WHAT IS CLAIMED IS:

1. An arctic drill ship, characterized in that,

a derrick is fixed on an upper portion of a drill floor;

each of a left wall and a right wall of a weather tight structure ~~are~~ is coupled with a respective side strake to form the same plane ~~on a side strake~~ around a drilling work area, and a front wall and a rear wall of the weather tight structure are coupled to a hurricane deck at the front and rear of the drilling work area, so as to protect the drill floor and the drilling work area from outside air;

a reinforcement part installed to reinforce a drilling load applied to the weather tight structure is coupled to the left wall, the right wall, the front wall, and the rear wall of the weather tight structure;

the reinforcement part forms a lower structure of the drill floor; and

both sides of the drill floor extend up to a position corresponding to a width of a hull, so that a load of the derrick is applied to the side strake.

2. The arctic drill ship according to claim 1, wherein the reinforcement part of the weather tight structure has a grillage girder system.