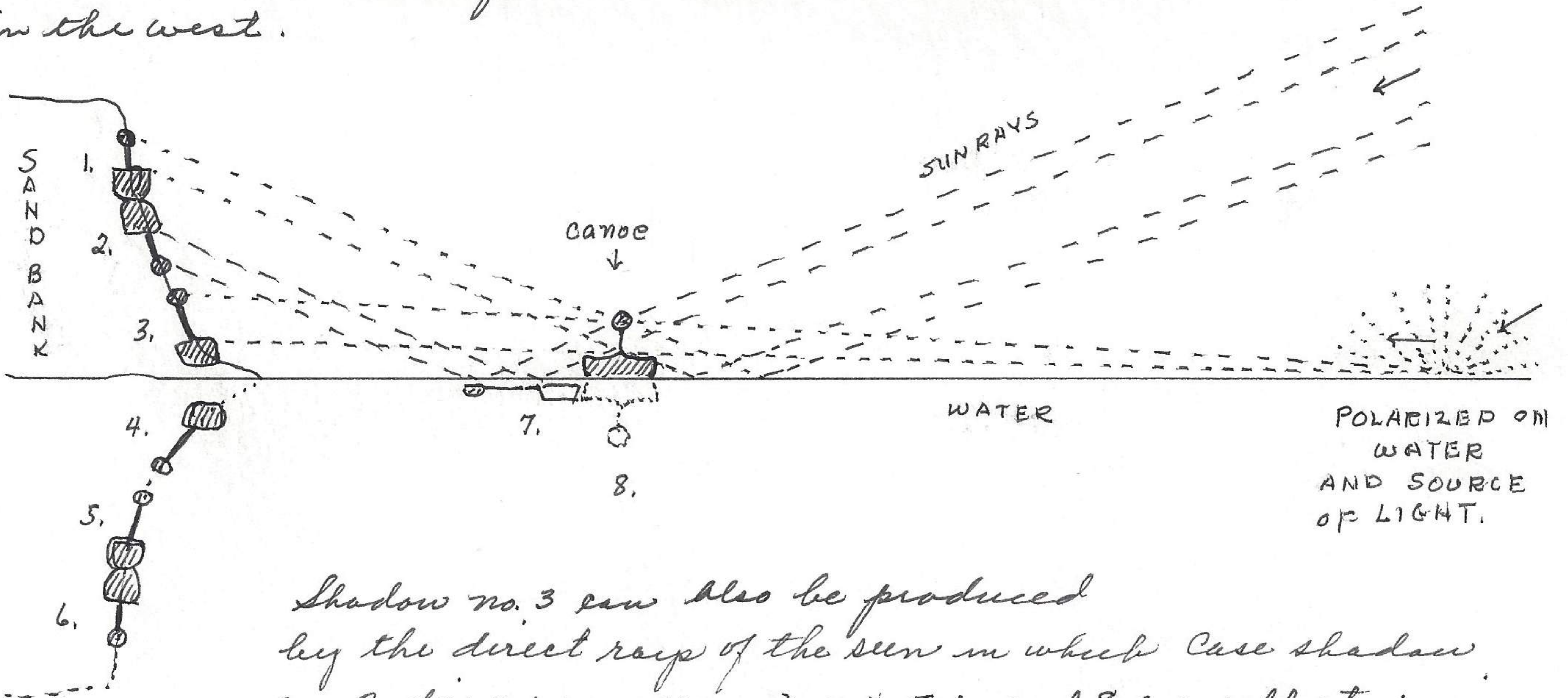


631207-180
wildlife habitat. Recorded a shadow-reflection complex ~~that~~ on the east sandbank of the river at a time when the sun was low in the west.



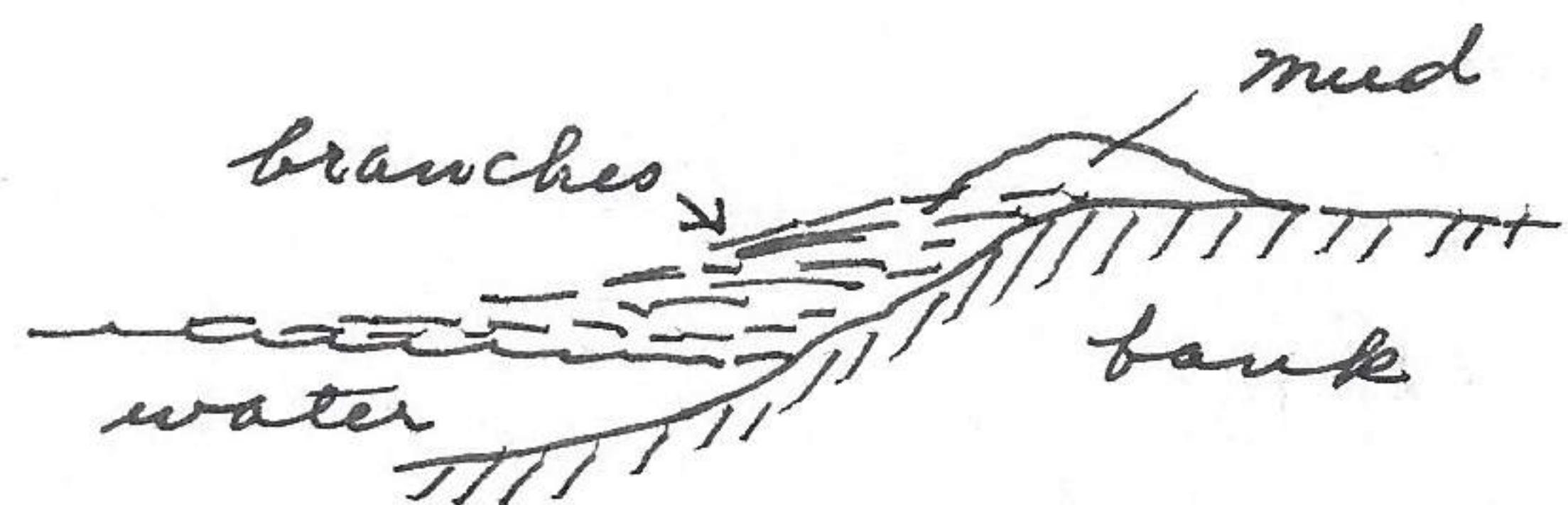
Shadow no. 3 can also be produced by the direct rays of the sun in which case shadow no. 2 disappears. nos. 4, 5, 6, and 8 are reflections in the water. no. 7 is a shadow. nos 1 and 2 depend on smooth water.

2
10 mi. W and 1 1/10 mi. N Lawrence, Douglas Co., Kansas

Dec. 8, 1963

Checked Kaw River, (1:00 P.M.) to determine effect of high wave action on river. The wind has been blowing all morning from the NW from 30-40 miles per hour. Some gusts up to 60 miles per hour.

Examined a beaver house on edge of bank. mud had been piled on upper edge of bank, mainly on



solid river bank rather than on the mass of sticks. The last branches brought to house were tamarack. One main trail led from base of house to top of house and timber beyond. Six bank trail to cut timber were associated with the territory of this beaver house. Several photos were taken here, one of them of a unionid mollusc, Leptodea laevisima no. 631208-1. This shell was on top of beaver house and had been pushed there by the beaver. This shell was only a day or less old. Several photos of this house were taken 631208-2 to 631208-8 showing construction of house and one of ice crystals on tamarack bordering open water of wave action. The mass of willows and cottonwood as the house may serve a purpose keeping wave action from destroying the bank burrow. Photos 631208-9 to 631208-20 of various conditions of surface wave action during the high wind. As the wind increases in velocity, the waves smooth out and the interval between each wave