

of poles. The sides of the door are formed by two posts (*A*) from 6 to 8 inches in diameter and standing about 4 feet apart. Over the door they are connected by a cross-bar (*B*, Fig. 3). Sometimes this frame-work of the door consists of heavy planks. The frame-work of the house front

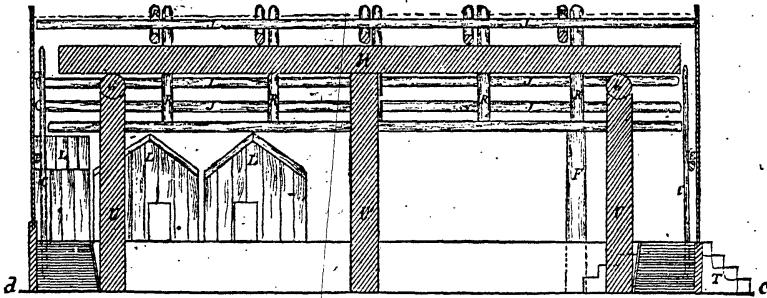


FIG. 4. Construction of Kwakiutl house. Longitudinal section, from *c* to *d*.

consists of two or three vertical poles (*C*), about 3 inches in diameter, on each side of the door. They are from 8 to 10 feet apart. Their length diminishes toward the sides of the house according to the inclination of the roof. These poles are connected by long cross-bars (*E*), which are tied to their outer side with ropes of cedar bark at half the distance between the roof and the ground. The frame-work of the rear part is similar to that of the front, but that of the sides is far stronger, as it has to support the roof. Two heavy posts (*F*) about 9 inches in diameter are erected. Their heads are cut out and a beam of the same diameter is laid over them. At the joints it is cut out so as to fit into the heads of the posts. On both sides of the door and in the corresponding part of the rear side, about 3 feet distant from the central line of the house, the supports of the roof (*U*) are erected. These form the principal part of the frame-work, and are the first to be made when the house is built. They stand about 3 feet from the walls inside the house. These uprights are about  $1\frac{1}{2}$  feet in diameter and are generally connected by a cross-piece (*G*) of the same diameter. On each side of the cross-piece rests a heavy beam (*H*) which runs from the front to the rear of the house.

Sometimes these beams are supported by additional uprights (*U'*), which stand near the center of the house. The rafters (*R*) are laid over these heavy timbers and the beams forming the tops of the sides. They are about 8 inches in diameter. Light poles about 3 inches thick are laid across the rafters. They rest against the vertical poles (*C*) in the front and rear of the house, and are fastened to the rafters with ropes made of cedar bark. After the heavy frame-work which supports the central part of the roof is erected a bank about 3 feet in height is raised all around the outlines of the house, its outer side coinciding with the lines where the walls are to be erected. Long, heavy boards 4 or 5 inches thick are implanted lengthwise along the front of the house, their