Backgrounds

Sod Houses --- Vital "Invention" For Successful Prairie Living

One of the factors helping the German-Russian settlers better adapt to the prairie conditions of North and South Dakota than other ethnic groups was the German-Russian construction techniques. The prairie in the early 1870s was practically devoid of timber, which presented formidable difficulties to all settlers who were only familiar with lumber as a construction material. Thus, the Anglo-Saxons or "Old Americans" who started moving to Dakota Territory in the last quarter of the nineteenth century erected claims shanties—a type of dwelling requiring the purchase of expensive building materials from rail-head merchants. One inch of wood inadequately separated those settlers from 100 degree Fahrenheit summer heat and 20 below zero winter blasts. Other newcomers with a log cabin tradition built log dwellings, but there were few areas only along the rivers and lakes which could provide the necessary timber.

A stone and clay structure with clay roof and "bee hive" type of chimney. The p i c t u r e appeared in "Russian-German Settlements in the United States."

Clearly, a different construction technique was required if the settlers were to survive. That new technique was clay, learned and adapted by the Germans living on the treeless steppes in southern Russia.

The following clay construction descriptions are an excerpt from "Russian-German Settlements in the United States," by Richard Sallet, and translated by LaVern J. Rippley and Armand Bauer. The book can be ordered from Varsity Mart at North Dakota State University in Fargo.

The first type of clay construction consisted of a puddled course of clay with or without rocks thrown at random into the mixture, the walls being raised successively from tier to tier. The second type consisted of a clay mixture fashioned into large sized bricks which, after drying in the sun for several weeks, were thereupon erected into walls and gables using the same clay for mortar and for interior and exterior plaster. When stone was used, a third method was utilized. The

walls were built of rocks chosen for their more or less uniform shape and placed one upon the other, clay was used as mortar and also as interior plaster. Finally, and perhaps some time later, a row of wooden forms about waist high, were erected and clay was poured into them and tamped in place. After the clay was dry, the forms were raised leaving a tier of wall, and the process was repeated until the walls had reached the desired height.

A fifth and less frequent variation was used by some early German settlers: a type of wattle-and-daub which consisted of upright poles interspersed laterally with sticks and saplings in a lattice-work kind of structure. Clay was daubed onto the framework until the walls reached the desired thickness.

Clay was the basic ingredient in the construction technique, but the clay was part of a mixture of straw, manure (Mist), water, and, if necessary, a bit of sand. A century's old "recipe," with room for individual preferences, detailed the proper proportions of each ingredient. The end product was a most durable substance.

The floor plan of the early homes was simple: an elongated rectangle one room deep which was divided in half if there were to be two rooms. The entry was through the kitchen and there was a parlor-bedroom (Vorderstube) on the street side. If there were to be three rooms, the rectangle was divided somewhat equally into three parts with the entrance and kitchen in the middle and the parents' room (Vorderstube) facing the street and the children's room (Hinterstube) on the opposite side of the house. In the early decades, in the Black Sea area, a stable and storehouse were often attached to the building and consisted of an extension added to the wall of the Hinterstube. The Russian practice of using an entryway or antechamber (Vorhaeusl) became a standard feature of the colonists' houses. It was formed by partitioning the front part of the kitchen or by the addition of a small external room of frame or sometimes of clay in front of the kitchen door.

The long axis of the building, at least in the Black Sea region, was almost invariably oriented east and west, for the most prominent streets were laid out in a north-south direction. Often there were no windows in the west wall but the long southern exposure had several windows. A minimum of windows were in the north, and they were invariably in the kitchen. The entrance was on the south side of the dwelling. A Russian clay bakeoven (Backofen) occupied almost a fourth of the space in the kitchen and provided heat for the entire building. ■