During the second world war the ability to read enemy's encrypted messages was important to defence own territory and even to quicken the end of the war. One of the encrypting machines was german Enigma, whose seizing did not yet mean any success of decryption since the number of all possible settings for one day was a number exceeding trillions. In the pre-war and war years the breaking of Enigma was led by the best polish and british mathematicians, while they had to strictly keep their achievements secret, even decades years after the war. The aim of my bachelor thesis is to create a mathematical model of Enigma and to reconstruct its procedures for discovering daily keys with emphasis on their mathematical substantiation.