CLAIMS

The invention claimed is:

1. A gate system comprising:

a cam sled comprising a cam plate configured to slide along a rail;

a cam follower engaged with a guide element of the cam plate; and

a bracket comprising a first end portion and a second end portion, wherein the first end portion is configured to be non-rotatably coupled to a gate post and the second end portion is coupled to the cam follower;

wherein the cam sled is configured to be actuated by a power source to slide along the rail, thereby causing the cam follower to be guided along the guide element and causing the bracket to rotate about a single axis and mechanically lock into position in first or second orientations.

2. The gate system of claim 1, wherein the guide element comprises a curved profile.

3. The gate system of claim 1, wherein the guide element comprises a generally v-shaped profile.

4. The gate system of claim 1, wherein the guide element is substantially symmetrical about a central axis that is perpendicular to a direction of movement of the cam plate along the rail.

5. The gate system of claim 1, wherein the guide element comprises a groove, and the cam follower comprises a bearing that fits within the groove.

6. The gate system of claim 1, wherein the cam sled is configured to be actuated by the power source to slide along the rail, thereby causing the bracket to rotate about the single axis through an angle of approximately 90 degrees.

7. The gate system of claim 1, comprising the gate post, wherein the first end portion of the bracket is non-rotatably coupled to the gate post.

8. A gate system, comprising:

a gate assembly comprising a gate post;

a bracket comprising a first end portion that is non-rotatably coupled to the gate post and a second end portion;

a cam plate configured to slide along a rail and comprising a guide element; and

a cam follower coupled to the second end portion of the bracket and engaged with the guide element of the cam plate;

wherein movement of the cam plate along the rail causes the cam follower to be guided along the guide element of the cam plate and causes the gate assembly to rotate about a single axis between an open position to enable access through the gate assembly and a closed position to block access through the gate assembly.

9. The gate system of claim 8, wherein the guide element comprises a curved profile.

10. The gate system of claim 8, wherein the guide element comprises a generally v-shaped profile.

11. The gate system of claim 8, wherein the cam follower is configured to move along a path that is substantially symmetrical about a central axis as the gate assembly rotates between the open position and the closed position.

12. The gate system of claim 11, wherein the central axis is substantially perpendicular to a direction of movement of the cam plate along the rail.

13. The gate system of claim 11, wherein the guide element comprises a first curved portion on a first side of the central axis, a second curved portion on a second side of the central axis, and a central portion along the central axis between the first curved portion and the second curved portion, and wherein the first curved portion and the second curved portion curve away from a lateral edge of the cam plate such that respective ends of the first curved portion and the second curved portion are proximate to the lateral edge and the central portion is distal from the lateral edge.

14. The gate system of claim 11, comprising a plurality of support structures configured to receive the gate post of the gate assembly, wherein the gate assembly is in a first orientation relative to the cam plate when the gate post is received and supported within a first support structure of the plurality of support structures and the gate assembly is in a

second orientation relative to the cam plate when the gate post is received and supported within a second support structure of the plurality of support structures.

15. A gate system configured to adjust between an open position and a closed position to enable and to block travel along a path on a floor surface, the gate system comprising:

a cam plate comprising a guide element, wherein the cam plate is configured to slide along a rail relative to the floor surface between a first end position and a second end position, and wherein the guide element comprises a generally v-shaped profile and is substantially symmetrical about a central axis that is substantially perpendicular to a direction of movement of the cam plate along the rail; a cam follower configured to follow the guide element as the cam plate slides along the rail; and a gate assembly coupled to the cam follower, wherein the gate assembly is configured to rotate to adjust the gate system between the open position and the closed position as the cam follower follows the guide element as the cam plate slides along the rail.

16. The gate system of claim 15, wherein the guide element comprises a first curved portion on a first side of the central axis and a second curved portion on a second side of the central axis.

17. The gate system of claim 15, wherein the guide element comprises a first substantially linear portion on a first side of the central axis and a second substantially linear portion on a second side of the central axis.

18. The gate system of claim 17, wherein the guide element comprises a first end portion angled relative to the first substantially linear portion and a second end portion angled relative to the second substantially linear portion.

19. The gate system of claim 15, wherein axial ends of the guide element are positioned proximal to a lateral edge of the cam plate that is proximate to a gate post of the gate assembly, and a central portion of the guide element is positioned distal from the lateral edge.

20. The gate system of claim 1, wherein the rail extends along a central axis from a first rail end and a second rail end, and the central axis is perpendicular to the single axis.