

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
1. Nehalem wax	64°	.960	1.00	7.80
2. Oregon beeswax	66°	.964	1.30	7.60
3. Beeswax (misc.)	63°-65°	.963-.969	2.00	7.50
4. Ozokerite	56°-63°	.85-.90	.00	.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

write the "b" a "v," as they so often did, and finally the "v" would be pronounced as a "v" in English, and "Havasupa" or "pai" would result. It is also probable that some of the people would contract the full name as is often done in Amerindian languages; for example, the Pai Ute name for Major Powell was "Cah-parats" the "cah" being a contraction of "cotch," no, and the whole meaning "No-arm" and referring to the fact that Powell had but one arm.

It would therefore seem permissible to contract Ahabasugapa, in the interest of euphony and simplicity to *Habasupa*, and I would suggest that this spelling be substituted for the incorrect one now in use, and for the further corruption "Supai." The canyon in which they live should then be "Habasu" instead of Supai. The canyon was formerly generally known as Cataract, because of the several beautiful waterfalls there, but as there is on the Colorado River a larger and more important canyon called Cataract, Habasu is a better name for the one where the Habasupa live.

The other name applied to these people, I conclude, should be spelled "Cohonino" when it is used. It seems to be the Moki name for them and Voth (1905) spells it Kohonino, while Jacob Hamblin, who visited the Moki frequently from 1857 down, always pronounced the name Cohonino.

F. S. DELLENBAUGH

7 WEST 43D STREET,  
NEW YORK,

September 25, 1907

#### THE PROLIFICNESS OF THE ENGLISH SPARROW

WHILE collecting the eggs of the English sparrow, early last May, in Syracuse, N. Y., for embryological purposes, I was able to gain some idea of the remarkable prolificness of that ubiquitous little pest.

Mounted upon a bicycle, I accompanied, for a little more than two hours, an electric-light "trimmer" (similarly mounted) on his rounds. During this time forty-five lamps were visited, and in every lamp an English sparrow's nest was found. The lamps were of the common type of street arc light, with a

metal hood that made an excellent nesting place.

The trimmer said he never bothered to tear out the nests, as they would be rebuilt before his next round. That this was probably true was illustrated, in one case, where, after collecting the eggs, the man pulled out a handful of straws and feathers from the nest and threw them from the top of the pole to the ground; before it had reached the ground one of these feathers had been caught by the female bird, who was ready, apparently, to immediately begin the process of reconstruction.

While there was a nest in every lamp visited, all of the nests did not, of course, contain eggs; a few, though very few, of the nests were empty, and a number of them contained young birds which were not counted.

From forty-five nests one hundred and twenty-eight eggs were obtained, an average of nearly three eggs for each nest; therefore, in the eleven hundred arc-lights of the city of Syracuse there were, probably, more than three thousand eggs. If the number of young birds also had been counted the total number would have been largely increased—and this was only one brood.

Of the eggs collected only two or three per cent., possibly less, were infertile, so that there must be a fortunately heavy mortality among the young and adult sparrows or their number would be even greater than it already is.

While the arc-lights furnish the most common and easily accessible nesting places, there are, as is well known, hundreds of other places, so that the number of eggs of any one brood is much greater than the figure given above.

The greatest number of eggs found in any one nest was seven; the smallest number was two, though this was probably due to the fact that the full number of eggs had not yet been laid. The usual number of eggs per nest was five; more than three fifths of the nests that contained any eggs at all contained that number.

A. M. REESE

WEST VIRGINIA UNIVERSITY