

## Michele de Cuneo's Letter on the Second Voyage, 28 October 1495

**M**ICHELE DE CUNEO BELONGED TO A NOBLE FAMILY OF SAVONA, ON THE LIGURIAN LITTORAL a few miles west of Genoa. His father, Corrado de Cuneo, in 1474 had sold to Domenico Colombo, father of the Admiral, a country house near Savona; and it is probable that he and Christopher were boyhood friends. His language shows him to have been a cultured though not a scholarly writer, with the point of view of an Italian gentleman of the Renaissance, savoring life and adventure, full of scientific curiosity.

Cuneo accompanied the Second Voyage as a gentleman volunteer. There were at least four other Genoese in the fleet; perhaps Cuneo was instrumental in bringing them to Cadiz. He took part in the first exploring expedition under Hojeda to the interior of Hispaniola, and with Columbus made the voyage of discovery to Cuba and Jamaica of April-September 1494. Returning to Savona in 1495, he addressed this letter to a friend and fellow-citizen, Hieronymo Annari, who had asked him for information about the New World. His language is literary Italian, but contains a number of Genoese dialectal expressions.

The original letter has disappeared. The existing manuscript, a copy made about 1511 by one Jacopo Rossetto, belongs to the Library of the University of Bologna, whose librarian, Olindo Guerrini, first gave it to the world in 1885. Its authenticity was then challenged because of inconsistencies in style; but it has passed the scrutiny of the paleographer Carlo Malagola, Director of the Archives of Bologna, of Henry Harrisse, and of Cesare de Lollis, who printed it in full in his *Raccolta Colombiana* III ii 95-107. De Lollis's text is the one used for this translation, which Miss Luisa Nordio, then Assistant Professor of Italian at Vassar College, made for me in 1940, and which is, I believe, the first complete one to be published.

Michele de Cuneo was a jolly dog and good raconteur, in contrast to Columbus

and the rather solemn Spaniards who wrote on the early voyages. He didn't care whether or not this was the Orient, or whether its discovery had been foretold in the Sacred Scriptures, so long as he had a good time, which obviously he did. Although his narrative is somewhat confused, it is valuable for personal touches, incidents that nobody else related, and a lively account of fauna, flora and native manners and customs.


This letter is of special interest in relation to the discovery of the Virgin Islands, Jamaica, and Puerto Rico. The unsolved question of where Columbus first landed in Puerto Rico is thoroughly discussed in Aurelio Tío *Nuevas Fuentes para la Historia de Puerto Rico* (Universidad Interamericana de Puerto Rico, 1961) pp. 121-53.

Subheadings have been supplied by the editor.

Savona, 15 October 1495

To the noble Lord Hieronymo Annari

My noble honored lord:

 I have received yours of the 26th ult., to which I sent a brief reply, thinking that within a few days I

would have been with you. But, since now this cannot be, I have decided to satisfy your request concerning the subject about which you wrote me. Should I, perhaps, not write as full a report as you wish, please excuse me; since, as I told you in my previous letter, all my papers are still in Nice.

CONCERNING THE NEW THINGS OF THE ISLANDS OF THE WESTERN  
OCEAN DISCOVERED BY DON CRISTOFORO COLUMBO OF GENOA

*a. From Cadiz to Hispaniola*

In the name of Jesus and of His Glorious Mother Mary, from whom all blessings proceed.

On 25 September 1493, we departed Cadiz with 17 sail, in perfect order in every respect; to wit, 15 square-rigged and two lateeners, and on 2 October we made the Grand Canary. On the following night we sailed and on the 5th of the same month we made Gomera, one of the Canary Islands. If I should tell you what we did in that place with salvos, lombard shots and fireworks, it would take too long. This we did because of the Lady of that place, with whom our Lord Admiral in other times had fallen in love.<sup>1</sup> In that place we took on fresh supplies of all that we needed. On 10 October we sailed

on our direct course, but, because of contrary weather, we remained for 3 days near the Canary Islands. On 13 October, being a Sunday, in the morning we left the island of Ferro, the last of the Canary Islands and our course was W by S. On 26 October, the vigil of SS. Simon and Jude, at about 4:00 P.M., the fortune of the sea began to strike us in such a way that you would not believe it. We thought our days had come to an end. It lasted all that night and until day in such a manner that one ship could not see the other; in the end it pleased God that we should find each other, and on 3 November, a Sunday, we saw land, that is to say, five unknown islands. The first our Lord Admiral called *Sancta Dominica* because of

the Sunday on which it had been discovered; the second *Sancta Maria la Gallante* for love of the ship in which he sailed, which was called *Maria la Gallante*.<sup>2</sup> The two islands were not too big; however the Lord Admiral charted them. If I well remember, from the island of Ferro to the island of Santa Maria la Gallante it took us 22 days, but I believe that with good wind one could cross over easily in 16 days.

In the said island Santa Maria la Gallante we took on water and wood; the which is not inhabited although full of trees and flat. The same day we sailed thence and we came to a big island which is inhabited by Caribs,<sup>3</sup> who as soon as they saw us, instantly ran to the mountains. We landed on this island and stayed there for about six days; and the reason for our staying was that eleven of our men formed themselves into a company for purposes of robbery and went into the wilderness five or six miles, so that when they wished to return they did not know how to find their way, and this in spite of the fact that they were all seamen and looked for the sun, which they could not well see because of the thick and dense forest. The Lord Admiral, seeing that those men were not coming and could not be found, sent 200 men divided into four squads, with trumpets, horns and lanterns, yet for all this they could not find them, and there were times when we were more in doubt about the 200 than for the first ones. But it pleased God that the 200 came back very tired and hungry. We thought that the eleven had been eaten by the aforesaid Caribs, who are accustomed to do that. However, at the end of five or six days, the said eleven, as it pleased God, even with little hope to find us, started



THE CARIBEE ISLES  
as shown on Juan de la Cosa's World Map  
of 1500

a fire on top of a rock; and we, seeing the fire, thought they were there and sent them the boat, and in this way they were retrieved. Had it not been for an old woman who by signs showed us the way, they would have been lost, because on the following day we meant to make sail for our voyage.

In that island we took twelve very beautiful and very fat women from 15 to 16 years old, together with two boys of the same age. These had the genital organ cut to the belly; and this we thought had been done in order to prevent them from meddling with their wives or maybe to fatten them up and later eat them. These

boys and girls had been taken by the above mentioned Caribs; and we sent them to Spain to the King, as a sample. To that island the Admiral gave the name of *Santa Maria de Gadalupe*.<sup>4</sup>

From this island of Guadaloupe, which belongs to the Caribs, we set sail on 10 November and on the 13th of the same month we came to another island of Caribs very beautiful and fertile, and we arrived at a very beautiful harbor.<sup>5</sup> As soon as the Caribs saw us they ran away to the mountains like those of the other island and they emptied their houses, into which we went and took whatever pleased us. In these few days we found many islands where we did not go ashore. A few times we anchored, that is, for the night; and when we did not anchor we kept the ship hove-to, and this in order not to make any headway and for fear of running afoul of the said islands, to which, because they were close one to the other the Lord Admiral gave the name of Eleven Thousand Virgins;<sup>6</sup> and to the one previously mentioned, Santa Cruz.

One of those days while we were lying at anchor we saw coming from a cape a canoe, that is to say a boat, which is how they call it in their language, going along with oars so that it looked like a well-manned *bergantino*,<sup>7</sup> on which there were three or four Carib men with two Carib women and two Indian slaves, of whom (that is the way the Caribs treat their other neighbors in those other islands), they had recently cut the genital organ to the belly, so that they were still sore; and we having the flagship's boat ashore, when we saw that canoe coming, quickly jumped into the boat and gave chase to that canoe. While we were approaching her the Caribs began shooting at us with

their bows in such manner that, had it not been for the shields, half of us would have been wounded. But I must tell you that to one of the seamen who had a shield in his hand came an arrow, which went through the shield and penetrated his chest three inches, so that he died in a few days. We captured that canoe with all the men, and one Carib was wounded by a spear in such a way that we thought he was dead, and cast him for dead into the sea, but instantly saw him swim. In so doing we caught him and with the grapple hauled him over the bulwarks of the ship where we cut his head with an axe. The other Caribs, together with those slaves, we later sent to Spain. While I was in the boat I captured a very beautiful Carib woman, whom the said Lord Admiral gave to me, and with whom, having taken her into my cabin, she being naked according to their custom, I conceived desire to take pleasure. I wanted to put my desire into execution but she did not want it and treated me with her finger nails in such a manner that I wished I had never begun. But seeing that, (to tell you the end of it all), I took a rope and thrashed her well, for which she raised such unheard of screams that you would not have believed your ears. Finally we came to an agreement in such manner that I can tell you that she seemed to have been brought up in a school of harlots. To that cape of that island the Admiral gave the name Cape of the Arrow because of the one who had died of the arrow.

On 14 November we set sail from that island with very bad weather. On the 18th we made a very beautiful and very large island inhabited by Indians, which they call, in their language, *Boriquen*, which the Admiral called *San Juan Bau-*



*tista*.<sup>8</sup> During our five days' sailing we saw both to starboard and to port many islands, all of which the Lord Admiral caused to be distinctly entered on the chart. And for your own information, in that island we took on provisions, and on the 21st made sail and on the 25th in the name of God made the island of Hispaniola, previously discovered by the Lord Admiral, where we anchored in an excellent harbor called *Monte Christi*.<sup>9</sup> In these few days we had again very bad weather and saw about ten islands. We estimated that course from the island of Dominica to Monte Cristi to be 300 leagues. In this navigation of ours several times we could not follow a direct course because depth [of water] was wanting.

On 27 November we sailed to go to *Monte Santo* where on his previous voyage the Admiral had left 38 men, and on that very night we came to the very place.<sup>10</sup> On the 28th we went ashore where we found all our above-mentioned men dead and still lying there on the ground without eyes, which we thought to have

been eaten; because, as soon as they [the Indians] have beheaded anyone, immediately they scoop out the eyes and eat them. It could have been from 15 to 20 days that they were dead. We met the lord of that place called Guacanagarí who, with tears running down his breast (and so all his men), told us that the lord of the mountains called Caonabó had come with 3,000 men, and he to spite him had killed them together with some of his own people and robbed them. We could find nothing of all that the Lord Admiral had left; and, hearing this, we believed what they told us. We stayed 10 days in the neighborhood, and on 8 December left that place because it was unhealthy on account of the marshes which are there,<sup>11</sup> and we went to another location still in the island, in an excellent harbor where we landed; and there we built 200 houses which are small like our hunting cabins and roofed with thatch.<sup>12</sup>

When we had built the above-mentioned settlement for our residence, the inhabitants of the island, as far from us as one or two leagues, came to see us as if we

had been their brothers, saying that we were men of God come from Heaven, and they stood there full of wonder to contemplate us, and brought us some of their things to eat, and we presented them with our stuff; wherefore they behaved like brothers. And here finished the goal and

1. *tincto d'amore*, lit. "impregnated with love." The lady was Doña Beatriz de Peraza, ruler of Gomera. For this "affair," for which Cuneo is the only authority, see Morison *A.O.S.* I 212-15 (one-vol. ed. 164-5).
2. Dominica and Mariegalante. Columbus's flagship on this voyage was a big carrack named *Santa Maria*, to which the sailors added *la Galante* because she was a gallant ship. For this part of the voyage see Morison *A.O.S.* II 63-99 or *C. C. Mariner* 95-102; but my identification of the smaller islands has been revised by Leonardo Olschki "The Antillean Nomenclature of Columbus's Second Voyage" *The Geographical Review* XXXIII no. 3 (1943) 397-414.
3. *Camballi*, which in the ms. means either Carib Indians or Cannibals, the latter word being derived from the former.
4. Guadeloupe, named by Columbus after the famous shrine in Spain, which he had visited between voyages.
5. Salt River, St. Croix.
6. *le XI milia vergine*, the Virgin Islands, named by Columbus after St. Ursula and the 11,000 Virgin Martyrs of Cologne. See Morison *A.O.S.* II 86-8.
7. This word, *bergantín* in Spanish, meant a small, fast sailing vessel provided with a bank of oars, used for coastal work. It was somewhat heavier and more seaworthy than the *fusta*, to which both Columbus and

end of our voyage.

Later I shall tell of another voyage which afterwards I took with the Lord Admiral when he decided to search for mainland; but now I shall tell something else. First of the search for gold in the island Hispaniola.

- Cuneo compared the bigger Indian dugouts. A *bergantín* had nothing in common with a modern brigantine. This skirmish took place at Salt River, St. Croix.
8. Puerto Rico. The city on the north side, founded by Ponce de León in 1509, was named *San Juan de Puerto Rico*, and the last two words eventually became the name of the island. The fleet called either at Añasco Bay or Mayagüez Bay. See Morison *A.O.S.* II 89-90, 99 (one-vol. ed. 421-2), José G. Ginorio *El Descubrimiento de Puerto Rico* (1936), and Aurelio Tió (p. 210).
  9. See Columbus's Journal for 4 January 1493, note 5.
  10. The fortress of Navidad; see Journal for 25-27 December 1492. *Cabo Santo* was the name that Columbus gave to Cape Haitien.
  11. The mangrove swamps in Caracol Bay.
  12. Isabela on the north coast, the first European settlement in the New World intended to be permanent. The fleet arrived there on 2 January 1494. See Francisco Domínguez y Company *La Isabela, primera ciudad fundada por Colón en América* (Habana 1947) and Morison *A.O.S.* II 96 101-2, and index (one-vol. ed. 430, 494-5). Found unsatisfactory in several respects, such as poor harbor and distance from a supply of fresh water, Isabela, after an ambitious beginning, was abandoned as capital in favor of Santo Domingo, and soon became a ghost city.

### b. How We Explored the Cibao<sup>1</sup>

After we had rested for several days in our settlement it seemed to the Lord Admiral that it was time to put into execution his desire to search for gold, which was the main reason he had started on so great a voyage full of so many dangers, as we shall see more completely in the end. Therefore the Lord Admiral sent two captains with about 40 men, well armed, and with two Indians who were acquainted with that island to a place called *Cibao*, in which he had found that according to Ptolemy there must be plenty of gold in the rivers. These, on their way,

crossed a great river wider and more swift than that of Seville and all the time they found many settlements of those Indians, who always made them good cheer. And being more or less near that place of *Cibao*, and the weather being terrible, and having to cross another very wild river, being afraid of the outcome, we turned back to the nearest settlement to talk with them, and they told us that, positively, in that place of *Cibao* there really was gold in large quantities; and they presented our captains with a certain amount of gold which included 3 big pieces, viz. one worth

9 *castellanos*, another of 15 *castellanos* and the last of 12, which included a piece of rock. This gold they brought to the Lord Admiral telling him all that we have related above, as seen or heard. With this he and all of us made merry, not caring any longer about any sort of spicery but only of this blessed gold. Because of this, the Lord Admiral wrote to the King that he was hoping to be able shortly to give him as much gold as the iron mines of Biscay gave him iron. What happened afterward is as follows.

In the month of February, after the 12 caravels sent by the Lord Admiral had departed for Spain,<sup>2</sup> 500 of our men went together with the said Lord Admiral to that place of Cibao, not too well fitted out with clothes; and on that trip, between going, staying, and returning, we spent 29 days with terrible weather, bad food and worse drink; nevertheless, out of covetousness of that gold, we all kept strong and lusty. We crossed going and coming two very rapid rivers, as I have mentioned above, swimming; and those who did not know how to swim had two Indians who carried them swimming; the same, out of friendship and for a few trifles that we gave them, carried across on top of their heads our clothes, arms and everything else there was to be carried. We went to that place called Cibao and shortly we built a fort of wood in the name of St. Thomas, unconquerable by those Indians.<sup>3</sup> This fort is distant from our settlement 27 leagues or thereabouts. Several times we fished in those rivers, but never

was found by anyone a single grain of gold. For this reason we were very displeased with the local Indians, who all told us that the gold was within the power of King Caonabó, who was about 2 leagues distant from our above-mentioned fort. While we were staying in our fort many Indians came to see us from as far as 10 leagues as if we were marvels, bringing to us some of the gold they had, and they exchanged it with us so that we collected gold to the value of about 2,000 *castellanos*, among which there were some nuggets which weighed 24 *castellanos* and also of other substance as *tiber*.<sup>4</sup> None of us went to find the said King Caonabó because of the scarcity of clothes. That King, they say, could command 50,000 men. Besides the above dealings for a value of 2,000 *castellanos*, there was also exchanged in secret against the rules and our own agreement to a value of about 1,000 *castellanos*. As you know, the devil makes you do wrong and then lets your wrong be discovered; moreover, as long as Spain is Spain, traitors will never be wanting. One gave the other away, so that almost all were exposed, and whoever was found guilty was well whipped; some had their ears slit and some the nose, very pitiful to see.

1. This expedition into the interior, led by Alonso de Hojeda, left Isabela early in January, 1494. See Morison *A.O.S.* II 102-4 (one-vol. ed. 430-3), with chart.

2. The fleet commanded by Antonio de Torres, on 2 February 1494.

3. For map, see Morison *A.O.S.* II 109 (one-vol. ed. 438).

4. I am unable to guess what Cuneo meant by this.

### *c. Fauna and Flora*<sup>1</sup>

Now, to answer in detail to all the things you have asked me, I will say some-

thing about the fruits which grow commonly in all those islands. In them there

are some huge trees which measure around the trunk from 25 to 35 *palmos*, which give a fruit to our taste fit only for pigs.<sup>2</sup>

There are also innumerable cotton trees as big as fig trees.<sup>3</sup> Again there are trees of the same size which give a fruit like the apricot, which is full of small seeds like the seeds of the fig, red as scarlet, which the inhabitants eat but to us it is none too good. Again there is another tree like the last one which makes a similar fruit, but the seeds inside are black, and they eat them, too, and it has the same taste. Of those fruits some are red and some are black in color.<sup>4</sup> There are also trees, which make a fruit as big as our citrus but it is not good to eat because it is very bitter and it has a rind like a squash, and they make out of it drinking vessels like cups, and vases to hold water; for anything else they are no good.<sup>5</sup> There are also some like artichoke plants but four times as tall, which give a fruit in the shape of a pine cone, twice as big, which fruit is excellent and it can be cut with a knife like a turnip and it seems to be very wholesome.<sup>6</sup>

Furthermore there are very big and tall trees which give a fruit which resembles in shape all sorts of things, which has inside from one to three stones as big as eggs; this fruit is excellent to eat and it is immediately digested and it tastes like a peach and even better.<sup>7</sup> More, there are very big and tall trees which give real myrobolans; when they are ripe they are excellent and quickly digested.<sup>8</sup> One can also find a tree all covered with thorns like a porcupine, which gives a fruit like an egg full of wool of a brownish color. This wool can be picked only with canes and is very short like the nap of broadcloth.<sup>9</sup>

Furthermore, there are in those is-

lands trees which give a fruit like pomegranate but not so big, which if you set on fire burns like a torch and gives an excellent light. This tree, if you split it, that is to say, make a cut into it, gives an excellent turpentine with which we cured some of our wounded ones.<sup>10</sup> But the Indians when wounded do not take any remedy and die fistulated.

There are also trees which when cut give milk of which they make something like wax and we have tried it out.<sup>11</sup> There are also trees which have the bark like cinnamon but it is not any way as good as that which comes from Alexandria. In those Islands there are also bushes like rose bushes which make a fruit as long as cinnamon full of small grains as biting as pepper; those Caribs and the Indians eat that fruit as we eat apples.<sup>12</sup>

There grows also in those islands a grassy bush as high as *esparto* which they comb and treat and spin and they make of it nets to fish and they can make it as thick or fine as they please and it is a very strong and beautiful thread.<sup>13</sup> To those nets, in place of lead, they attach stones and, in place of corks, they attach light woods.

Those islands also produce many roots like turnips, very big and in many shapes, absolutely white of which they make bread in the following way: they shred those turnips on certain stones which look like cheese graters as we do with cheese; then they put on the fire a very large stone on top of which they place that grated root and they shape it in the form of a cake and use it as bread and it keeps good for 15 or 20 days, which bread several times was very handy for us. This root is their main food, they eat it raw and cooked.<sup>14</sup>



Those islands also produce innumerable purslane, but they are not as good as ours.<sup>15</sup> There are also in those islands some not too big trees which give a fruit like . . .<sup>16</sup> which also they eat, but for us it is not too good. Has the flavor of acorns.

In those islands there are again huge palm trees, innumerable and very big. The white of it is good to eat; they give a great number of dates but they never ripen and they are good only for pigs.<sup>17</sup> There are also trees that make a fruit which is nine inches around and is as flat as a pancake. It has the skin of a chestnut, it is full inside like an egg; has the flavor of acorns and is excellent food for pigs.

There are also trees which give a fruit like horse-beans but smaller than that fruit, which has a very hard rind and is of the color of metal and the meat is white, good only for pigs.<sup>18</sup> In those islands they sow a fruit which makes a plant like that of chick-peas and it is in the shape and flavor of figs.

For your own information we brought with us from Spain all sorts of seeds, all of which we sowed and tried those which would do well and those that could not. Those which do well are the following: spring melon and cucumber, squashes, radishes; the others, like onions, lettuce and other salad plants and scallions do very ill and grow very small, save parsley which grows very well. Wheat, chickpeas and beans in ten days at the most grow nine inches; then all at once they wilt and dry; although the soil is very black and good they have not yet found the way nor the time to sow; the reason is that nobody wants to live in those countries.<sup>19</sup>

Now, to go on with your request, I shall tell of the quadrupeds which live on



land, of which very few are found, and they are the following: dogs which do not bark, rabbits of three kinds, some as big as hares, some like ours and some much smaller than ours.<sup>20</sup> For this reason that very few animals can be found in those islands, the Lord Admiral brought from Spain the ones most needed; and we found that pigs, chickens, dogs and cats reproduce there in a superlative manner, especially the pigs because of the huge abundance of the aforesaid fruits. Cattle, horses, sheep and goats do as with us.

To continue, we shall now tell of the birds.

First, going from the island of Ferro to the island of Guadaloupe, for six days almost constantly we saw in the air many hawks<sup>21</sup> flying across. We also saw an infinite number of swallows,<sup>22</sup> and that is why we thought we were near either to an island or a continent.

There are in all the islands, as well as of the Caribs as of the Indians, where I

have been, innumerable parrots of three kinds, viz., green all over and not very big, green spotted with red and not too big, and as big as chickens, spotted with green, red and black. Of the last I have eaten several times, their flesh tastes like that of the starling. There are also wild pigeons, some of them white-crested, which are delicious to eat. There are also innumerable swallows and sparrows and some little birds of the forest.

I have now to speak about fish, in which those islands are most abundant. There are octopi, crayfish, seals, mussels,

clams, shrimps, tunny, codfish and dolphins and some other sea-pigs unknown to us.<sup>23</sup> Others are long, big and huge, weighing from 25 to 50 *libre*, excellent and somewhat like sturgeon. Still other fish are of unusual shapes, very good. There is a kind of fish very much like a sea-urchin.<sup>24</sup> Also an infinite number of dogfish<sup>25</sup> which are very good to eat. Also innumerable and very big turtles, weighing from 2 to 15 *cantara*, excellent to eat. Also there is there another kind of fish like a hornpout,<sup>26</sup> which does not taste good to us but the Indians eat it.

1. For a contemporary description of Antillean fauna and flora, Oviedo's *Historia General y Natural de las Indias* (1535) is incomparable.

2. The Royal Palm, whose bud is excellent eating, and whose nuts are still used in the West Indies to feed swine. There is still a saying in Cuba, "One palm will keep twenty pigs."

3. See Columbus's Journal for 4 November 1492, note 8.

4. These are probably the papaya, the guava (*Psidium guajava* or *Clusia sp.*), and some of the native "fruits" mentioned in Columbus's Journal for 21 December 1492, p. 128. H.U.B.

5. The calabash tree, *Crescentia cujete*, subject of Tom Moore's famous poem.

6. The pineapple. This, and a similar description in Dr. Chanca's letter, are the first mentions in literature of this excellent fruit.

7. The mamee apple(?)

8. Myrobolans are a small, sour fruit that was imported dried from the Orient, and used largely for industrial purposes, such as tanning. The tree that Cuneo saw was probably the *Hubo* or Hog-plum.

9. The Seiba or Silk-cotton tree, *Ceiba occidentalis*, whose fibre is not spinnable.

10. "I cannot figure any fruit corresponding to the description. Some trees or shrubs do give turpentine, but they are pine trees, and I cannot see why the author does not mention them by their name. The *avogado* tree gives an abundant resin; but I do not believe the fruit would 'burn like a torch.'" Brother Alain.

11. Undoubtedly Castilloa rubber trees (*Castilla elastica*), according to Professor Purseglove.

12. *Capsicum frutescens, s.l.*, a very hot pepper.

13. Either cotton or sisal (*Agave sisalana*).

14. The manioc, from which the natives made cassava bread; cf. Journal for 26 December 1492, note 1. Several specimens of the graters have been unearthed

in Cuba and Hispaniola, and the earthenware griddles on which the cakes were cooked are fairly common. The art of preparing cassava to eat has descended to the West Indian Negroes.

15. *Portulaca oleracea*. See Columbus's Journal for 28 October 1492, note 5.

16. *como uno costo de melegba*. What he meant is uncertain.

17. Royal palms again; see note 2.

18. *sono di colore de arcella, e lo gariglio e bianco*. Either this or the acorn-tasting fruit mentioned in the preceding paragraph, was *Entada gigas* L. (*E. scandeus* Benth.) a lofty woody climber related to the mimosa, bearing pods that look like flattened horse-chestnuts. These of such specific gravity that they float for great distances. We picked one up at Man of War Cay, Bahamas, where they are not native, and Dr. Bensaude gave me one that had floated ashore in the Azores.

19. Striking testimony to the spirit of the first European colony in America.

20. For the barkless dogs, see Columbus's Journal for 17 and 18 October 1492. There are no native rabbits in the Antilles; Cuneo must mean the *butia*, for which see Journal for 17 November 1492, note 4.

21. *falconi*. Obviously not hawks; probably skua gulls.

22. *rondole*, meaning petrels, often called sea-swallows today.

23. *polpi, aragoste, vituli marini, muzari, lovaci, gambari, toni, bacharali et delfini, et alcuni altri a nuy inusitati porcini*. It is anyone's guess what American species he means by these and other words for fishes, some of which are obsolete in Italian. See the discussion of fishes encountered by Columbus in his Journal for 7 December 1492, notes 14 and 15.

24. *ricio*.

25. *pesci cani*. A *cantaro* was a measure of weight, about 150 pounds.

26. *bagio*.