In 1854, the Army stationed Meyer in Texas as an assistant surgeon. While there, Meyer observed the Comanche tribe’s use of lances to send messages over long distances. This gave him the idea of using flags and torches for signals by the US Army.

Meyer developed a method for swiftly enciphering and deciphering messages. The inner ring of a cipher disk represented the plaintext letter of a message, and the outer ring represented the enciphered number.

Once a message was enciphered using the disk, it would be sent to the next signal station. There, soldiers with a copy of the same disk would put it into plaintext for officers who needed to read the message.