shut or opened. In this case, the side surfaces of the bolt sections form a converging oblique surface. When the bolt is against the striker plate and partially in the opening of the striker plate (or the door is open), the bolt sections are in the position, in which the oblique bolt forms a deadbolt. If there are deadlocking means in the lock and they are placed to lock the oblique bolt into the extracted position, the oblique bolt functions therefore as a deadbolt. If the deadlocking means do not lock the oblique bolt, the oblique bolt functions as an oblique bolt in relation to both turning directions of the door.

The oblique bolts presented above need lubrication grease in order that they remain in good functioning condition. If the lubrication grease runs out, they begin to wear considerably faster than when lubricated. Wearing again causes functional disturbances.

Brief description of the invention

Embodiments of the invention obviate above said disadvantages and increase the functional reliability of the lock and the oblique bolt. .

Embodiments of the invention are based on the idea that an attempt is made to reduce stress of the parts susceptible to wear, wherein they remain functional longer.

According to an aspect of the present invention, there is provided a door lock comprising a lock body provided with a face plate, having an oblique bolt, which is to be moved back and forth in a linear movement between a retracted position and an extracted locking position from the lock body through a bolt hole in the face plate and which oblique bolt is spring-loaded towards said extracted position, which oblique bolt comprises a tip part and a body part, which tip part is in the extracted position partially outside from the lock body, characterized in that the tip part comprises slanted surfaces on both sides such that the tip part is narrower at its tip than in a back part of the tip part, and the tip part has recesses in its lower part and upper part, which recesses extend from the tip to the back part, both recesses being open at the end of the tip of the tip part

and on the other slanted surface such that the recess of the upper part is open on the opposite slanted surface than the recess of the lower part, both of which recesses have a turning piece comprising a bolt projection, which has a counter surface on its first side and a support surface on its other side, and a turning projection, which is arranged to turn the turning piece, when the oblique bolt moves from the retracted position into the extracted position such that the turning projection is against a support surface on the inside of the face plate, and such that the counter surface moves away from the slanted surface of the tip part, the turning piece further comprising a push projection having a push surface towards a counter push surface of the back part of the recess and a curved turning surface on the other surface of the push projection towards a side surface of the recess, and the lock body has a roller on both sides of the oblique bolt, between the side of the lock body and the side of the oblique bolt, which turning pieces are arranged to be with the bolt projection turned outwards from the slanted surfaces in the extracted position of the oblique bolt, and to turn from an external force directed onto the counter surface such that the push projection pushes the counter push surface using the push surface, causing the oblique bolt to move inward towards the lock body, and the turning surface turns in relation to the side of the recess, until the support surface of the bolt projection has settled against another side surface of the recess.

A door lock according to an embodiment of the invention comprises a lock body provided with a face plate, having an oblique bolt. The oblique bolt is spring-loaded towards the extracted position, and it comprises a tip part and a body part. The tip part is in the extracted position partially outside from the lock body, and it comprises slanted surfaces on both sides such that the tip part is narrower at its tip than in the back part of the tip part. The tip part has recesses in its lower part and upper part, which extend from the tip to the back part. Both recesses are open at the end of the tip of the tip part and on the other slanted surface such that the recess of the upper part is open on the opposite slanted surface than the recess of the lower part.