising support means, a wall mounted on said support means and partially enclosing said enclosure, a rotatable door pivotally mounted on said support means, said door and said wall cooperating to form an enclosure when said door is in the closed position, a rotatable seat pivotally mounted on said support means, said seat being connected to said door for corotation therewith, and spring means biasing said seat and said door into the closed position.

2. The enclosure construction of claim 1 wherein, said support means has a base and a vertical support extending upwardly from said base, said rotatable door being pivotally mounted by said vertical support and said rotatable seat being pivotally mounted by said base.

3. The enclosure construction of claim 2 wherein, said support means has a pair of vertical supports disposed on opposite sides of said base and extending upwardly therefrom, said pair of vertical supports having a cantilever extending horizontally from the upper portions thereof and wherein said cantilever pivotally mounts said rotatable door.

4. The enclosure construction of claim 3 wherein, said spring means has a torsion spring with one end fixedly attached to said seat and its opposite end fixedly attached to said base for biasing said seat and said door toward the closed position.

5. A booth construction forming an enclosure for a user comprising, a base, vertical support means extending upwardly from said base, a wall of a generally semicircular configuration supported by said vertical support means and partially enclosing said booth, a rotatable door of a generally semicircular configuration pivotally mounted on said vertical support means, said door and said wall cooperating to form an enclosure of a generally circular configuration, a rotatable seat pivotally mounted on said base, said seat being connected to said door for corotation therewith, and spring means biasing said seat and said door into the closed position.

6. The booth construction of claim 5 wherein, said vertical support means has a pair of vertical supports disposed on opposite sides of said base and extending upwardly therefrom, said pair of vertical supports having a cantilever extending horizontally from the upper portions thereof, and wherein said cantilever pivotally mounts said rotatable door.

7. The booth construction of claim 5 wherein, said spring means has a torsion spring with one end fixedly attached to said seat and its opposite end fixedly attached to said base for biasing said seat and said door toward the closed position.

References Cited

UNITED STATES PATENTS

1,221,910 4/1917 Rutherford 52—65
1,043,043 10/1912 Carter 52—64 X

JOHN E. MURTAGH, Primary Examiner.

U.S. Cl. X.R.