Halogen bonding is attracting recent attention as a strong and directional supramolecular interaction. Basically speaking, it is a Lewis acid-base interaction between electron-deficient halogen-containing molecule and electron-rich chemical species such as halide ions. As far as we know, however, the halogen-containing molecules are always convex-type and no concave-type molecule has been reported. Here we report the synthesis and crystal structure of supramolecular complex comprising a bromide ion and a concave ligand 1.