

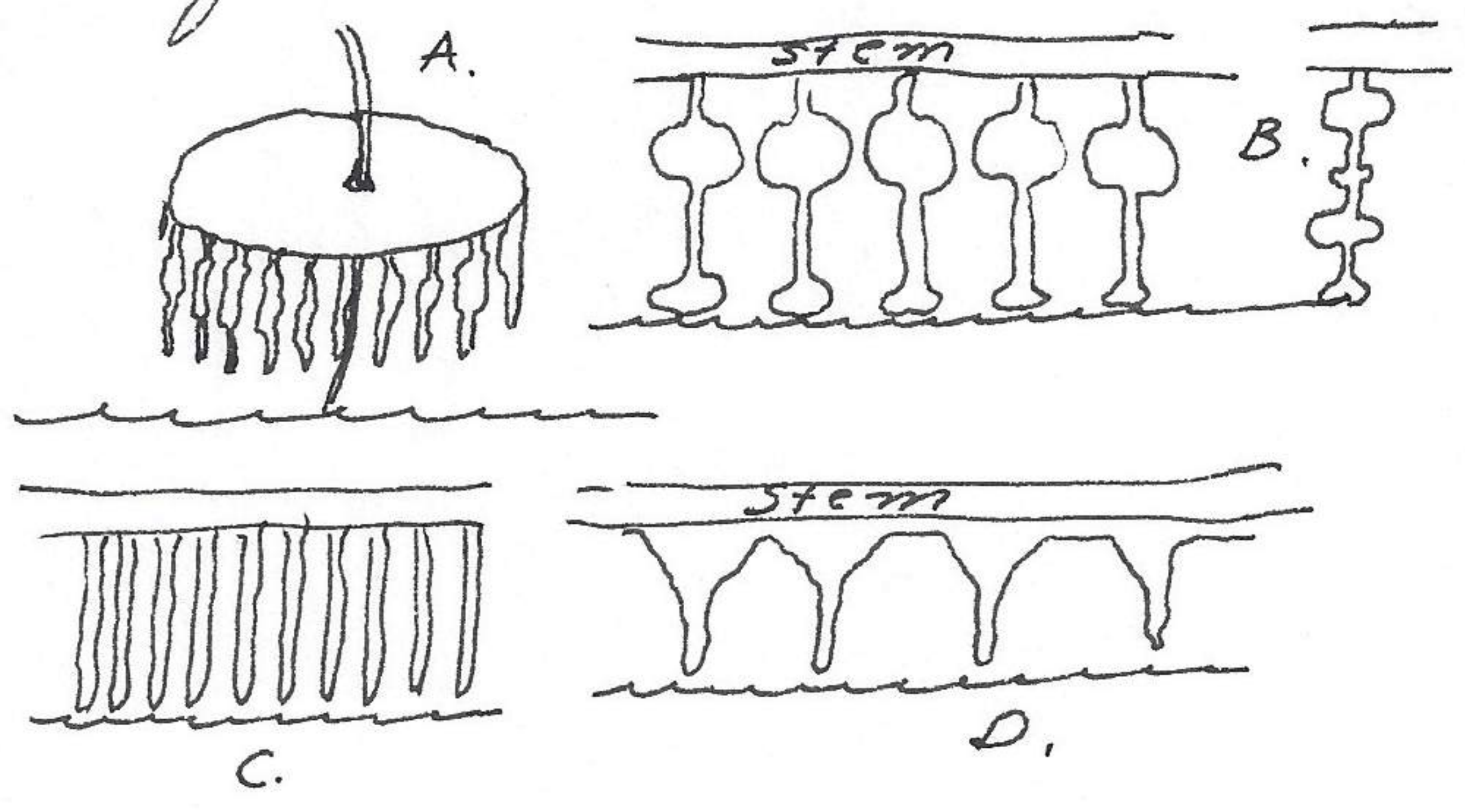
Delaware River, Half Mound to Valley Falls, Jefferson Co., Kansas

March 9, 1969

made solitary canoe trip from bridge west of Half Mound to bridge E of Valley Falls. The bridge at Half Mound is a high, fragile structure of unusual beauty. Annette and daughter Annette assisted in placing canoe in the Delaware. My first step on upper bank carried me to almost water edge on a slippery mud. After hundreds of experiences with mud surfaces on these mud west channels I am still fooled by their stable appearances. Last night's snows (3 inches since yesterday morning) helped to soak these slopes which at this time are 100 percent covered with snow in protected exposures and 90% covered in other southern exposures. Snow to edge of water and an ice level approx 10 inches above the present water level. This ice level supports a sheet of ^{thin} ice that either projects out or stream-ward for 6-10 inches or has dropped down as a slope-covering ice to edge of water. This receding of water from ice level has taken place since the last (or first freeze) of a day or two ago. Ice formations from the level of the ice sheet to present level have been formed as the water gradually receded and take on the following forms.

A. plate or disk of ice with crystals or ice formation at edge; some disks 2 feet wide and supported by stem + free of water below.

B. bulbous type with all kinds of variation according to how long the water was maintained at one particular level and the degree of cold temperature and freedom of wind agitation of surface of water. C. long slender formations with basal plates. D. slender formations



There is no end to variations of all the above and the subject would make an extremely interesting field for photography, especially as sun strikes opposite side to viewer. The ice chandeliers are not consistently distributed but seem to occur where all contributing conditions are favorable. Water temp 32°F, air 25°F Sky 90% clouds and blue between. Clouds increasing. At bridge were approx 300 ♂ redwing blackbirds all singing. They stopped at our approach in a fraction of 1 second to absolute quietness. 2 blue jay + 1 redbellied woodpecker in area. 12:42 redbellied woodpecker, 2 chickadees, crow. 12:50 2 black-