Claim(s)

1. A lock assembly comprising:

a lock body;

a shackle partially located within the lock body and configured to move relative to the lock body;

a pair of locking members within the lock body, wherein the pair of locking members are configured to movably engage the shackle to prevent movement of the shackle in a locked configuration and to movably disengage from the shackle in an unlocked configuration;

a locking mechanism coupled to the pair of locking members, wherein movement of the locking mechanism corresponds with the movement of the pair of locking members,

a guard slidably engageable with the locking mechanism, wherein the guard is slidably movable between a deployed position that blocks an access region in the lock body and a retracted position that creates the access region in the lock body, wherein when in the deployed position, the guard is configured to slidably move so as to block the access region and to cause the locking mechanism to move out of the access region and to move the pair of locking members into the locked configuration, and when in the retracted position, the guard is configured to slidably move so as to create the access region to allow the locking mechanism to move into the access region and to cause the the pair of locking members to move into the unlocked configuration;

characterized in that

the pair of locking members further comprise a first head capable of engaging and disengaging with a first pocket of the shackle and a second head capable of engaging and disengaging with a second pocket of the shackle; and

the locking mechanism comprises a first support part and a second support part, each of the first and second support parts having a first end coupled to each one of the pair of locking members, and each of the first support part and second support having a second end directly coupled to each other.

2. The lock assembly according to claim 1, further comprising an actuating

mechanism configured to engage the guard so as to cause the guard to move between the deployed position and the retracted position.

3. The lock assembly according to claim 2, further comprising a control mechanism configured to selectively move the actuating mechanism so as to cause the guard to move between the deployed position and the retracted position.

4. The lock assembly according to claim 1, wherein the guard is slidably movable to the retracted position such that the access region is created and configured to allow the locking mechanism to enter the access region, whereby the first support part and second support part are urged towards each other such that the pair of locking members are disengaged from the shackle.

5. The lock assembly according to claim 4, wherein the guard is slidably movable to the deployed position such that the guard blocks the access region and causes the first support part and second support part to be urged away from each other to cause the pair of locking members to engage the shackle.

6. The lock assembly according to claim 1, wherein when the shackle is in the locked configuration and the guard is blocking the access region, movement of the first support part and movement of the second support part are impeded so that the further movement of the shackle is impeded, thereby maintaining the shackle in the locked configuration.

7. The lock assembly according to claim 1, wherein when the pair of locking members are engaged with the shackle in the locked configuration, the first support part and the second support part are urged away from each other.

8. The lock assembly according to claim 1, wherein when the pair of locking members are disengaged with the shackle in the unlocked configuration, the first support part and the second support part are urged towards each other.

9. The lock assembly according to claim 1, wherein the first support part corresponds to a master lever relative to the second support part and the second support part corresponds to a slave lever relative to the first support part, and wherein the master lever acts to drive the slave lever in a manner so as to facilitate ease in urging the first and second heads one of toward each other and away from each other.

10. The lock assembly according to claim 1, wherein each of the locking members corresponds to a curvilinear protrusion associable with a curvilinear surface, and wherein each of the first and second pockets corresponds to a curvilinear pocket associable with a curvilinear surface.

11. The lock assembly according to claim 10, wherein each curvilinear protrusion corresponds to a convex based curvilinear surface and each curvilinear pocket corresponds to a concave based curvilinear surface.

12. A locking mechanism located within a lock body, the lock body having a shackle partially located within the lock body and configured to move relative to the lock body, the locking mechanism comprising:

a pair of locking members configured to movably engage the shackle to prevent movement of the shackle in a locked configuration and to movably disengage from the shackle in an unlocked configuration;

an actuating mechanism coupled to the pair of locking members, wherein movement of the actuating mechanism corresponds with the movement of the pair of locking members,

a guard slidably mounted within the lock body, and the guard is slidably movable between a deployed position that blocks an access region in the lock body and a retracted position that creates the access region in the lock body, wherein when in the deployed position, the guard is configured to slidably move so as to block the access region and to cause the locking mechanism to move out of the access region and to move the pair of locking members into the locked configuration, and when in the retracted position, the guard is configured to slidably move so as to create the access region to allow the locking mechanism

to move into the access region and to cause the pair of locking members to move into the unlocked configuration;

characterized in that

the pair of locking members further comprise a first head capable of engaging and disengaging with a first pocket of the shackle and a second head capable of engaging and disengaging with a second pocket of the shackle; and

the locking mechanism comprises a first support part and a second support part, each of the first and second support parts having a first end coupled to each one of the pair of locking members, and each of the first support part and second support having a second end directly coupled to each other.