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EAST INDIAN VOYAGES OF THE SIXTEENTH AND SEVENTEENTH CENTURIES IN THEIR RELATION TO DRUGS, SPICES AND DYESTUFFS.*

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PORTUGUESE VOYAGES.

At the beginning of the fifteenth century, when Venice had already firmly established herself as mistress of the Mediterranean, the little kingdom of Portugal, on the west coast of the Iberian Peninsula, had hardly begun to think of commerce and exploration. At this period Portugal possessed no vessels better than half-decked sailing craft carrying crews of 36 men. (H. Morse Stephens, "Portugal," p. 144.) However, at a time when most of the noble youth of Portugal saw no road to distinction other than fighting the Moors, one prince of the royal house was granted wisdom to see that there were other things worth while. Prince Henry, known to history as "The Navigator," was the third son of King John I. We read of him: "This prince devised how he might advance the honor of his name and order in the discovery of countries not yet known. He spent his life in single estate, and chose the clear air of Cape St. Vincent, that he might better extend his mathematical theory, the practice thereof in instruments, and the use in sending out ships at his own charge to discover remoter parts. He caused Master James, skilful in navigation and cards and sea instruments, to be brought into Portugal to erect a school of marineship and to instruct in that mystery." ("Purchas his Pilgrimes," i, pp. 9–15.)

From the first, Prince Henry seems to have dreamed of being able to wrest the profitable Indian trade from Venice by finding a sea route to the Spiceries; at any rate, he established on the extreme southwestern point of the continent of Europe the school in which were to be trained the daring navigators who would find and win for Portugal an empire beyond the seas. Here Prince Henry gathered around him a group of choice spirits, not only mathematicians and cartographers, but navigators of experience as well. Here came for instruction, not only the sons of Portugal, but men from other countries.

Prince Henry himself never made an ocean voyage, but from 1418 onward seems to have sent out an exploring expedition nearly every year. The first voyage accomplished little, but in 1419 or 1420 one of Henry's captains discovered (or rediscovered) the Madeira Islands. Succeeding expeditions worked farther and farther down the African coast, until, at the time of Henry's death, in 1463, 1110 miles of coast line had been explored by the Portuguese, as well as the islands of Madeira, Cape Verde, Azores, and Canaries. When Henry passed away, only a relatively small part of the long distance to the Indies had been travelled, but the Prince had done much to merit the gratitude of his countrymen. He had promoted the colonization of the island groups which had been discovered, and successfully introduced in them the culture of the vine and sugar-cane. (Stephens,

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* Continued from p. 255, March issue.

"Portugal," p. 145.) He had secured from Pope Martin V a perpetual donation to the crown of Portugal of whatever should be discovered from Cape Bajador to the Indies, together with plenary indulgence for the souls of those who should perish in conquest. ("Purchas his Pilgrimes," ii, pp. 13–14.) Most important of all, Henry had created in the hearts of the Portuguese a determination to continue the national career of exploration.

An enumeration of the various stages in the progress of the Portuguese down the west coast of Africa would be tiresome; however, the following may be noted: In 1434 Cape Bajador was rounded, in 1441 Cape Blanco, in 1445 Cape Verde, in 1447 the Azores were discovered, in 1455 the Cape Verde Islands and the coast of Senegal, in 1462 the mouth of the Niger, in 1484 the mouth of the Congo. Already the Portuguese voyages had extended the knowledge of pharmacognosy, for in the Congo region, if not farther up the coast, the explorers found the plant-producing "Grains of Paradise." This drug or spice was known in Europe long before this time, having been brought overland to Monte di Barca, on the coast of Tripoli, and from thence by the Venetians to Europe. The native name was *Melegeti* or *Melegette,* but because it came from an unknown region and was highly esteemed it became known as "Grains of Paradise." Flückiger and Hanbury mention a record of a curious *fête* held at Treviso, in 1214, in which a sham fortress defended by twelve noble ladies and their attendants was stormed and carried by knights armed with flowers, fruits, sweetmeats, and spices, among the latter being mentioned "*Melegetæ.*" (Flückiger and Hanbury, "Pharmacographia," p. 652.)

To return to the Portuguese and their explorations: The year 1486 was a notable one. In this year an expedition sent out by John II, under the command of Bartholomew Diaz, reached the bold promontory known to us as the Cape of Good Hope. Because he had encountered storms in this vicinity, Diaz reported to his royal master that he had named the cape "*Cabo Tormentosa.*" King John, however, willing to believe that this discovery marked an important advance on the long-sought route to the Spicery, rechristened the cape "*Bona Speranza,*" or Good Hope. ("Purchas his Pilgrimes," vol. ii, p. 17.)

King John was thoroughly imbued with the spirit of discovery, and firmly believed that the Portuguese would eventually find the sea route to India. He took the greatest care to represent to other nations the immense difficulties of the voyages, so far as they had been prosecuted, endeavoring to create the impression that they would have been impossible in ships other than those of the peculiar Portuguese construction. When one of his sea captains and two pilots attempted to desert in order to enter the service of the King of Spain, they were pursued and killed. ("History of Spain and Portugal," Harper & Co., iii, p. 233.)

So determined was King John to reach the Indies by sea that he neglected no means that would further his purpose. Becoming convinced that in India, or on the east coast of Africa, something might be learned in regard to a route around Africa, he sent trusted men to the East to seek such information. The first messenger failed because of his ignorance of Arabic. Having learned to be more careful in his selection, John sent Pedro Covilham and Alfonso de Payva, whose orders were to discover the country of Prester John, to trace the Venetian commerce in drugs and spices, and to gather information in regard to the possibility of reaching India by rounding the southern extremity of Africa. Covilham and Payva went to Alexandria, thence to Cairo, and by caravan to a port on the Red Sea, where they found opportunity to study the methods of the Moorish traders who plied between India and Egypt. At Aden the two separated, Covilham going

to Calicut, on the Malabar coast, Payva starting for Abyssinia, the land of the far-famed Prester John. Covilham was the first Portuguese to sail the Indian Ocean. In India he saw the pepper and ginger plants growing, and was able to secure accurate information in regard to cinnamon and cloves. Returning to Egypt, Covilham learned that Payva had been murdered. He met a messenger from King John, and sent him back with the report that ships which sailed down the coast of Guinea might be sure of reaching the termination of the continent, "and that when they should arrive in the eastern sea, the best direction must be to inquire for Sofala and the Island of the Moon" (Madagascar). Covilham now went to Ormuz to study the trade there, and, having again forwarded reports to his master, went to Abyssinia to do the work which had been assigned to Payva. He made himself so useful to the monarch of Abyssinia that he was constrained to remain in his service during the rest of his life. It is believed, however, that Covilham continued to serve his native land by maintaining a correspondence as long as he lived. ("India in the Fifteenth Century," Hakluyt Society, pp. lxxxi–lxxxviii.) It seems only just to Covilham that his services should receive recognition as an important contribution toward the discovery of the Cape route, as the expedition of Vasco da Gama did not sail until after Covilham's reports had been received.

In the year 1495 Manuel "the Fortunate" came to the throne of Portugal. He continued his father's policy of endeavoring to reach India by sea. It is said that he was encouraged to do so by reading some old letters which he found in a chest of his father's. These letters were from a Venetian merchant who had executed important commissions for King John, and, having received favors from his royal patron, had consented to tell him something of Venetian commerce. He wrote "of India, its riches and trade, of the bringing of rich merchandise and aromatic spices to Alexandria, from which the Turk drew great profits, and from that place the merchandise came by the trading of merchants to Venice. This was the greatest trade there was in Venice." (Gaspar Correa, "Voyages of Vasco da Gama," Hakluyt Society, p. 16.)

After much deliberation the King selected Vasco da Gama as the captain-general of the fleet which was being fitted out. Da Gama gave the most careful attention to the details of provisions and equipment. He encouraged the sailors, who had been hired for the voyage some months in advance, to learn trades, such as carpentry, rope-making, and blacksmithing; promising additional wages to each man who thus increased his usefulness.

It is said that the intended voyage was very unpopular among the people of Portugal, who believed that no adequate compensation could be derived from so wild and hazardous a venture. Camoëns, Portugal's most illustrious poet, who penned the "Lusiad," an epic of the discovery of India, has personified the populace in a venerable man who appears on the shores among those who watch the departing vessels. The aged one pronounces a curse upon all those who seek the vanities of honor and dominion, especially upon those who leave their native land to seek empire upon unknown shores. His malediction is, in part, as follows:

> What new dread horror dost thou now prepare!
> High sounds thy voice of India's pearly shore,
> Of endless triumphs and of countless store;
> Of other worlds so towered thy swelling boast,
> Thy golden dreams when Paradise was lost,
> When thy big promise steeped the world in gore,
> And simple innocence was known no more.

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> Cursed be the man who first on floating wood
> Forsook the beach and braved the treacherous flood!
> Oh! never, never may the sacred Nine,
> To crown his brows the hallowed wreath entwine;
> Nor may his name to future times resound;
> Oblivion be his meed, and hell profound!
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> —CAMOËNS, *Lusiad,* Mickle, trans., Book IV.

The little fleet of three vessels sailed from Lisbon, June 20, 1497, rounding the stormy cape on November 20. Shortly afterward a beautiful river was entered, and here a pause was made for refreshment and for refitting the vessels. One of the ships had been damaged, and this was burned, all of the metal parts being saved for possible use in repairing the others. The other vessels were beached and scraped.

Reaching Mozambique, da Gama endeavored to obtain information in regard to the route to India. Upon the Sheik's inquiry as to what merchandise he sought, da Gama showed him pepper, cinnamon, and ginger. The Sheik promised to provide pilots who would guide him to a country where his ships could be filled with these spices. However, the Sheik proved to be treacherous, and da Gama found it necessary to look further for the pilot he needed. He was more fortunate in his dealings with the King of Melinda, on the Zanzibar coast. The Melindans showed every kindness to the voyagers. Pilots were promised, but the Portuguese were advised to wait for the season of favorable winds, and this was done. Camoëns tells us that the King and his court were fully informed of the glories of Portugal and the martial exploits of her warriors by a long historical recital by da Gama. As Camoëns gives us da Gama's recital, the deeds of the sons of Lusitania lost nothing in the telling. Doubtless the Melindans were duly impressed. (Camoëns, "Lusiad," Books III and IV.)

The time of favorable winds having arrived, the hospitable King provided the Portuguese with two of his best pilots, as well as with provisions for the voyage. Leaving Melinda in July, 1498, they sailed with a fair wind for twenty days, at the end of which time they sighted a mountain on the coast of India. Running along the coast, they reached the harbor of Calicut (not to be confused with Calcutta). Here they were given a friendly reception, and assured that they would be allowed to purchase pepper and other spices. All would have gone well had it not been for the Moors. These shrewd Moslem merchants, who had been established here for many years, and who controlled the traffic between India and the Red Sea, very soon saw that their trade was ruined if the Portuguese were allowed to establish commercial relations in Calicut and other cities of India. The Moors guessed that if, on this initial voyage, the Portuguese were able to secure cargoes of spices, they would soon monopolize the business. So by threats and bribes they sought to influence the court officials to incite the King to hostility towards the Europeans.

However, after long negotiations, the privilege of trade was granted, and a temporary factory or trading post was set up in a house on the shore. The goods sent ashore for barter consisted of coral, vermilion, quicksilver, copper, and amber, as well as Portuguese gold and silver coins. A table covered with green cloth, and a wooden balance with weights were also landed. On the first day quantities of pepper were brought from the King's storehouse, and the entire day was spent by the Portuguese factors in weighing this pungent condiment, the high price of which in Europe had been instrumental in bringing about the Portuguese discovery. In the evening, having reckoned the value of the pepper

weighed, the factor told the King's officials to select from the stock whatever they wished, to the value of the pepper, the price of the Portuguese merchandise having previously been agreed upon. The goods selected were cut coral, copper, and quicksilver. Such was the first day's trade between Europeans and the natives of the Indies, such the beginning of a traffic that was to bring to the eastern ocean the fleets of several nations, and to result in centuries of strife and bloodshed.

A curious feature of these first days of trade at Calicut was that each party to the transaction believed that he was outwitting the other. So trifling was the native price for pepper compared with that to which the Portuguese had been accustomed at home, so precious did the European commodities appear to the natives, that each party believed itself to be driving a keen bargain. Da Gama had instructed his factors to be liberal in their dealings with the natives, to accept all spices offered without question in regard to quality, and to give good weight on the wares given in exchange. The King's officers soon learned that the Portuguese would not protest, even if the spices offered were of inferior quality, and seem to have worked off a lot of second-grade pepper and ginger. The wily da Gama cared little for this; he knew that if he could return to Lisbon with cargoes of pepper, thereby demonstrating that his ships had reached the long-desired land of spices, the next expedition would be powerful enough to protect Portuguese interests.

For a number of days the weighing went on, the Portuguese purchasing not only pepper, but cinnamon and ginger. The Moors did not cease their efforts to cause trouble for da Gama, and at last he was treacherously arrested. The Portuguese accounts differ in regard to the incidents which followed, and the exact truth is not obtainable. However, da Gama was liberated after a time, and sailed from Calicut, secretly vowing vengeance on King and Moors. During this entire voyage he was very careful to avoid any serious clash with natives, as such an incident might easily have proved disastrous to his weak forces. His conduct on futures voyages, when he had the backing of strong military forces, was very different.

The King of the neighboring State of Cananor had heard of the visit of the Portuguese to Calicut. When the Portuguese approached his harbor he sent messengers in boats to beg them to trade with him, promising all the spices they needed. An agreement was reached, and the King sent out in boats sufficient spices to complete the lading of the vessels. In paying for these, the Captain-general was very liberal, sending coral, vermilion, quicksilver, and copper basins amounting to fully twice the value of the spices received, as prices were in that market. The King now visited the vessels, and presents were exchanged, after which da Gama was ready for the homeward voyage. A stop was made at Melinda. Here again was an interchange of presents. The King sent to the Queen of Portugal a large piece of ambergris. To King Manuel he sent a letter of friendship written on a leaf of gold.

As the vessels ran down the east coast of Africa on the return voyage, da Gama gave orders to his pilots to write in fullest detail the directions necessary for future navigations of this coast. The cape was rounded without misfortune. When the sailors found that they were again headed northward they embraced each other with joy and knelt to offer praise to Heaven. Terceira, in the Azores, was reached at the end of August, 1499, and the vessels anchored here for a few days. As soon as da Gama's vessels entered this harbor a number of boats raced for Portugal to carry to the King the glad news of da Gama's return. The ships

were by this time leaking so badly that it was difficult to keep them afloat, but the Captain-general refused to transfer his cargoes to other vessels. He reached Lisbon about September 18, 1499 (conflict in dates), and was greeted by city and court with demonstrations of joy.

Vasco da Gama was richly rewarded for the service which he had rendered to king and country. The title of "Dom" was conferred upon him, and he was presented with 20,000 cruzadoes in gold, and, further, "the perpetual right of 200 cruzadoes which he might put out every year of his own money on cinnamon in Cananor . . . these purchases he might stow on any ship without freight or duties and bring them free of charge to his own house . . . this the King granted him as long as India lasted, for an inheritance to his principal heir." Various favors and recompenses were granted to the captains and officers, one and all. It was ordered that to each mariner of the fleet "should be given ten pounds of each spice for their wives to divide with their gossips and friends. . . . Great recompenses were given to one and all, because at this time the quintal (100 pounds) of pepper was worth in Lisbon 80 cruzadoes, that of cinnamon 180, of cloves 200, of ginger 120, mace 300, nutmeg 100. All remained rich and satisfied." Well might the King be liberal in his gifts, for it was found that for every cruzado invested in the voyage a return of 60 was yielded. The King went with Dom Vasco to the convent of Our Lady of Guadalupe to offer a rich gold necklace, which had been sent by the King of Cananor, together with some rich stuffs, a bag of each spice, and a piece of benzoin, the latter probably to be used as incense. (Although many authorities have been consulted which describe in more or less detail Vasco da Gama's first voyage to the Indies, most of the story as given above is taken from "Voyages of Vasco da Gama," translated from the Portuguese by E. J. Stanley, H. S. The quotations are from this authority.)

Doubtless the motives which had influenced Prince Henry the Navigator and the various Portuguese kings of the fifteenth century to send out exploring expeditions were very complex. We believe that a desire for glory and renown and an inspiration to extend the dominion of the throne of Portugal influenced the princes and their captains. That there was also a desire to extend Christianity to heathen lands was doubtless true, since priests were sent to Indian very soon after the discovery of the way thither. However, it seems certain that the dominating motive in moulding the Portuguese policy was the desire to gain the trade in spices and other Oriental wares. Vasco da Gama had shown the Sheik of Mozambique pepper, cinnamon, and ginger, and asked to be directed to the land where these were found. Once on the Malabar coast, he had spared no pains to secure cargoes of these spices, and, having obtained them, lost no time in making his way home, assured of a welcome. Stanley, the translator of Gaspar Correa's work, which has formed the basis of our story of da Gama, considers that Correa has made it very plain that the methods used by da Gama and his captains evidenced a greed of commercial gain. (Correa, "Voyages of Vasco da Gama," H. S., p. xxxix.) However that may be, the return of 60 to 1 on the investment in the first voyage was sufficient to cause Manuel to resolve to send without unnecessary delay such a fleet as could carry great cargoes sufficient to bring him untold wealth. (Correa, "Voyages of Vasco da Gama," H. S., p. 275.)

Pedro Alvarez Cabral was the commander of a fleet of 13 ships which sailed from Lisbon, March 8, 1500. Being blown far to the westward of the African coast by a great storm, Cabral sighted land on April 23; this land he named Brazil. One of the vessels hastened back to Lisbon with the tidings of this dis-

covery, while the others went on their way. The discovery of Brazil had an important bearing on the Indian voyages, for Bahia, on the Brazilian coast, was frequently made a stopping place to secure water, fruit, and other refreshments. Only six ships of Cabral's fleet succeeded in rounding the Cape. Reaching Calicut, Cabral, like his predecessor, had trouble with the Moors and with the King. Becoming embroiled with the Moorish merchants, he destroyed some of their vessels after having loaded the cargoes into his own ships. Some of his sailors having met death ashore, Cabral visited a terrible vengeance upon the city. The unfortunate King learned that he had to deal with a race who were not only able to defend themselves, but to wreak revenge upon those who dared to deny them what they demanded. This was only a foretaste of the dealings between the Portuguese and the eastern peoples. Cabral established friendly relations with a number of potentates on the Malabar coast, and settled factories. He returned with very heavy and valuable cargoes of spices. (History of Spain and Portugal, Harpers, iii, p. 244.)

A glance at the story of Vasco da Gama's second voyage will give us further insight into the character of that hero, as well as into the methods which the Portuguese were using to secure the monopoly of the spice trade. Da Gama sailed from Lisbon in 1502 with 15 caravels (some accounts say 19 or 20). On this voyage, instead of following the east coast of Africa well up toward Cape Guardafui, and then crossing the Arabian Gulf to the Malabar coast, he left the continent while still opposite the Mozambique coast; and struck boldly across the Indian Ocean for his destination, thus greatly shortening the voyage. The Admiral detached a squadron under Sodre to explore the coast of Arabia. (" Purchas his Pilgrimes," x, p. 22.)

We find da Gama on this voyage sending the following message to the King of Baticola, one of the Indian potentates: " This is the fleet of the King of Portugal, my sovereign, who is the Lord of the sea, of all the world, and also of this coast, for which reason all of the rivers, and forts which have got shipping have to obey him and pay tribute . . . and this as a sign of obedience . . . neither trading in pepper or bringing Turks, nor going to the port of Calicut . . . for any of these three things; the ships which shall be found to have done them shall be burned with as many as be captured in them. Let the King send me an answer; if it be not a good one I will send and burn ships and town, and cause much harm to be done." (Correa, H. S., p. 311.) We learn from this declaration that already the Portuguese were claiming a monopoly of the pepper trade, that they were undertaking to dictate as to where and with whom the native states might trade, and that they had determined to ruin the commerce of such petty kingdoms as had not seen fit to submit to the demands of the intruders. Let us see whether da Gama was prepared to back his threats with actions.

On this same voyage he captured a richly-laden Moorish vessel *en route* from Mecca to Calicut. After the cargo had been transferred to his own vessels da Gama ordered that the captured vessel, with its crew and passengers, numbering about 700 souls, be burned. The Moors, among whom were wealthy merchants plead for their lives, and offered, if da Gama would but conduct them to Calicut, to fill all of his vessels with pepper as a ransom. Da Gama refused the offer, contrary to the advice of his own officers, and the ship was fired. The desperate Moors did not perish, however, until after they had succeeded in boarding one of the Portuguese vessels and inflicting some loss of life upon its company. (Correa, p. 313.) Greater atrocities were to follow before the fleet left India. Certain vessels from Coromandel, on the east coast of India, bound for Calicut, fell

into the hands of the Portuguese and were plundered. The unfortunate mariners were bound, their hands, ears, and noses lopped off, their teeth knocked down their throats, and the whole bleeding, writhing mass loaded into one of the captured vessels, which was fired. The severed members of all of the victims were put into another ship and sent ashore as an object lesson to all who should dare to question Portuguese authority. (Correa, p. 331.) Where he found the natives submissive, the Admiral established factories or trading stations, and left agents with stocks of goods for barter. This was done at Cananor and at Cochin. The principal commodities offered by the Portuguese in trade continued to be coral, vermilion, quicksilver, brass, and copper, although they landed, also, caps, mirrors, and other trinkets. Pepper was the product purchased in greatest quantity; ginger and cinnamon, however, were taken in large amounts.

After a long period of retirement, the reason for which is not fully understood, Vasco da Gama made a third voyage to the Indies. In the meantime new honors had been conferred upon him. He was now Count of Vidigueria, and ranked as Admiral of the Indian Seas, as well as Viceroy of India. He arrived at Goa, now the seat of Portuguese power in India, September, 1524. He travelled and lived in regal splendor, was served by men bearing silver maces, maintained his major-domo and equerries. He was accompanied by a brilliant soldiery, officered by sons of noble families. He came endowed with the King's own power of justice and revenue over all the dominion beyond Cape Bona Speranza. Our narrator tells us that, despite his arrogance and love of pomp and display, da Gama was not corrupt, as were so many of the Portuguese officials of his own and later times, but still remained true to the interests of his master. He gave particular attention to the supervision of the royal revenues, and declared that it was his intention to make the King rich. However, his career as Viceroy was a short one; he died in Goa, December 24, 1524. (Correa, pp. 380–381.)

Stanley considers that Vasco da Gama is not to be ranked with Columbus and Magellan, both of whom were the originators of the projects which they prosecuted to success, and both of whom, in their voyages of discovery, commanded men not their own countrymen and who were not fully in sympathy with the leaders. Vasco da Gama was appointed by Manuel to take charge of an expedition which had been dreamed of and prepared for by Portuguese princes for many decades, and considerable information in regard to the route of which had already been gathered. He should, however, be given credit, thinks Stanley, for indomitable perseverance, wise judgment, and magnificent qualities of leadership. His record is stained by deeds which, even for the age in which he lived, were relentlessly cruel. His fame is due in great measure to the epic of his voyage as told by his gifted countrymen, Camoëns, in the *Lusiad*. (Introduction to "Voyages of Vasco da Gama," H. S., p. xx.) Perhaps it would not be fair to da Gama for us to accept in full Stanley's estimate of the ability of that daring man. Although on his famous voyage da Gama commanded men of his own race, they were far from loyal through all of the vicissitudes of the voyage. Indeed, it became necessary for him to put his pilots in irons to prevent them from inciting the crews to open mutiny. Da Gama did what a man then living, a navigator of no mean ability, namely, Bartholomew Diaz, who first rounded the Cape, had declared to be impossible. His route was not always that of a coasting voyage, as has sometimes been said; at certain stages it was necessary for him to give the continent a wide berth to avoid dangerous shore currents. On his second voyage, as we have seen, he found his way for thousands of miles across the trackless Indian Ocean from Mozambique to India. When all has been said

that may be to detract from his fame, Vasco da Gama is worthy to live in history as a great discoverer.

Portuguese expeditions to the Indies now followed one another in rapid succession. Every year or oftener, fleets of from ten to twenty vessels left Lisbon harbor on the long voyage, carrying, in addition to their crews, strong bodies of soldiery. From da Gama's first voyage in 1497 until the year 1521 there were despatched 33 fleets, totalling 220 ships. From that time on throughout the entire century, probably hardly a year went by without a powerful expedition leaving for the East. (Introduction to "Voyages of Sir Henry Middleton," H. S., p. vi.) The policy followed during the first few years of the century was to establish factories as rapidly as possible on the African and Malabar coasts, by peaceful means if possible, but using force if the natives proved contrary; further, to utterly destroy all efforts of the Moors to carry on the commerce which had been so flourishing before the Portuguese came. Little effort was made at this period or later to acquire territorial dominion; the Portuguese had come to trade rather than to gain an empire. In this their policy was quite different from that of the Spaniards in the New World. (Introduction to "Commentaries of Alfonso d'Albuquerque," H. S. p. xv.)

Francisco de Almeida, the First Viceroy of India, sailed from Lisbon in 1505 with a fleet of 22 vessels. He not only promoted trade, but garrisoned forts at Cananor and several other places in India. Probably the man who did most to firmly establish Portuguese power in the Indies was Alfonso de Albuquerque. Albuquerque combined the qualities of a diplomat with those of a military commander. He exercised splendid judgment in the selection of strategic points for fortifications which would enable the Portuguese to dominate the commerce of all southern Asia and neighboring islands.

One of the strongholds which Albuquerque secured for Portugal was Ormuz, situated on an island at the narrow entrance to the Persian Gulf, and therefore, if fortified, able to control the entrance and exit of vessels. For years an important trade route between the Indies and the Mediterranean had passed through the Persian Gulf, up the Euphrates to a point opposite Aleppo, thence by caravan to that city. Although, during the period of Venetian ascendency, this route was not as much used as that by the Red Sea to Alexandria, it still retained much of its importance. It will be recalled that Covilham had been sent to study the commerce of Ormuz before da Gama's first voyage. The value of Ormuz was further enhanced by the fact that it controlled the pearl fisheries of the Persian Gulf. Of the many available accounts of the commerce of Ormuz at the beginning of the sixteenth century, I quote from that of Duarte Barbosa, a keen and accurate observer. He says, in part: "In the mouth of the Sea and Strait of Persia is a small island in which is the city of Ormuz . . . a great centre of trade. They bring here all sorts of spices, precious stones, pepper, ginger, cinnamon, cloves, mace, nutmegs, long pepper, aloes-wood, sandal-wood, Brazil-wood, balsam, tamarinds, rice, cocoanuts, rubies and other stones, benzoin, porcelain, all kinds of cotton goods. . . . They also bring to Ormuz (for India) quicksilver, vermilion, rosewater, brocades, silks, woollens, and camelots. From China and Cathay came by land, silk in skeins, rare metals, and rhubarb . . . from Baharem, seed pearls and pearls; from Arabia and Persia, horses, which they carry to India, as well as salt, dates, raisins, and sulphur." (Duarte Barbosa, "Coasts of East Africa and Malabar at Beginning of Sixteenth Century." translated by E. J. Stanley, H. S., p. 42.) From another source we get this picture of Ormuz: " . . . greate traffic for all that is staple of all India, Persia,

Arabia, and Turkie . . . and commonly it is full of Persians, Armenians, Turks and all nations, as also Venetians, which be there to buy spices and precious stones; . . . out of Arabia various sortes of drugges for Poticaries, as Sanguis Draconis (Dragon's Blood), manna, Mirre, Frankincense and such like, and goodly horses . . . now to know the cause of so great traffique . . . twice every year commeth a great company of people overland called Caravanes, which come from Tripolis, on the coast of the Mediterranean Sea . . . every year twice, in months of Aprill and September. A Captain and certain hundredths of Janissarries (Janizaries) convey the caravan to town of Bassora (junction of Tigris and Euphrates), from whence by water to Ormuz." (Jan Huyghen van Linschoten, H. S., pp. 47–48.)

We can easily understand how the Portuguese might covet a city of such commercial importance. Barbosa tells us that a Portuguese fleet under the command of Albuquerque appeared before Ormuz, that there was a failure to come to an understanding in regard to trade, and that a great battle ensued, in which the Moors were routed. The latter then agreed to allow the Portuguese to build a fort, but, as they repented of this, further combat followed, and the city and island became tributary to Portugal. Ormuz continued to be one of the strongholds of Portugal until captured by the English and Persians in 1622.

Even more important to the future of the Portuguese in India was Albuquerque's conquest of Goa. This city was built on an island at the mouth of the river Mandona, on the Malabar coast. It was a dependency of the kingdom of Deccan. At this period it was a prosperous city and an emporium of trade. Albuquerque, in 1510, found an excuse for attacking the city in the fact that its ruler headed a conspiracy of Moorish merchants to build in Goa a fleet for the purpose of driving the Portuguese out of India. Albuquerque heard of the plan, assembled his forces, made an attack and utterly defeated the sea and land forces of his enemies. (Barbosa, H. S., pp. 75–76.)

Albuquerque found in Goa a flourishing commercial city possessed of a good harbor, in a position easily defensible, and centrally located. Quick to recognize these points of advantage, he determined to make Goa the capital of India. He fortified the island, and under him and succeeding viceroys the city rose to regal splendor and almost fabulous wealth. Although its glory has long since departed, it is one of the few footholds in Asia retained by the Portuguese through all the vicissitudes of the centuries. A glimpse of Goa in the height of its magnificence will be given later.

For a number of years after da Gama's first voyage, the Portuguese devoted all of their energy to establishing themselves on the African and Malabar coasts. However, their ambition, or rather their greed of financial gain, caused them to cast longing eyes on the Farther East. They learned that many of the products they were purchasing on the Malabar coast were coming to them at second and third hand. Pepper and ginger were produced in abundance on this coast, but cloves, nutmegs, mace, camphor, and benzoin came from far to the eastward. A bahar (5 quintals, or 500 pounds) of cloves, which was worth 2 ducats in the Moluccas, was worth 14 ducats by the time it reached Malacca, and 500 in Calicut where the Portuguese received it. (At this period it was worth 1680 ducats in London.) (Tschirch, "Handbuch der Pharmacognosie," p. 730.) Further, the Portuguese learned that the Moors were carrying on a trade between the islands and the Red Sea ports. Here, then, was a portion of the commerce of the Indies, which did not pass through Portuguese hands, from which they were deriving no revenue. This could not be tolerated.

As early as 1505 Almeida reached the island of Ceylon, where much of the cinnamon was and is produced. In 1509 an expedition reached the port of Malacca, on the straits of the same name. Malacca was at that time a thriving commercial city of 150,000 souls, a market much resorted to by merchants from Arabia, India, China, and the great archipelago to the southeast. A foothold in Malacca was obtained only after severe fighting. Singapore, down the Straits, at the tip of the Malay Peninsula, was reached shortly after Malacca. (Tschirch, p. 730.) In 1511 three ships sent out by Albuquerque, under d'Abreo, coasting along the south of the great islands of Sumatra and Java, reached the Banda Islands and Amboyna, the sources of the world's supply of nutmegs and mace. In 1512 a ship of this same squadron, commanded by Senano, leaving Banda, succeeded, after many misfortunes, in reaching the true Moluccas, a group consistting of Ternate, Tydore, and several other very small islands, frequently known as the "Clove Islands." These are supposed to have been the first Europeans to tread these tiny islands, the desire for control of which was to cause endless strife between Portuguese, Spanish, Dutch, and English, as well as abject misery to the islanders themselves. Marco Polo and some later travellers had gone no farther east than Java. (Tschirch, p. 731; also Purchas, ii, p. 83.)

In June, 1513, we find Manuel of Portugal writing to the Pope of the successes of his commanders in India. He informs the Pope that Alfonso d'Albuquerque sailed to Malacca, between Sinus Magnus and the Ganges estuary, and found it a town of immense size, abounding in spices, pearls, gold, and precious stones. The place was captured and a fortress built. The King of Ansiam (Siam) sent a golden cup with a carbuncle and a sword as a pledge of amity. Returning to India, d'Albuquerque found Goa, formerly won with great bloodshed, attacked by Moors, whom he defeated. (Calendar of State Papers, Colonial, East Indies, 1513–1616, pp. 1–2.) It is significant to note that Manuel mentions spices first in the list of products of this wonderful city of the East.

In the course of a few years the Portuguese tightened their grip upon the commerce of the Indies, until from the Cape of Good Hope to the Moluccas they held it almost entirely in their control. The Moors continued to do a little surreptitious independent trading, but it was small in volume. The Spaniards early began to make trouble in the Moluccas, of which we shall learn later. But during the sixteenth century Portugal may be said to have held a monopoly on the trade in the spices, drugs, and dyestuffs of the East.

She had soon obtained a foothold in China. During the ages past the products of China had reached Europe by several indirect routes. In part they were carried across the entire breadth of Asia by caravans to the Caspian or Mediterranean; in part, as we have seen, by caravan to Ormuz and thence up the Euphrates and so to the Mediterranean ports. Chinese junks had also traded to Malacca, where their goods passed into the hands of the Moors, who carried them to Ormuz, Aden, or Suez. All of these routes were exceedingly expensive, which explains the fact that during the Middle Ages rhubarb was one of the most costly drugs used in Europe.

"But from yeere 1554 Lionell of Sosa . . . made a covenant with the Chinese that they would pay their duties and that they should suffer them to doe their businesses in their ports. And since that time they doe them in Canton, which is the first part of China, and thither the Chinaes do resort with their silks and Muske which are the principal goods the Portuguese buy in China." (Purchas, xi, p. 541.)

The foregoing, taken from the journal of Gaspar da Cruz, one of the early

Portuguese missionaries to China, refers to the colony at Macao. From another source we learn that " Machan, or Makau, is inhabited by Portuguese who traffic with the men of Canton . . . but the Portuguese may not go thither . . . they suffer the Portuguese to choose a factor among themselves who in all their names is licensed to goe to Canton, there to buy what they desire, but at night he must lye in the suburbs without the towne." (Linschoten, H. S., p. 145.)

A travel story which serves not only to throw light upon the methods of the Portuguese, but also to show how large a part of the merchandise exported from those countries consisted of drugs and spices, is that of M. Cæsar Fredericke, a Venetian merchant, who travelled in the Far East from 1563 to 1581. The story is very lengthy, and only brief extracts will be given. Fredericke went by caravan from Aleppo to the Euphrates, down that stream by boat to Bassora, where he reshipped for Ormuz. Since we have already seen something of the commerce of Ormuz, we will pass on to Goa. Among the wares received in this city for distribution to various ports of the Indies and for shipment to Europe, Fredericke mentions the following: " All sorts of spices, silks of China, Sandols (sandalwood), elephant's teeth (ivory), velvets of Vercini, . . . great quantity of Indico (indigo), dried ginger and conserved myrabolans, . . . great store of sugar, great quantity of cotton, abundance of opium, assafetida, other sorts of drugges, and precious stones."

He mentions the city of Chaul, on the Malabar coast, where he saw many cocoanuts. He gives a very detailed description of the numerous uses made by the natives of this nut and of the other products of the tree which bears it. " There goeth forth out of Chaul for Malacca, for the Indies, for Macao, for Portugal, for the coasts of Melinda, for Ormuz, indico, opium, cotton, silke, fetida, yron, corne, and other merchandise." Among the products of the kingdom of Cananor are enumerated: " cardamomuma, pepper, ginger, honie, great nuts (cocoanuts), areka." Of the areka he says, " which fruit they eat in all these parts of the Indies . . . with the leafe of an herbe which they call Bettell (Piper Betel), family *Piperaceæ,* like unto our Ivie leafe . . . they eat it made in plaisters with the lime made of Oister shells . . . and it is used daily . . . when this people eate and chawe this in their mouths it maketh their spittle to be red like unto blood, and they say it maketh a man to have a very good stomacke and a sweet breathe, but in my judgment they eat it rather to fulfill their filthie lustes and of a knaverie, for this Herbe is moyst and hote." The above is one of many descriptions of the betel-chewing habit found in the journals of the travellers of this and earlier periods. All the writers describe the habit much as Cæsar Fredericke has done.

Speaking of the pepper trade at Cochin, our traveller says that the officers of the King of Portugal made a contract for the price of pepper, " and by reason of that agreement, the price can neither rise nor fall, which is a very low and base price, and for this cause the villains bring it to the Portugalls green and full of filth. The Moores of Mecca, that give a better price, have it cleane and drie and better conditioned. All the spices and drugs that are brought to Mecca are *stollen from thence* as *contraband.*" (Italics mine.)

Fredericke says that in the Island of Zeilan (Ceylon) there is much fine " Sinamon " (cinnamon) as well as pepper. " Nuttes " (cocoanuts), and " Arochoe " (areca), also " Christall Cat's eyes." He describes the gathering of cinnamon, which he took great pains to go to see, in spite of the fact that the Portuguese were at that time in arms against the islanders. " They cut the barke round about in length from knot to knot, or from joint to joint, above and

below, and then easilie with their hands they take it away, laying it in the sun to drie. . . . The next yeare it will have a new barke, and that which is gathered every yeare is the best Sinamome. . . ."

In Sumatra, we are told, are found great store of pepper, ginger, and "Benjamin" (benzoin). He tells us how the Portuguese used the strategic position of Malacca to aid them in controlling the commerce of Farther India, and to derive a revenue therefrom: "All the ships that sail in these seas . . . are bound to touch at Malacca to paie their custome . . . and if by night they escape away, then they fall into a greater danger after, for if they come into the Indies and have not the seal of Malacca, they pay double custom. The sailing from Malacca toward the east is not common for all men, as to China and Japan, but only for the King of Portugal with leave granted."

Fredericke tells us that each year one galleon of the King's leaves for the Moluccas (Ternate and Tydore) to lade cloves, and one for Banda to lade nutmegs and mace. The trade of these three was a monopoly of the Portuguese crown. The principal merchandise leaving China he states to be "gold in plates, silk, damask, taffeta, quantities of muske, quicksilver, cinaper (cinnabar), camfora, infinite variety of porcellane ware, and roots of China (Smilax China). The Rhubarbe commeth from thence over lande by way of Persia, because that every yeare there goeth a great Caravan from Persia to China."

The Portuguese commander of Malacca sent every year a small ship to Timor (seven or eight hundred miles east of Java) to load "white Sandols," the supply of the best quality of this much esteemed aromatic wood being found in that island. He also sent a vessel to "Canchin China" to get "wood of Aloes" (the wood of *Aquilana agallocha,* formerly much used as incense. Not to be confused with the drug aloes.) At this point in his narration, Fredericke extols at length the "excellent gentle vertue" of the Nypa or Nypher wine (a beverage made by fermenting the juice of the Nyper palm), which he says will cure even if "one were rotten with French pockes."

As the products of Pegu (in lower Burmah) are given gold, silver, precious stones, benjamin, long pepper, lead, "lacca" (lac or shellac), rice, wine, and sugar. Our author tells us of a speculation in opium which he made. Knowing that opium was very dear in Pegu, he went to Cambaya, where he invested 2100 ducats (every ducat 4 pounds 2 shillings, about one dollar) in opium, thinking to make a handsome profit by selling at Pegu. However, just one day before he reached Pegu, a ship carrying a great amount of opium was driven into that harbor by a storm. When Fredericke arrived he found that "opium was now at a base price . . . so that I was glad to stay two years in Pegu unless I would have given away my commodite."

Cæsar Fredericke also undertakes to enumerate the principal products of India and adjacent countries, with information as to where and how each is obtained. A few of his statements may be of interest.

"The cloves come from the Moluccas, which are two islands (Ternate and Tydore) not very great, and the tree that they grow on is like to our Laurell tree."

"The nutmegs and maces, which grow together, are brought from Banda . . . the tree is like to our walnut tree." (Nutmegs and mace are both obtained from *Myristica fragrans,* the former being the kernel of the seed, the latter the arillode partly enclosing the seed.)

"All of the good white Sandol is brought from the island of Timor. Camfora, being compound, cometh all from China, and all of that which groweth in canes

from Borneo, and I think that this Camfora (the latter kind) cometh not into these parts, for that in India they consume great store, and that it is deare." The author here distinguishes between camphor (from *Cinnamomum camphora*) and Borneo camphor (from *Dryobalanops aromatica*). From references to camphor in early records it is frequently difficult to determine which kind is referred to. Garcia da Orta, whose work, " Colloquios dos simples e drogas he cousa medicinais da India," was published in Goa in 1563, was probably the first to clearly differentiate the two camphors. (Clusius, " Aromatum Medicamentorum Simplicium Historis," Antwerp, 1613, pp. 36–39.) Borneo camphor was much used in India by the wealthy in connection with the betel-chewing habit. It was used also in celebrating the funeral obsequies of Indian princes. (Flückiger and Hanbury, " Pharmacographia," pp. 512–517.)

Fredericke gives an entirely erroneous account of the manner of obtaining musk, in brief his explanation being that it was made by pounding an animal with stones and putting the dried mixture of flesh and blood into sacks made of the skin of the animal. This explanation, or a very similar one, is found in several of the old records. Musk really consists of the preputial follicles of the musk deer (*Moschus moschiferus*), a native of Tartary and Siberia. Musk was held in even higher estimation during the Middle Ages than at present as a perfume. (" The Voyage and Travel of M. Cæsar Fredericke," Hakluyt's Voyages, v, pp. 365–449.)

A picture of the viceregal city of Goa, as it was seen at the pinnacle of its glory near the close of the sixteenth century, will give us a conception of the immense wealth which accrued to the Portuguese from their traffic in the products of the Indies. We may have called to our attention some of the factors which were working to destroy the proud structure which the Portuguese had reared.

Jan Huyghen van Linschoten's description of Goa as he saw it during his six years' residence (1583–1589) is one of the best that has come down to us. From it we learn that Goa was the official residence, not only of the Viceroy, but of the King's counsel and the Archbishop of the Indies. The Viceroy held office for three years, and seems to have found little time to devote to the king's business, since the first year was consumed in learning the " customs and manners " of his position, the second in industriously accumulating treasure for himself, and the third year in getting his accounts into order so that he would not be surprised by the new incumbent. The Portuguese of Goa, no matter how humble their station had been at home, were all gentlemen, and were served by slaves, who were very plenty and cheap. Many Portuguese men married native women, the children of such unions being called mesticos. He writes of the King's Hospital located at Goa, and says that of the 500 patients who entered yearly few came out alive.

Linschoten mentions most of the countries of southern Asia as represented among the merchants who gathered at Goa. A fair or market was held every morning between the hours of seven and nine. Among the principal commodities offered for sale were " Arabian horses and all kinds of dried drugs, sweet gummes fine and costly." Many slaves, both men and women, were also offered for sale in this market.

Most of the Portuguese ships for India went directly to Goa and there unloaded. Linschoten informs us, however, that they came out with very light cargoes, most of the spices and other commodities purchased being paid for at this period in coin. One great ship yearly went directly to Malacca, not calling in India proper unless in distress for water. Each ship was manned by about

500 men, and of these, as many as thirty or more commonly died on the outward voyage. (Jan Huyghen Linschoten, H. S., vols. i and ii.)

The narrative of Pyrard de Laval was written about 1618. This observer confirms many of Linschoten's statements, and gives some additional matter of interest. He goes into detail in regard to the magnificence of the establishment maintained by the Viceroy. This dignitary, he says, never went abroad into the city without having his intention of doing so proclaimed on the previous day, in order that all nobles and officials might assemble on horseback to honor his progress. De Laval places the Viceroy's annual salary at 30,000 cruzadoes, but states this amount was only a trifle compared with the vast sums amassed by means of gifts, bribes, and sale of privileges.

The Church enjoyed great prosperity in this golden era of the history of Goa. The city boasted a cathedral of superb architecture, besides numberless churches and the houses of many religious orders. The Inquisition also was firmly intrenched. De Laval's estimate of the royal hospital is quite different from that of Linschoten. He considers it one of the finest in the world in every respect. He was himself a patient in it, and speaks in terms of highest praise of the treatment and care. Possibly the management may have changed since Linschoten's day. The Jesuits were in charge at the time of which de Laval writes, and he considers them remarkably efficient. He says that the most common ailments were fevers, dysenteries, and venereal diseases. When the carracks arrived, great numbers of the crews, ill with scurvy and afflicted with ulcers, were removed to the hospital. (Pyrard de Laval, H. S., vol. ii, chap. i–viii.)

Tavernier wrote of conditions as they were about 1660, by which time the Dutch and English had encroached terribly upon the Portuguese commerce, with a consequent decline in the prosperity and magnificence of Goa. Tavernier tells us that in the good old days of Portuguese monopoly two or three ventures on voyages to the Moluccas or Japan, with a return of five to ten on the investment, wêre sufficient to make a man wealthy. Now, however, the Dutch had robbed them of so much trade that many of the Portuguese in Goa were impoverished. Very scornful are Tavernier's references to the " Hidalgoes of the Cape of Good Hope," the Portuguese of mean birth who prefixed the title of " Dom " to their names on rounding the Cape.

Tavernier describes the five governments into which Portuguese India was divided. The government of Mozambique, which included, apparently, all of the Portuguese forts and factories on the east coast of Africa, had been a rich sinecure in the former days. Our writer mentions one governor of this coast who after three years' tenure of office returned with ambergris worth 20,000 e'cus (450,000 to 660,000 dollars), besides gold and ivory. The government of Malacca was important because, as we have seen, all vessels returning from the East to Goa had to show the receipt of the Malacca customs house. The government of Ormuz had (by Tavernier's time Ormuz had been lost to the Portuguese) collected revenues on all of the commerce of the Persian Gulf, as well as on the pearl fisheries. The other governments were those of Ceylon and Muscat. The five governors were appointed by the Viceroy, and Tavernier considers that few monarchs have the distribution of such rich patronage as did the Viceroy of the Indies. Tavernier describes at length the many tropical fruits to be had in Goa, and adds: " Certainly a good pippin is worth more than all of these." May it not be supposed that in the midst of the luxuries of Goa the heart of the traveller yearned for *" La belle France "?* (Jean Baptiste Tavernier, " Travels in India," translated by V. Ball, i, chap. xiii.)

(To be continued.)