verized alum in all crevices where insects might lodge or breed. Powdered alum, she states, may be sprinkled upon carpets already laid and then brushed or swept into their meshes with no injury to the carpets and with the certainty of banishment to many insect pests including both moths and fleas.

Sheets that have been soaked in alum water and then dried may profitably enclose those that are spread nearest to the sleeper. . . . From ten to twenty cents' worth of alum judiciously used in each room of the house will effect much good in the prevention of dangerous insects.

L. O. Howard

U. S. DEPARTMENT OF AGRICULTURE

SPECIAL ARTICLES

THE NEHALEM WAX

EARLY explorers of the Oregon coast found bits of a waxlike substance on the Nehalem beach near the mouth of the Nehalem River. In time considerable deposits of the substance were found buried in the beach sands. As early as 1846 several tons of the wax were shipped to the Hawaiian Islands and since that time many tons have found their way into the markets of the northwest.

There has been much speculation concerning the origin and nature of this wax and opinions have been divided as to whether it is beeswax or a mineral product, ozokerite.

An Indian legend tells of the wreck of a ship at the mouth of the Nehalem before the coming of the white man. The crew landed and cached the cargo as it drifted in. In confirmation of the legend the hull of a wrecked vessel was found there. It is further cited that the Spanish ship *San Jose* sailed from La Paz, Lower California, June 16, 1769, loaded with supplies for the Catholic missions to the northward, and was never afterwards heard from. Her supplies would probably include wax for candles and tapers in the missions.

The wax is found, mainly, in large rectangular blocks, bleached on the surface through exposure but of a yellowish cast within. The honey-like aroma of beeswax is plainly noticeable on a freshly cut sample. An examination of an authentic portion of this wax was made in the Pacific University laboratory, the data on a home-made sample of beeswax being also determined for comparison. The following table gives the results obtained, the data for numbers 3 and 4 being taken from Allen, Thorpe and Dana.

	M.P.	Sp. Gr. at 15°	Per cent. KOH Required to	
			Neut. Free Acid	Sapon- ify Esters
 Nehalem wax Oregon beeswax Beeswax (miscl.) Ozokerite 	64° 66° 63°–65° 56°–63°	.960 .964 .963–.969 .85–.90	$1.00 \\ 1.30 \\ 2.00 \\ .00$	7.80 7.60 7.50 .00

The properties of the Nehalem wax are thus seen to approach those of beeswax very closely and are not in accord with those of ozokerite.

Dr. H. N. Stokes, of the Bureau of Standards, and Professor O. F. Stafford, of the University of Oregon, have also pronounced the material beeswax.

C. E. BRADLEY

CORVALLIS, OREGON, August 22, 1907

CONCERNING THE NAME "HAVASUPAI"

A SMALL tribe of Amerinds living in a secluded canyon in Arizona have been variously called, Havasupai, Supai, Cohonino, Cosnino, etc., the full list being given in the Bureau of Ethnology's handbook. Gibbs wrote it Habasopi; Hodge, Agua Supai; Bourke, Ah Supai; Gilbert, Akbasupai; Gatschet, Akusuepai and Avesupai, while the first white visitor, Garces, in 1776, made it Jabesua, the "J," of course, being pronounced in the Spanish way.

During a recent visit to this tribe I inquired particularly as to the composition and pronunciation of the name. According to my understanding it is derived from "*aha*" water, "*basuga*" blue, and "*apa*" people, and is therefore *Ahabasugapa*, People of the Blue Water. This refers to the color of the stream along which they live. It is evident that, rapidly spoken, the name would take on a sound like "habasupa." The Spaniards would