The game of Arimaa is a strategic board game that has proved to be a challenge to computers. Not only because of its huge branching factor, but also thanks to the difficulty in creating a good evaluation function to be used with the Alpha-Beta algorithm. Proof-Number Search is an algorithm that does not depend on a heuristic evaluation function and it has been successfully applied to solving endgames of various other games. In this work, we adapt and implement the Proof-Number Search method for the game of Arimaa.