

Section on Historical Pharmacy

Papers Presented at the Fifty-Ninth Convention

PRODUCTS OF THE ISLAND OF SOCOTRA.

ADOLPH W. MILLER, M. D., PH. D.

The Island of Socotra, situated in the Indian Ocean, 543 miles distant from Aden and 120 miles east of Cape Guardafui, has been regarded as the source of Socotrine Aloes by the earliest writers on medicine, as well as by later authors. Although the island is in the direct steamer route from Aden to Colombo, it is almost isolated at present, principally owing to the absence of protected harbors. During the monsoon season vessels are compelled to give Socotra a wide berth. Even in the mildest weather, ships of larger size than the native Arab dhow are compelled to anchor some miles from shore.

Among the ancients, Socotra was known as the Island of Dioscorides, who appears to have been well acquainted with the virtues of aloes. Both this and the modern name are usually traced back to a Sanskrit form Duipa-Sakhadhara, meaning the Island Abode of Bliss.

Cosmas, a traveller of the sixth century, says that the people of Socotra spoke Greek and that they were largely Christian, having a Bishop from Persia.

The famous Arab traveller and geographer of the twelfth century, Idrisi Abu Abdallah Muhammed, al Sherif Al Idrisi, better known simply as El Edrisi, relates the following curious tradition, which was current in Eastern countries as early as the fourth century: When Alexander the Great had conquered Persia, India and the adjoining islands, his tutor Aristotle, the former apothecary of Athens, advised him to seek the island that produced aloes. Therefore, when he had been sated with his conquests in India, he set sail for Socotra, the climate and fertility of which he admired. Following the advice of Aristotle, he removed the original inhabitants and put Greeks in their place, enjoining the latter to preserve carefully the plant yielding aloes, on account of its utility and the necessity of employing it as an ingredient in certain sovereign remedies. The colony of Ionian Greeks, which he established, remained under his protection and that of his successors, acquiring great riches in course of time.

When the religion of the Messiah appeared, they embraced and retained the Christian faith up to the time of Edrisi's visit in 1154. The Socotrans remained Nestorian Christians throughout the Middle Ages, but they have gradually lost all traces of Christianity except a reverence for the cross. They now practice South Arabian moon worship.

As no Greek or Roman writer confirms Edrisi's story, it is probably merely a fable invented to account for certain facts. Still it is somewhat strange that

Mohammedan voyagers of the ninth century repeat the same legend. Masudi, of the tenth century, says that aloes was produced then only in Socotra by Greeks, who had been sent there by Alexander the Great, and who had improved on the original methods of the natives.

The Journ. de la Soc. Pharm. Lusit. of 1838 contains a letter addressed in 1516 by Thome Pyres, an apothecary of Cochin to Manuel, King of Portugal, in which it is stated that the most highly esteemed aloes is grown in the Island of Cacotora.

The records of the East India Company, in the early part of the seventeenth century, contain many notices of aloes being bought of the King of Socotra. Wellstead, who visited Socotra in 1833 says that the cultivation of aloes had then declined, but that the walls which had enclosed the old plantations were still to be seen. At that time, the production of the drug was a monopoly of the Sultan.

Dr. Kirk, when residing in Zanzibar from 1866 to 1873, noted that then aloes from Socotra arrived there in a very soft state, contained in goat skins. After being transferred to wooden boxes and having solidified, it was shipped to European markets.

An interesting and valuable report on the Island of Socotra has been furnished to the government by Chas. K. Moser, United States Consul at Aden, Arabia. He states that the island is about 73 miles in length and 36 miles wide at the widest part, and that the population is now estimated at 13,000. It is very mountainous, the Haghier range rising from 2000 to nearly 5000 feet, and forming the core of the island. Although very rocky, the whole island is exceedingly fertile. Many strange forms of flora are found on the mountain slopes, chief among these being *Dendrosicyos socotrana*, or cucumber tree; *Dracaena cinnabari*, or dragon's blood tree in several varieties; adeniums; euphorbias and three species of the frankincense tree (*Boswellia ameero*, *B. elongata* and *B. socotrana*). All of these trees have immense swollen limbs, suggestive of vegetable elephantiasis. By means of this peculiarity, these plants have adapted themselves to subsist on an extremely dry soil.

Rain rarely falls in the Haghier range except during the months from May to September, when the streams become torrents and the soil is then completely saturated. Most of these trees are resin bearing. They exude a thick milky substance, which would have a commercial value were it to be obtained in a less isolated locality.

In ancient times, Socotra was famed for frankincense, myrrh, dragon's blood and spices. Now Socotra produces more dragon's blood. Myrrh and frankincense are more easily procured and of better quality from Somaliland and other localities. The Socotran does not take the trouble to collect the products from the wild trees that abound. A little dragon's blood is usually used as a dye, and a small quantity of frankincense is shipped to Aden. The principal item of export is ghee, a butter made from goat's milk, which is highly prized by the Arabs. The natives call the resin of the frankincense tree luban, which is the proper Arabic name for it, derived from "Lbnan." This is the Arabic name for Mount Lebanon, which is so called from the milky whiteness of its perpetual snow. This same term is found in the Hebrew and in the Greek *libanos*, as well as in our Latin

term *Olibanum*, which is simply the result of joining the Arabic article "al" with the root *luban*.

The frankincense of Socotra is inferior in quality to that produced in the Hadramaut and Somaliland, and the island trees secrete a smaller quantity of the resin. The average yield per tree in Socotra is about two pounds each year. Its value is whatever amount of rice, ghee, cotton goods or kerosene oil the collector can persuade the Arab trader to give for it.

The ruby-red exudation of the dragon's blood tree is valued among Orientals as a dye. The Socotrans call the tree *A'aree-ib* and the dragon's blood resin *Mu'soi'lo*. Like the incense, these trees stand in thousands on the Haghier hills, and a large source of revenue could be obtained from their milky juices. Fifteen *fraselas*, or about 48 pounds of dragon's blood is considered to be worth five goats, which the Arab trader will value at ten Maria Theresa dollars, or about \$4.46. According to this somewhat complicated calculation, the dragon's blood is worth about 10 cents per pound.

The finest kind of frankincense or *al-luban* offered in the Aden market is used as incense in the Latin churches and in the richest Mohammedan mosques of the East, where it is called "*luban dakkar*." The price of the best kind varies from \$11.50 to \$18.00 per *bokkar*, consisting of three baskets, each containing one hundredweight. The second quality of a clear, transparent, nearly white color is exported only to Cairo, where it is in great demand, as the Arabs use it as a chewing gum for the prevention of thirst. Its price varies from \$1.00 to \$4.00 per maund of 32 pounds. It is called "*luban haali*," meaning sweet incense.

The third quality is of dark brownish color and is used by the poorer classes as an incense and as a fumigant for driving away mosquitoes and other insects. The merchants pay from 16 to 33 cents per maund of 32 pounds for this grade.

The natives of the interior grow small patches of *dhoorra*, tobacco and cotton. Their principal occupation is the raising of sheep, goats, asses and camels, and a very fine breed of humpless cattle, quite distinct from those met with in Asia and Africa.

Civet cats are occasionally caught and the civet obtained from them is used locally. Wild asses in thousands roam through some parts of the island. Frequently the young are caught by the Bedouins and trained to domestic uses.

The Socotran cow is the most beautiful and important of the native animals. She is without the hump, which characterizes Indian cattle. Even in the driest season, she always presents a sleek, well nourished appearance. Her milk is rich in butter fats; two and three gallons per day is a frequent yield of the choice cows. The Socotran cows are fawn color, and in general appearance they are much like the Alderney. As they appear to be the ideal dairy animals for hot, dry countries, the Indian government is endeavoring to introduce them into India.

It is to be noted that in the above account no mention is made of any Socotran aloes being at present produced and exported from that island. Most probably that which is now sold under the name of Socotrine aloes is all obtained from Zanzibar, Moka and other countries.

The 1908 edition of Brockhaus' *Konversations-Lexikon* makes the positive assertion that at present no aloes whatever is obtained in Socotra.

It is therefore an open question as to whether those who still dispense and sell Socotrine aloes are not in conflict with the rigid provisions of the Pure Food and Durg Law of 1906.

Even if it could be established that a certain lot of aloes was actually the product of the *Aloe socotrina*, Lumarck, this would not entitle the drug to be sold as Socotrine aloes, as the *Aloe socotrina* was shown by Bolus to be indigenous to the Cape of Good Hope, while the true Socotrine aloes was formerly obtained from the *Aloe Perryi* of J. G. Baker, and a dwarf species with spotted leaves.

BUSINESS CREDIT AND FIRE INSURANCE.

Practically all business in the United States is done upon credit, and the accurate placing of a man's rating is one of the carefully studied commercial sciences of the day. That merchant is foolish who does not give the information requested by creditors or by commercial agencies, and who does not comply with all of the requirements of the situation. Insurance protection plays a large part in the problem of credit, and every merchant owes it to his creditors as well as to himself to see that he buys fire insurance of the proper kind and quantity. So important is this consideration that the National Credit Men's Association, during the last two or three years, has published no fewer than six booklets on the relation of insurance to credit. And yet every day merchants are being burned out with little or no insurance, thus subjecting themselves and all their creditors to losses for which there is no excuse at all.—*Bulletin of Pharmacy*.

CLAMS AND CALAMITY.

A cooped-up, imprisoned, bilious druggist, can neither be a good husband, father or citizen, and it is your plain sacred duty to yourself, your family and your state to help in the regeneration of pharmacy. Don't be a clam—don't breathe calamity—get up and out, and emancipate yourself. Don't sit in your store, studying the race cards or devouring yellow literature; read your drug journals, see what others are doing, and tell others what you are doing; help the editors, poor fellows, to make their columns good lively reading, and you will help others as well as yourself.—*W. Bodemann*.