AMBER

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BY

ELIZABETH F. PARKER

"For such saffrons,
Beryl yellows
Ambers of a torrid East
I am grateful . . . .
Without sunshine
There is thinness and no lustre."

K. B.

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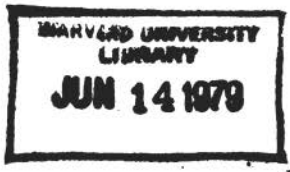

AMBER

AMBER is one of the mysteries of creation and that enhances its charm. A Chinese legend of the sixteenth century names it "Tiger-Soul," stating that when a tiger dies its spirit penetrates the earth and turns to amber.

A more gentle version of its origin is the old Greek myth which represented the daughters of Helios, the Sun God, who, weeping for the death of their rash brother Phaëthon, were changed into trees, ever dropping amber tears.

This poetic story is true only so far as the fact that amber dropped from trees, for it is a fossil gum, a resin from pine trees which flourished three and a half million years ago, and the remains of which geologists find in what is called the Tertiary Period. The giant Sequoias, now a comparatively small grove, visited

as one of the wonders of California, once covered a large part of the earth's surface, from what is now the frozen North to the tropics, and from these and other conifers of that remote period the sap exuded, not in small quantity, as from peach or cherry tree today, but dropped in large "tears."

A Chinese writer of the tenth century said, "When the great pine tree is broken or felled without injury to the root which remains undecayed, its sap continues to flow down and coagulate, or when the branches and joints of the pine tree are still flourishing, they are scorched by the hot sun and the resin flows out of the trunk of the tree and thickens in large masses. Thereupon it sinks into the ground, and the juice, moist in the beginning, trickles into the earth for many years when, finally, it is preserved only as a lustrous substance." And another in the

same century wrote, — "It is not only fir-tree resin that thus changes, but generally speaking, it is tree-resins which penetrate into the earth and all alter in the course of a millenium."

In its moist state many light objects fell or were blown upon its surface, adhered, and were covered and imbedded in the subsequent flow. These are now the interesting "inclusions" which afford to naturalists the opportunity of studying the plants and insects of that long past time. Under the microscope, and even without it, one can sometimes discern what may be gossamer threads, flower stamens, petals, spiders' webs, bark, twigs, moss, suggestions of leaves and cocoons, bodies and wings of insects, and very frequently bright scales larger or smaller, in great number, which might be the outer shell-like covering of seed ves-

sels or the wing casings of tiny beetles. Also minute air bubbles and imprisoned drops of water often add brilliancy.

The earth has undergone many changes in three and a half million years. Continents have been depressed, submerged, or raised from the depths of the sea. Fire and flood have played their part in nature's convulsions. The resin of the fir forests in all this has suffered

> "A sea change
> Into something rich and strange."

Amber has gained, therefore, various color, not only from variety of tree, but from chemical action and proximity to minerals. In true amber the color-range is from palest yellow to rich dark brown and blood red. All the colors of wine find in it their counterpart.

The amber of Sicily is remarkable for what W. Arnold Buffum in his book

"Tears of the Heliades, or Amber as a Gem" calls "fluorescence." "All the colors in the prismatic spectrum," as he says, flash across the surface of "Ambra di Sicilia . . . from faint blue to deepest azure, and from pale rose to the intense red of the pigeon blood ruby."

Amber has been known from remotest centuries. Homer and Herodotus, Pausanias, Tacitus, Pliny and others all mention it. It was an object of barter brought by the Phœnicians in their adventurous voyages beyond the Straits of Gibraltar; ornaments of it are found in many of the ancient tombs; specimens have even been found in the tumuli of the Stone Age in Britain. In the Middle Ages the Turkish tribes of Central Asia sent "Catties" of amber as tribute.

It has figured largely in the Chinese pharmacopeia, being mentioned in a

medical book of the tenth century as a remedy "which reanimates the heart, calms the soul, stops bleeding, produces flesh, etc." And the Orientals today prefer the pale, slightly clouded amber and believe it a guard against contagion or infection, while the Sicilian mother thinks a string of amber about her child's neck saves it from croup.

From time immemorial it has been used for the beads for prayer strings in the East, and because of its aroma when heated, used also for incense in churches. It has always found place in personal decoration as well as in "objets de vertu," and has been carved in all imaginable forms. Sometimes the lumps or nodules have been left in the shapes in which they have been found, or perhaps slightly carved, and hung pendent from the Mandarins' chains where, according to a San

Francisco Chinaman, they were "delightful to hold and so keep one's hands quiet."

A Chinese naturalist of the fifth century divides it thus: "Red fir tree resin, stone amber, water amber, flower amber, black amber, and amber proper. Red fir tree is dull, brittle, in large pieces with streaks extending cross-wise; water amber pieces are not red, but light in tinge; among those that are yellow are many with furrowed stripes. Stone amber is heavy like stone and not fit for use; flower amber resembles some plant and the inner part of the pine tree and has streaks of red and yellow. Rubbed with a piece of cloth and made warm, all will attract mustard seed which is proof of genuineness."

It has always been an object of value, as from Pliny we learn that the price of a figurine in amber, however small, ex-

ceeded that of a living, healthy slave; and a traveller in Sicily in 1877, says that blood-red pieces and those with chrysolite-green hues or blue fluorescence suitable for ornaments sell for three or four thousand francs each and thus are dearer than diamonds.

The two large and well-known deposits of amber are in Sammland, East Prussia, and in Burma, where, in both places it is mined like a mineral, — though it has been found in India, Tibet, Persia, Turkistan, Denmark, along the Baltic Sea, in Roumania, and in the United States and England. In the latter country it is mostly black and known as Whitby jet, while in Corea and Japan it is red in color and opaque. Sammland amber mined for commerce is generally yellow, both clear and cloudy. The clear amber is very brilliant when facetted for beads. The

cloudy, or opaque, is extensively cut or carved into articles for the use of smokers, and also made into beads. The Chinese traders buy the amber of Burma and take it to the Province of Yünnan, where it is fashioned, and probably much reaches Yünnan from other countries. Many things are often done with it by clever artisans, and bits of it are subjected to great heat and then compressed into clarified masses ready for cutting. These are capable of being colored red, green, etc., and when facetted make handsome beads. Also extraneous objects are introduced, such as green beetles or delicate scalings of the abalone shell. This is known as compressed or synthetic amber and sometimes easily passes for the genuine article.

True amber has the curious property of magnetic attraction when warmed by

friction. The old accounts from the East all speak of it as "picking up mustard seed," and we find scraps of silk or paper equally drawn to it. It has been called fire-stone, sun-stone, and by the Greeks was known as Elektron, the origin of our word electricity.

Lumps of amber are found in dry river beds, on beaches, even ploughed up in rough fields where some old tertiary layer has been turned toward the light of day by volcanic agency and its nodules broken out, or washed out by water. It has been picked up on two of the beaches at Sicily, supposed to have been washed from a morain by the action of the waves which are gradually robbing it of its treasures, as it is more rarely found now than formerly. For centuries, necklaces of it have been heirlooms in Sicilian families, dowries for the brides, and supposed to

prevent disease and bring good luck, for in all superstitions it has been regarded as able to protect from evil. The Sicilian beads are generally facetted, which the Chinese ones are not, and one sees occasionally strings of irregular bits which look as though a peasant lad had found them, cut them with his knife, and strung them as a gift to his inamorata.

Mr. Buffum, in his charming book, begins with a description of meeting a Sicilian girl on her way to a fiesta, wearing a wonderful necklace of translucent gems of all colors, some even with blue fluorescence "like a bit of sky fallen to earth." She tells him it is not stone, but amber of Sicily, and when he asks her whence came its wondrous colors, she replies, "You must ask that of the good God."

Elizabeth F. Parker