

THE DUTCH DRAKE MAP
c. 1581

LA HEROIKE ENTERPRINSE FAICT PAR LE SIGNEUR DRAECK
D'AVOIR CIRQUIT TOUT LA TERRE

There are two known editions of this map apparently produced from the same plate, one in the Huntington Library, San Marino, and the other in the New York Public Library. The Huntington edition is the earlier because of the addition of a number of place names and altered legends on the New York copy. Most noticeable of the alterations on the New York edition occurs in the Atlantic and Indian Oceans where a series of letters, reading from top to bottom and left to right spells "MARE OCCEANUS." These scattered letters have been altered to create new legends by adding letters and changing others to make new letters, so that the legend reads "MAR DEL NORT, OCEANVS AETIOPICVS, MAR INDICUM."

These maps have an extremely close resemblance to the French Drake Map in layout, place names and legends, but because of the changes that were probably intended to improve that map, they undoubtedly followed its publication. Where the French map makes no speculation in the Arctic region, the Dutch maps show considerable detail that appears to be derived mainly from Ortelius or Gerard Mercator. More place names are shown on the Dutch maps than on the French map, and the confusing legend appearing on the latter near Greenland is not included.

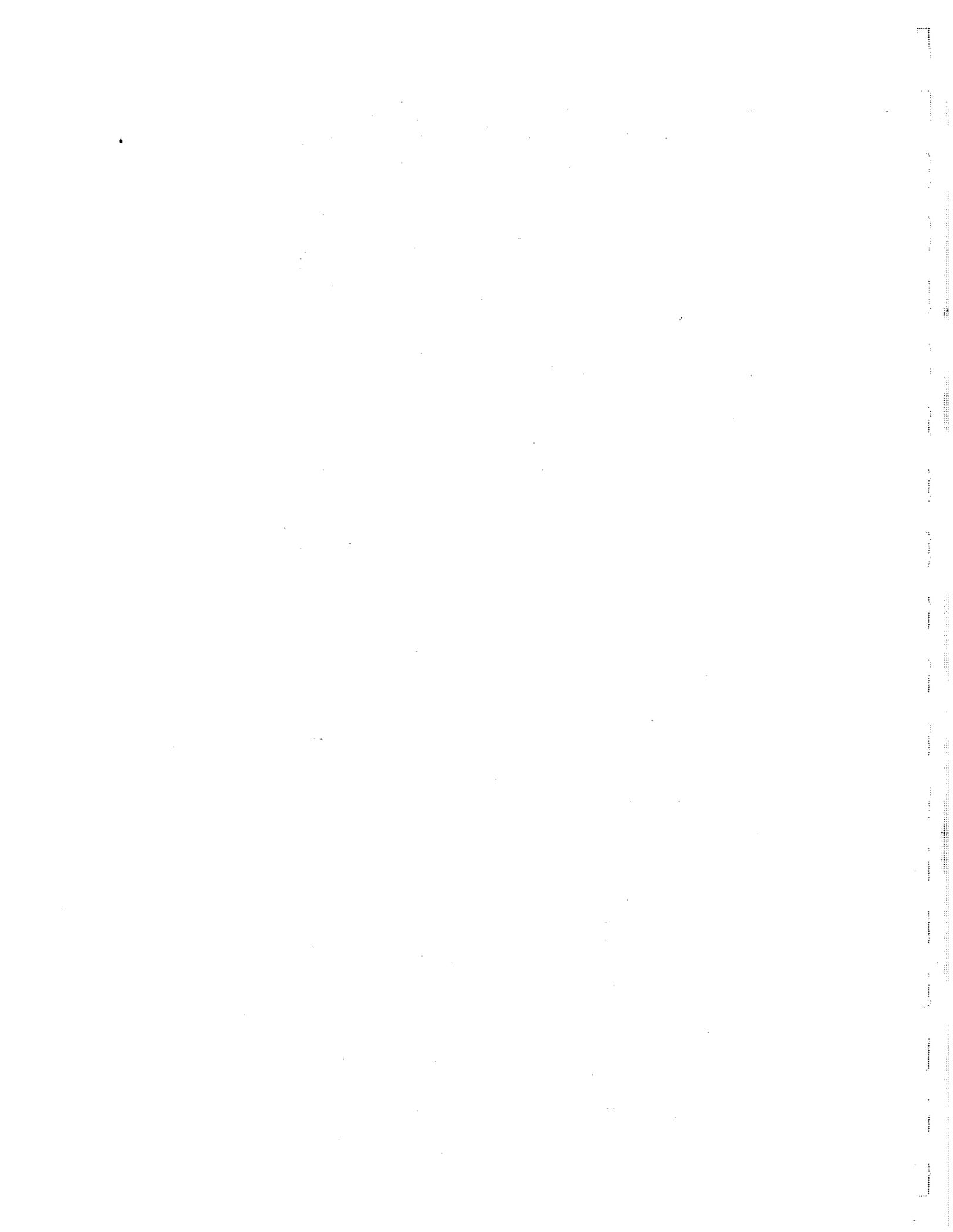
Like the French Drake Map, an early date of issue is indicated by the names "NOVA FRANCIA" and "FLORIDA" where the Virginia Colony was established in 1584. The Dutch maps were probably printed to capitalize on an immediate, popular interest in Drake's voyage and intended for sale in Flanders and the Netherlands. In the legends, the Dutch is summarized in French, probably for the benefit of French speaking people in Flanders.

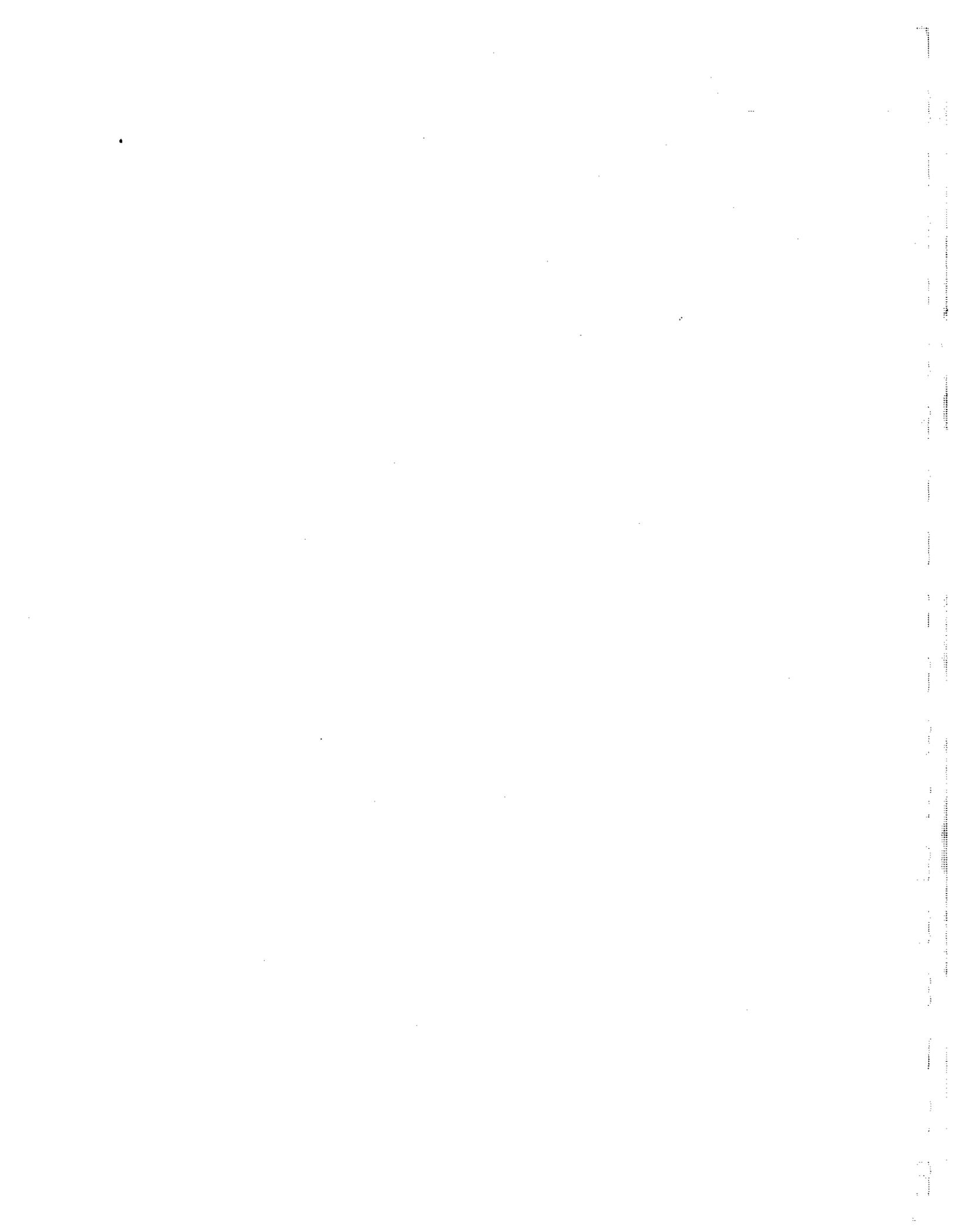
Perhaps significantly, the boundary limits of Nova Albion are not shown on the Dutch maps, nor the English arms below the Strait of Magellan and at Nova Albion, the Tudor Rose eliminated from the border frames of all cartouches, though their design is otherwise almost identical to those in the French map, and even the Cross of St. George in the Golden Hind's flags replaced by what could be either the Cross of St. Andrew (Scotland) or the Cross of St. Patrick (Ireland). Conceivably, these changes were made in view of the fact that the Spaniards

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were then strong in the Netherlands and Flanders was in peril of falling to them. Perhaps for the same reason, the statement at the bottom of the French map, "Carte veue et corige par Le dict siegneur Drack," literally, the world's geography seen by Drake and the map corrected by him, was not copied on these maps.

The size of both copies of the Dutch map is $17 \frac{5}{8}$ " long by $9 \frac{9}{16}$ " wide, just a shade larger than the French Drake Map, which is $17 \frac{7}{16}$ " long by $9 \frac{7}{16}$ " wide. The date and place of publication is not given, nor is there any indication of the name of the engraver.





THE DUTCH DRAKE MAP
c. 1581
(Huntington Library copy)

Translation of Statements Appearing at
Various Places on the Face of the Map

The following translation of statements in Dutch were made by John Dillon of Dillon, Agnew & Marton, Amsterdam, 1969, and subscripts in French by Dr. Gerald Herman, Assistant Professor of French, University of California, Davis, and Robert W. Allen of the Drake Navigators Guild. All translations are literal.

1 - At upper border -- Title of Map:

LA HERDIKE ENTERPRINSE FAICT PAR LE SIGNEVR DRAEK
DAVOIR CIRVIT TOVTE LA TERRE

THE HEROIC ENTERPRISE DONE BY SIR DRAKE TO HAVE CIRCLED
ALL THE EARTH

On the New York Public Library edition HERDIKE was changed to
HEROIKE.

2 - Cartouche in upper left corner -- Description of the Voyage:

Beschriuinge vān Reÿse gadaen by Francoÿs Draek met 5 schepen.
Waer af .2. Verbrande eeniuce derkē eñ een vergink if Seÿlende Vÿt
Engelant den. 13 disseंबर .7.7. Naeden westen om die Ganse
Clout des Aertricx int Oost wederom opcomende ende Alsoo In Eng-
elant Den. 26. September 1580.

Comme le Cap.^{ne} Draeck Singlant D'angleterre a. cercui Entre'lan
'77 . et 80 Toute la terre.

Description of the journey made by Francis Drake with 5 ships of
which 2 burnt down, one returned and one was wrecked sailing off
from England the 13th December '77 in west direction around the
whole Globe of the earth, in the east coming up again and on this
way [back] in England the 26 September, 1580.

How [the manner in which] Captain Drake sailing from England has
circumscribed between the year 77 and 80 all of the earth.

THE DUTCH DRAKE MAP

3 - Cartouche in lower left corner -- Reception of Drake in the Moluccas:

Die herlicke Ontfanckenise eñ Inhalinge Den draeck bewesen van den Coninck der Molucken met. 4. galeien eñ had de groot behagen Int horen der musicque.

La magnifg₃ Reception au roy des Moluques faicte au Sig.^r Draeck.

The magnificent reception and welcome shown to Drake by the King of the Moluccas with 4 galleys and he had great pleasure in hearing the music.

The magnificent reception on the part of the King of the Moluccas made by the said Drake.

4 - Cartouche, lower left center -- Elizabeth Island:

Dat Suýderste deel van Mageliano den . Draeck eerst Ontdaen en Sin niet dan Eýlandē . Waer af tsuýderste bý hem gename .S. Elisabet.

La Partie meridionale Magellanes ne Sont qu' isles

The southern part of the Magellanes, to Drake first discovered, are not but isles of which the most southern was named by him S. Elizabeth.

The southernmost part of the Magellanes are nothing [only] but islands.

5 - Cartouche, lower right corner -- Golden Hind aground:

Beschriuinge vant tship van Draeck Stootende 20. oren Lank tegens een Clip die de heere daer nāweer Verlost heft.

Comme le Vaisseau de Cap.^{ne} Draeck a. Couru grand peril 20. heures de long.

Description of the ship of Drake bumping during 20 hours against a cliff [rock] which the Lord after that again has saved.

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The manner in which the ship of Captain Drake has run a great peril 20 hours long.

6 - Statement off Coast of Nova Albion:

Tournede La Acanse De La glasse

The turning on account of the ice.

On the New York Public Library edition of this map the statement has been changed to read "Tournede F. la cause De La glasse." If "F" stands for Francis, this would read "Francis turning because of the ice." Also, glasse can mean cold as well as ice, but it is probable that it was intended to mean ice.

RICHARD MADOX

Cotton MSS, Titus B., VIII, British Museum, London

E. G. R. Taylor, "Francis Drake and the Pacific: Two Fragments," The Pacific Historical Review, I (September, 1932), 360-369.

Because of the interest associated with Professor (Miss) Taylor's discovery in 1932 of Richard Madox's diary comments relative to Nova Albion -- and because of the later use of the Indian words found therein by Heizer and Elmendorf to identify the site of Drake's landing and encampment within California's Coast Miwok territory (Marin County and southern Sonoma County -- in the vicinity of 38 degrees), we reproduce Professor Taylor's introductory comments relative to Madox's diary.

"The poverty of authentic and strictly contemporary material relative to the inception and conduct of Drake's voyage of 1577-80 is notorious, and Stow's statement (made in 1592) that on his return 'books, pictures & ballads were published in his praise' is not only unconfirmed but directly contradicted by the words of the rhyming publicist Henry Roberts. Roberts (following his custom) penned a Ballad in Farewell when Drake went to sea in 1585, and referring to the circumnavigation says: 'I did expect some Ovid's pen to paint his worthy praise, But none hath writ....' and his heart failed him when he thought to attempt the task himself. Thus every scrap of relevant material that can be garnered is of interest and value to the student, a fact that must be the justification of the present article, dealing as it does, without any attempt at completeness, with two fragmentary documents."

"The first of these (1) can be connected with Drake only by inference, albeit a strong one. It is part of an English manuscript Navigating Manual... prepared in 1577...." Since this does not throw direct light on Drake's visit to Nova Albion, we omit further reference to the Manual and continue with Miss Taylor's comment.

"The second document (2) is a hitherto unnoticed reference to New Albion in the Diary of Richard Madox, chaplain on Fenton's ship in 1582.

1. Harleian MSS., No. 167, British Museum, London. See below [in Miss Taylor's paper] for transcript.
2. See below [in Miss Taylor's paper].

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A number of Drake's officers, including William Hawkins, John Drake, and the foul-mouthed pilot Thomas Hood, were sent out with Fenton, and the conversations often turned on the incidents of the circumnavigation which they were engaged in following up. Madox jotted down any matters that interested him, but in a very disorderly fashion. The description of New Albion follows a note on how to cure a foundered horse, and is followed in turn by a sketch of a sailing raft as used on the Peru Coast and (on the folio overleaf) by a vocabulary of the language of Java. The first point of interest is that the name of New Albion is not mentioned, the country subsequently so called being referred to as Ship's Land. This change of name is a reminder, if such be needed, of the way in which the story of Drake's voyage as we know it has been edited and worked up for publication. (1) The unvarnished account of the Anonymous Narrative probably comes nearer to the truth, just as the diaries of Madox and Walker give a more exact account of what transpired on the Fenton voyage than the colourless 'official' narrative of Ward which Hakluyt printed. The truth, however, is never suited for public consumption, and even in his private diary Madox did not dare to write in plain English, but resorted to Latin, Greek, and even cipher, while inventing a fictitious nomenclature for the leaders whose quarrels and intrigues he records. As regards Ship's Land, however, there was no need for secrecy. It was on the back side of Labrador (50°-60°), and as Christopher Hall believed, 'nigh unto it'. Hall was one of Frobisher's captains during the search for the Northwest Passage, and had written an account of the third attempt for John Dee. He was a man of great experience, and before joining Fenton's fleet had come from Spain with a despatch from the English spy, Roger Bodenham, bringing news of Sarmiento's fleet which had left Spain to fortify the Straits. The document then contains the categorical statement that Drake graved and trimmed his ship in 48° N., which agrees with a later account by John Drake. Now there can have been no possible reason for any falsification of the facts in a shipboard discussion, or in a diary jotting meant for the writer's eye alone. (2) Thus it would appear that Drake's anchorage must

1. Yet, "Nova Albion" is inscribed on the plate of brass. Ed.
2. There is an abundance of evidence that Drake repaired his ship and encamped in the vicinity of 38°. By inference it can be assumed that Drake's activities on the Northwest Coast of America were moved up to 48° to protect the English claim of possession which was otherwise placed in jeopardy by the Cabrillo voyage of 1543. Ed.

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be sought in Oregon rather than in California, perhaps in Gray's Bay, or at the mouth of the Raft River. ⁽¹⁾ If he approached, but just fell short of, the latitude of Juan de Fuca Strait, the statement in The World Encompassed that the land seen was 'running on continually Northwest, as if it went directly to meet with Asia' is in accordance with fact, and Mt. Olympus, snow-capped even in June, would presumably have been sighted. There seems little reason to doubt that John Dee's mention, in 1577, of a British subject about to solve the Anian problem, i. e., the possible link between northwest America and Asia, had reference to Drake. There is abundant evidence, too, that Drake himself at least bore in mind the possibility of getting home by the Northwest Passage. He could not have come to the decision he did, namely, that the American coast trended northwestward, if he had reached a latitude much short of 48° N.

"It had been hoped by the present writer that the few Indian words transcribed by Madox might form a decisive clue to Drake's landing place, but Professor Sapir, who kindly examined them, could come to no definite conclusion, and Professor Olson could say no more than that a Chinook Tribe of the Columbia River area might be in question. In view of the detailed work done by Mr. Wagner and Professor Davidson, and the present writer's lack of local knowledge, it seems best merely to submit the new evidence and leave the question open. ⁽²⁾

"While the 'Batn' or 'Raffe' drawn by Madox seems to be specifically one that Drake's men described to him as seen in Peru, it may not be quite irrelevant to the question in hand, for it is possible that they declared the vessels used by the Ship's Land Indians to be like those of Peru. The mast and sails, the latter seemingly of strips of bark, are clearly of native design and workmanship, although it has been held that sailing was unknown to the Indians in the Eastern Pacific. Mr. Frank Kermode of Victoria, B. C., when consulted, stated that he had no knowledge of such vessels in the northwest coast, and

1. For an effective answer, see Henry R. Wagner, "George Davidson, Geographer of the Northwest Coast of America," Quarterly of the California Historical Society, XI (December 1932), 310-311. Ed.
2. Heizer and Elmendorf have positively associated the Indian words with California's Coast Miwok. See Robert F. Heizer, Francis Drake and the California Indians, 1579. Ed.

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this further problem, therefore, is offered for solution to readers of the Review.

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In ship's land wh is ye back syde of Labradore and as Mr Haul supposeth nye thereunto Syr Frances Drake graved and brend his ship at 48 degrees to ye north. Ye people ar for feature color apparel diet and holo speach lyke to those of Labradore and as is thought kyngles for they crowned Syr Frances Drake. Ther language is thus

Cheepe bread

Huchee kercharoh sit downe

Nocharo mu tuch me not

Hioghe a king.

Ther song when they worship god is thus -- one dauncing first wh his handes up, and al ye rest after lyke ye prest and people Hodeli oh heigh oh heigh
ho hodali oh

Yt is thought yt they of Labrador (do) worship ye son and ye moon but (whether they) do of calphurnia I kno not.

A batn made of planks fastened together wher on thei carie botifioes of wyne at peru

(The original shows a sketch of a raft)

THE DEPOSITIONS OF JOHN DRAKE

Extract from the declarations made on March 24, 1584 at Santa Fe, province of the River Plate and an extract from the examination by the Tribunal of the Inquisition at Lima, Peru, January 8, 9, and 10, 1587

The appended extracts are from the first hand accounts of John Drake, Francis Drake's young cousin who accompanied him on the voyage around the world. John Drake was taken captive by the Spaniards after he had separated from Edward Fenton's aborted East Indies expedition of 1582. Leaving Fenton on the South American coast, and departing with his own ship to undertake some undisclosed plan of his own, he became shipwrecked at the Rio de la Plata. After enduring a precarious existence for many months with the Indians of the region and finally escaping from them, he fell into Spanish hands at Santa Fe, Argentina. During his interrogation there, he was recognized by his interpreter, an Englishman known as Juan Perez who had settled in Paraguay and a former prisoner of Fenton's. With his identity thus disclosed, John Drake was compelled to make his first deposition in which he gave an account of Drake's voyage around the world. Subsequently, he was taken to Lima, Peru, where he was re-examined in 1587 and made a second deposition in which he again gave an account of the voyage.

Several translations of the depositions have been published, amongst which there are variations of interpretation that make it necessary to consider more than one. The portions of both depositions describing the leg of the voyage from Guatulco, Mexico, to California are from the translations by Lady Elliott-Drake, The Family and Heirs of Sir Francis Drake, Appendices I and II, and Mrs. Zelia Nuttall, New Light on Drake. Included for comparison is the original Spanish version as published in Lady Elliott-Drake's book. The two depositions themselves are preserved in the Archivo General de las Indias in Seville in the legajo of papers relating to Drake, 2-5-2/21.

Also included is Wagner's translation of the account of Drake's voyage by Antonio de Herrera from the second volume of his Historia General del Mundo, Valladolid, 1606. Wagner believed that Herrera's account was copied almost literally from Drake's first deposition, but noted that it contains a few notable blunders and in some cases Herrera has the facts out of sequence. Wagner also noted that there are a few additions to the narrative derived from other sources.

THE DEPOSITIONS OF JOHN DRAKE

Insofar as John Drake's reliability is concerned, Wagner points out that because he was a young man, twenty-two or twenty-three years of age according to his deposition, his memory must have been good. To the Inquisitors he appeared sincerely penitent and even willing to be converted to the Catholic faith, but it may be taken as certain that he had every reason to be guarded and vague concerning those details of Drake's voyage that he felt might harm the English cause. This is evident from his successful concealment of the true latitudes of Drake's landfall and haven on the coast of North America as well as his avoidance of identifying any landmarks that would specifically locate those places. At the same time, he was undoubtedly aware that his statements were subject to confirmation and he accordingly had to give a relatively credible account. In general, his accounts pertaining to the voyage are probably quite reliable as evidenced by comparison to the other accounts available.

JOHN DRAKE'S FIRST DEPOSITION.
SANTA FE, ARGENTINA, 1584

(As translated by Lady (Fuller) Elliott-Drake),
including the original in Spanish.

. . . They put to sea, making for the north-west and north-north-east (?), and sailed during the whole of April and May and half June from Aguatulco, which lies in fifteen degrees, until they reached eighteen degrees. On the way they met with great storms: the whole sky was obscured and covered with clouds; they saw five or six islands, to one of which, Captain Francis gave the name of St. Bartholomew and to another St. James. These islands were situated in forty-six and forty-eight degrees. Captain Francis gave to the land which lies in forty-eight degrees the name of New England. They remained there a month and a half, taking in wood and water and repairing the ship. From there they went to the islands of Los Ladrones. On account of the cold they went no higher than forty-eight degrees. From New England they steered to the south-west, to the island of Los Ladrones, which is in nine degrees.

Original in Spanish:

. . . y que se hicieron á la mar siempre al Norueste, y al Nor-Nordeste, y que anduvieron todo Abril 7 Mayo, y de mediado Junio desde el dicho Aguatulco, que está en 15 grados, hasta en 18 grados, en el qual camino vieron cinco ó seis Islas que el dicho Capitan Francisco puso a la una nombre San Bartolomé, y á la otra Sⁿ Jaymes, y que estaban las dichas Islas en quarenta y seis y quarenta y ochos grados, y que la tierra que está en quarenta y ocho grados, le puso el Capitan Francisco por nombre, la Nueva Inglaterra, y que estubieron alli mes y medio tomando aqua y leña y aderezando el Navio, y que de alli fueron á las Islas de los Ladrones, é que por el mucho frio no subieron mas de los quarenta y ocho grados, y que de la dicha Nueva Inglaterra fueron gobernando al Sudueste hasta la dicha Isla de los Ladrones que está en nueve grados:....

JOHN DRAKE'S FIRST DEPOSITION.
SANTA FE, ARGENTINA, 1584
(As translated by Zelia Nuttall, and including her footnotes).

. . . They sailed out at sea always to the north-west and north-north-west the whole of April and May until the middle of June, from Guatulco, which lies in 15 degrees north, until they reached 48 degrees north. On their voyage they met with great storms. All the sky was dark and full of mist. On the voyage they saw five or six islands in 46 and 48 degrees. Captain Francis gave the land that is situated in 48 degrees the name of New England. ⁽¹⁾ They were there a month and a half, taking in water and wood and repairing their ship.

From there they went to the islands "de los Ladrones." On account of the great cold they did not go further north than 48 degrees and from the said New England they navigated to the south-west to the islands "de los Ladrones," which are in nine degrees.

1. This is an inaccuracy, for 48° was the highest latitude reached and the name "Nova Albion" was bestowed upon a part of California.

JOHN DRAKE'S SECOND DEPOSITION.
LIMA, PERU, 1587
(As translated by Lady (Fuller) Elliott-Drake),
including the original in Spanish.

. . . From there [Guatulco], they sailed in a north-west and north-north-west direction and covered a thousand leagues as far as 44 degrees, always on the bowline, then the wind changed, so they made for the Californias and found land in 48 degrees. They disembarked and made huts, remaining there a month and a half to repair the ship. Their food consisted of cockles (?mexillones) and wolves' ⁽²⁾ flesh.

They repaired their large ship here and left the one from Nicaragua which they had captured; they then went away, leaving the Indians apparently sorrowful. Thus they sailed with only one ship in the direction of the Moluccas, . . .

Original in Spanish:

. . . y de allí tomaron el rumbo de Norueste y Nor norueste, y anduvieron mil leguas hasta altura de quarenta y quatro grados, siempre á la bolina y despues bolvieron vientos y se fue á las Californias y descubrio tierra en quarenta y ocha grados, y allí saltó en tierra é hicieron ranchos y estuvieron mes y medio aderezando el Navio y los mantenimientos que tenian heran Mexillones y Lobos.

y aquí aderezó el Navio suyo grande y dexó el de Nicaragua que havia tomado, y se fue, quedando los Indias tristes, á lo que parecia, y de aquí fue solo con el dicho Navio enderezando la derrota hacia los Malucos, . . .

2. Seals' flesh.

JOHN DRAKE'S SECOND DEPOSITION

LIMA, PERU, 1587

(As translated by Zelia Nuttall, and including her footnotes.)

Then they left and sailed, always on a wind, in a north-west and north-north-westerly direction, for a thousand leagues until they reached forty-four degrees when the wind changed and he went to the Californias where he discovered land in forty-eight deg. There he landed and built huts and remained for a month and a half, caulking his vessel. The victuals they found were mussels ⁽¹⁾ and sea-lions. ⁽²⁾ During that time many Indians came there and when they saw the Englishmen they wept and scratched their faces with their nails until they drew blood, as though this were an act of homage or adoration. By signs Captain Francis told them not to do that, for the Englishmen were not God. These people were peaceful and did no harm to the English, but gave them no food. They are of the colour of the Indians here [Peru] and are comely. They carry bows and arrows and go naked. The climate is temperate, more cold than hot. To all appearance it is a very good country. Here he caulked his large ship and left the ship he had taken in Nicaragua. ⁽³⁾ He departed,

Zelia Nuttall's Footnotes:

1. "Mejillones" = *Mytilus aedilus*.
2. The species *Arctocephalos (Otaria) Californiana*, which is found off the coast of California and the Farallone Islands. In the World Encompassed, Vaux, 1. 131, it is stated that Drake, on one occasion, distributed to the inhabitants of California "such victualls as we had provided for ourselves as Muscels, Seales and such like."
3. It would seem as though John Drake must have said "the pinnace made in Nicaragua" and that the secretary of the Inquisition made the mistake. It is noteworthy that he speaks most guardedly of California and entirely omits any allusion to the fact that Francis Drake took possession of the land and named it New Albion -- an action which would scarcely meet with the approval of his Spanish examiners. It would seem as though either John Drake or the secretary was somewhat perturbed on this day, for instead of uniformly using the third personal plural in describing events, this is alternately used with the third person singular as in the preceding and following sentences.

JOHN DRAKE'S SECOND DEPOSITION.

leaving the Indians, to all appearance, sad. From there he went alone with the said ship, (4) taking the route to the Moluccas.

4. Here again the wrong idea is conveyed that he went to California with two vessels, instead of his ship and the pinnace.
Ed. Note: Zelia Nuttall is mistaken regarding Drake's second vessel which accompanied him to California as it was in fact the 15 ton bark taken from Rodrigo Tello at Nicaragua. Drake's pinnace was given to Tello in exchange for the bark.

ANTONIO DE HERRERA'S ACCOUNT OF DRAKE'S VOYAGE

Compiled by him from the depositions of John Drake and other sources now unknown, and published in Historia General del Mundo. Translated by H. R. Wagner from the 1606 edition and included with footnotes from his Sir Francis Drake's Voyage Around the World.

. . . he sailed towards the northwest and the northeast ⁽¹⁾ two months, encountering great storms and a sky obscured with many fogs, until he reached a latitude of somewhat more than 45° ⁽²⁾, with the purpose of seeking the strait which has been referred to. ⁽³⁾

Francis Drake, on this journey, saw five or six islands of good land. He called one San Bartolome, one San Jaime, ⁽⁴⁾ and another which seemed to be the largest and the best, Nueva Albion. Here he remained a month and a half, repairing the two ships ⁽⁵⁾ which he had with him. From here he went to the Ladrones Islands in 9° . . .

Wagner's Footnotes:

1. The text of the Drake account is plainly north-northeast and not north-northwest as translated by Mrs. Nuttall, page 31.
2. Drake says 48°.
3. The last part of this sentence is an interpolation as no such statement occurs in Drake's narrative.
4. The preceding part of this sentence is found in the Drake account but is omitted in Mrs. Nuttall's translation. See page 31 of her book.
5. In the first deposition Drake speaks of only having one ship in New Albion, but in the second deposition he says Drake had two, one of which he left when he sailed away. This is about the only certain evidence in Herrera's account that he had seen John Drake's second deposition as that is the only narrative of which I have any knowledge which contains that statement.

Ed. Note: Herrera's reference to the largest and best island named Nueva Albion is possibly an early indication of the belief held in Mexico in the seventeenth century that California was an island. It should be noted that John Drake did not mention this island in his deposition.

ANTONIO DE HERRERA'S ACCOUNT OF DRAKE'S VOYAGE

Original in Spanish:

Segunda Parte de la Historia General del Mundo, de XV. años del tiempo del señor Rey don Felipe II, el Prudente, desde el año de M. D. LXXI. hasta el de M. D. LXXXV. (Valladolid, 1606) (Book IX, Chapter 13, page 386) (1579)

" . . . Fue nauegãdo al Norueste, y al Nordeste, dos meses cõ grandes tormẽtas, y el cielo escuro cõ muchas neblinas, hasta ponerse en quarenta y cinco grados algo mas, cõ fin de buscar el estrecho que se ha referido.

"Vio Frãncisco Draque en este camino cinco, ô seys Islas de buena tierra, llamô a la vna S. Bartolome, y a la otra S. Iayme, y a otra ã le parecio grãde y mejor, la Nueva Albion: aqui se detuu mes y medio, adereçando los dos nauios ã lleuaua: de aqui passô a las Islas de los Ladrones, ã està en 9. grados . . ."

Marginal note reads:

"Descubre cinco, o seis Islas y las pone nõbre."

THE ANONYMOUS NARRATIVE

The so-called Anonymous Narrative is contained in Harleian MS No. 280, Folio 22, in the British Museum. The author has not been identified, but was possibly one of the gentlemen who accompanied Drake on his voyage, and written in the third person, it may have been from notes taken from a verbal account of the voyage. The date of the manuscript is also unknown, but from its context, it was written after the return to England. The latitudes given for the west coast of North America suggest an early date, or at least one before 1588, as they are similar to those given by John Drake in his depositions to the Spanish and may originate from common instructions to the members of the expedition. Only that part of the voyage from the Strait of Magellan on is covered by the manuscript.

The tone of the account is extremely hostile to Drake, being almost in the nature of an indictment against him for offences alleged to have been committed on the voyage, and viewed in that light it may have been transcribed from a court record, or legal deposition, possibly bearing on John Doughty's charges against Drake for the execution of his brother at Port San Julian.

Wagner demonstrated that Hakluyt used parts of this account for the voyage following passage through the strait; for the first part he used an account by John Cook, another that is hostile to Drake, and that may also have been part of a court record. As such, both would have been available to anyone willing to transcribe them. William Camden's account includes many facts from the Anonymous Narrative that were omitted from Famous Voyage, indicating that he also had a copy of it. Because some parts appear in World Encompassed, the compiler of that account may also have seen it or had a copy; it also appears to have been used in part by John Stow.

The latitude of Drake's harbor as given in this account is clearly in error, as the Madox diary's references to Indian words have located Drake among the Coast Miwok Indians in the vicinity of 38° North latitude instead of ".44. gr." (44° latitude). The highest latitude of 48° is questionable also and undoubtedly stems from the official effort to conceal the true extent of Drake's discoveries on the Northwest Coast. The dates for this portion of the account are in error, as they are in other parts also, and this may be expected in an account recalled from memory several years after the event.

THE ANONYMOUS NARRATIVE

. . . and here ⁽¹⁾ drake watered his ship & departed sayling northwardes till he came to .48. gr. of the septentrionall Latitud still finding a very lardge sea trending toward the north but being afraid to spend long time in seeking for the strait hee turned back againe still keping along the coast as nere land as hee might, vntill hee came to .44. gr. and then hee found a harborow for his ship where he grounded his ship to trim her, & heere came downe vnto them many of y^e contrey people while they wer gravng of their ship and had conference with them by synes, in this place drake set vp a greate post and nayled thereon a vj^d, which thè contrey people woorshipped as if it had bin god also he nayled vppon this post a plate of lead and scratched therein the Queenes name, and when they had gravd & watred their ship in the latter ende of August they set sayle and bent their course .S.S.W. and had not the sight of land againe till y^e latter end of november at which time they had sight of one of the Iles of Molucca, . . .

1. Port of Guatulco, Mexico, Ed.

JOHN STOW

The Chronicles of England, from Brute unto this present
yeare of Christ, 1592, London.

First printed in 1580, Stow's Chronicles was reprinted in 1592, and the later edition included the short account of Drake's voyage given here. The Chronicles were reprinted with additions by Edmund Howes in 1615 and 1631, as Annales, or a Generall Chronicle of England. Later editions followed.

John Stow was a contemporary of Drake, and Wagner believes that he "probably was acquainted with him, but so far as I have seen, nowhere says so."

An examination of the 1592 account convinced Wagner that Stow obtained his information for the first part of the voyage from John Cooke's narrative. . . . "and it is probable for the second part he took the few facts given from some other not now known." The dates given in the second part do not agree with those in The Anonymous Narrative, The Famous Voyage, or The World Encompassed.

Wagner states that the account is noteworthy since it presents us with a statement different from any others about Drake's movements on the Northwest Coast of America. Stow notes that Drake sailed north to 47° thinking to have come home that way, but having been obliged to abandon his intention on account of fog and cold wind, went back to 38° on the 10th of June, and stayed there to grave and trim his ship until July 25.

The account which follows is extracted from Wagner's Sir Francis Drake's Voyage Around the World. Wagner's account was taken in full from the 1635 edition of Annales, the text of which is the same as that first printed in 1592 except for differences in spelling.

JOHN STOW

FRANCIS DRAKE HIS VOYAGE ROUND ABOUT THE WORLD

"The golden Hinde (or Pelicane I thinke) held on her course to Chily, Lima, Coquimbo, Arica, Panama, & so all along the backe side of America to the lineward, and passed the line the first day of March, and the 16. of March being on land at the Ile of Canoes, hee passed foorth northward till he came to the latitude of forty seauen, thinking to have come that way home: but being constrained by fogs and cold windes to forsake his purpose, came backward to the lineward the tenth of June 1579. and stayed in the latitude of thirty eight to graue and trim his ship, untill the fiue and twenty of July, and from thence setting his course Southwest he fell the third of October with an Ile 8. degrees from the line Northward, and the 4. of Nouember he fell with Trenate one of the Iles of Moluca, . . ."

THOMAS BLUNDEVILLE

M. Blvnde vile His Exercises, containing sixe Treatises,
London, 1594

This work consists of six treatises for the furtherance of the art of navigation. One of the treatises is entitled: "A plaine description of Mercator his two Globes . . . Whereunto is added a brief description of the two great Globes lately set foorth by M. Molinaxe: and of Sir Francis Drake his first voyage into the Indies." In this, Blundeville gave an account of Drake's voyage based on the track laid down on the Molyneux globe, published in 1592-93.

In following the erroneous track as laid down off the west coast of North America, Blundeville's account adds little of importance to a study of Drake's landing in California. It is particularly interesting, however, that he differs somewhat with Molyneux with respect to the latitudes of Drake's discoveries here. Blundeville gives the farthest extent of Drake's track in the North Pacific as 46° instead of 48° as shown on the globe and places Cape Mendocino in 40° instead of about 42° as on the globe.

The following account is extracted from the complete version reprinted in Wagner's Sir Francis Drake's Voyage Around the World.

". . . from thence still Northward he sailed to Cape S. Francesco, which hauing in North Latitude 1. degré 30. minutes, is distant from Cape Guija 140. leagues, from thence he sayled stil Northernly to the Cape Mondecino, which is in the land called Quiuira, and this Cape hauing in North Latitude 40. degrés is distant by that course from S. Francesco 1740. leagues, from thence he sayled still Northward vnto a certaine Bay in the West part of Quiuira which he named Noua Albion (that is to say) new Englande hauing in North Latitude 46. degrés. And this was the furthest part of his voyage outward in which voyage hee sayled in all 6050. leagues, and from this Bay Sir Frances himselfe (as I haue heard) was of very good will to haue sailed still more Northward, hoping to find passage through the narrow sea Anian, which sea is not set downe by Master Molineux in his Terrestriall Globe as a straight, but rather as a maine Sea, bearing in bredth 400. leagues, and so from thence to haue taken his course Northeast, and so to returne by the Iles Crocklande and Groynlande into England, but his Mariners finding the coast of Noua Albion to be very cold, had no good will to sayle any further Northward, wherefore Sir Frances was faine to come backe againe

THOMAS BLUNDEVILLE

Southward to Mondecino, which (as hath béene said before) is distant from the foresaide Bay of Noua Albion 140. leagues. From thence he sayled in a manner right Southeast to the Iles Moluccas. . ."

THE HONDIUS BROADSIDE MAP

This important contemporary map of the world, measuring 21-1/4 inches by 15 inches, traces the circumnavigation routes of both Drake and Cavendish, and in Latin briefly describes various events of Drake's voyage. The border is embellished with four views depicting places and incidents on the voyage, one of which (upper left corner) shows Portus Novae Albionis, Drake's harbor in California. The map shows the harbor located near 38° North latitude.

The date and place of issue of the map is uncertain, but because it does not appear to have been produced for the English market, it is probable that it was published in Amsterdam, where Hondius established a map publishing business. (1) Also, because of the fact that Drake's track on the west coast of North America appears to have been altered on the basis of Hakluyt's Famous Voyage, the date of the altered plate can be assumed to follow publication of that account; 1595-96 seems a good estimate. On the copy of the map in the British Museum reproduced herewith, a text has been added printed in Dutch which describes the voyages and includes portraits of Drake and Cavendish. The added text has been pasted onto both sides and the bottom of the map, increasing its size to 37 in. x 25 in., and for this reason it is referred to as a broadside. Though the text has the appearance of being printed for the purpose, there is some evidence that the portraits, at least, were not by Hondius. In the title of the map, for example, it is stated that Drake returned on the 27th of September, but the copy accompanying Drake's portrait in the Dutch text states that he returned on the 4th Kalends of October (September 28), and the Dutch text itself states that he returned on November 3. Also, that the map and the small one which is part of Drake's portrait were not from the same hand is demonstrated by an error in the portrait map, which shows Cavendish's track instead of Drake's. (2)

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1. A print of the Broadside Map at the Royal Geographical Society without the Dutch text but with portraits of Drake and Cavendish pasted on the back marked "fecit Londini" and signed by Hondius suggests that the map had been published in London, although the notation and signature is far more likely to be in reference to the portraits rather than to the map.
 2. See H. R. Wagner, Sir Francis Drake's Voyage, p. 417.

THE HONDIUS BROADSIDE MAP

A note appended to the Dutch text states that the account was extracted from one printed by the "deputy of Her Majesty of England's printers." It is recognisable as a condensed version of Hakluyt's Famous Voyage, which appeared in the 1589 edition of his Principall Voyages. Two changes were made that do not appear in either the 1589 edition or the 1600 edition of Famous Voyage; Nova Albion is called an island, and it is said that Drake erected a silver plate on a pillar. The first is possibly the earliest known allusion to the theory that California was an island, and the second appears to be a faulty interpretation of Hakluyt's use of the word "plate", a word which sometimes applied to silver at that time. These same changes occur in Theodore de Bry's account of 1599 in America, achter Theil, and the similarity of the two accounts is a strong indication that either one was based on the other -- or that each, one in Dutch and the other in German, was based on an unknown source which has yet to be found. Considering de Bry's close working relationship with Hakluyt in London, it seems likely that he obtained his account from him. Because de Bry used a copy of Hondius' map to illustrate Drake's voyage in Americae, achter Theil, it enhances the possibility that Hondius and de Bry traded material. Both were Flemings and had worked in London on the production of The Mariner's Mirrour, the English version of the Dutch atlas of marine charts, Spijghel der Zeevaerdt.

The only other early account known which states that Nova Albion was an island is that of Antonio de Herrera's Historia General del Mundo, published in Valladolid in 1606, in which de Herrera used John Drake's first deposition as the basis for an account of Drake's circumnavigation. In this account, de Herrera interpreted John Drake's statement to read that one of several islands found by Drake, the largest and best, and where he remained a month and a half, was named "Nueva Albion", contrary to what John Drake actually said. These interpretations precede by many years the theory espoused by Father Antonio de la Ascension in 1620 in a memorial on the Vizcaino expedition to California that California was separated from the mainland of New Mexico. (1) The belief that Nova Albion, or California, was an island can be almost certainly traced to Mexico and the story of the pilot, N. de Morena (or Morera), who related that he had

1. See H. R. Wagner, Spanish Voyages, pp. 265-268.

THE HONDIUS BROADSIDE MAP

been left at Nova Albion by Drake and had walked to Mexico. His story is recounted at length in Chapter XI, but briefly it was that as a result of his wanderings and discoveries, he believed that the Gulf of Mexico went on to join what he assumed was the Strait of Anian, the mouth of which he found near the place where Drake left him.

Beyond the fact that Hondius credits himself with the production of the broadside map, no certain information has come to light to show with whom he consulted or what his sources were. A review of his background and a study of the map itself provides some reasonable probabilities and leads to the conclusion that, despite a few discrepancies, Hondius was not likely to have termed his map and its statements a "true description" of Drake's entire naval expedition around the world unless he felt assured that he had information from a credible source. In addition, he must have been aware of the paucity of information and erroneous maps showing Drake's discoveries that were currently in circulation, a fact that may have further inspired him to call his map a "true description." He must have realized too that his reputation and business could suffer at the hands of Drake's and Cavendish's supporters if his work was not acceptable.

Lloyd Brown, in The Story of Maps, informs us that Hondius was an engraver with wide experience. "Hondius was born at Wacken, Flanders, in 1563. His parents moved to Ghent when he was very young and there he learned drafting, engraving, type founding and the art of making and decorating mathematical instruments. He fled to London in 1584 when Ghent was stormed, like many another Flemish craftsman. He would engrave anything, but specialized in maps, charts, and globes. He made globes that were larger than any that had been made before." (1)

Hondius was a young man about 21 years old when he went to London. Three years later he married Colette Van den Keere, sister of a compatriot who was also a map maker established in London and whose family had been printers and engravers in Ghent.

Hondius, along with Augustine Ryther, Theodore de Bry and others, was engaged to translate and re-engrave the charts for the English edition of Lucas Janzoon Wagenaer's monumental atlas of printed sea charts

1. See L. A. Brown, The Story of Maps, p. 165.

THE HONDIUS BROADSIDE MAP

for Western Europe, the Spiegel der Zeevaerdt, which had been first published in Holland. The new edition was titled The Mariner's Mirrour. The great work of this Dutch mariner on piloting and cartography so impressed Lord Howard, High Admiral of England, that he had the Privy Council authorize its translation and publication into English. The task was entrusted to Antony Ashley, who was Clerk to the Privy Council, and it was probably begun in 1586 and completed in October of 1588. (1)

Of interest here is the appended note in Ashley's title to The Mariner's Mirrour: "Herein may also be understood the exploits lately achieved by the right Honorable the L., Admiral of Englād with her Maties Nauie and some former seruices don by that worthy Knight Sr. FRA. DRAKE." The note offers at least the possibility that through records officially assembled for the purpose of publishing some account of Drake's services in The Mariner's Mirrour, Hondius may have had access to the original sources of his inset views and the opportunity to carefully copy them; likewise, the several engravings by de Bry of incidents on Drake's voyage may also have their basis in those records.

Although illustrative material relative to Drake's voyage may have been officially assembled and available for study, or even publicly displayed, it is obvious from Hondius' own work and from the work of others following the publication of The Mariner's Mirrour, that little or no precise information on Drake's actual route and the discoveries made by him had been officially released. As previously mentioned, the small heart-shaped map of the world made by Hondius in 1589, TYPVS ORBIS TERRARVM, fails to show Nova Albion at all, while the islands and open passage which Drake claimed to exist below South America are so imperfectly delineated that they can only represent the mere fact that they were said to exist. The west coast of North America follows the grossly distorted configuration and excessive westward projection shown on the 1570 and 1587 maps of the world, TYPVS ORBIS TERRARVM, by Abraham Ortelius. (2)

Even the celebrated globe designed by Emery Molyneux and en-

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1. See D. W. Waters, The Art of Navigation in England in Elizabethan and Early Stuart Times, p. 170.
 2. See H. R. Wagner, Sir Francis Drake's Voyage, pp. 39, 428, 429.

THE HONDIUS BROADSIDE MAP

graved by Hondius for the English market late in 1592 gives a misleading presentation of Drake's track and discoveries on the Northwest Coast. Considering the interest taken in the globe by leading persons in London, it would seemingly have represented the most authoritative sources of information concerning Drake's voyage. Hakluyt advertised it in advance of publication as being "collected and reformed according to the newest, secretest, and latest discoveries, both Spanish, Portugall, and English." (1) As previously mentioned, Drake's track, for the most part merely follows the general route as shown on the French Drake Map.

Hondius had evidently gained respect and trust during his years of residence in London, if one may judge from the fact that Edward Wright, the English mathematician who revolutionized the science of navigation and who was five years senior to Hondius, had shown him in strictest confidence his method for constructing the Mercator type of projection for chart making. Wright used a mathematical method for constructing charts, and his projection marked a tremendous advance in chart construction by enabling a navigator for the first time to plot accurate courses and distances from one place to another.

It is likely that Hondius met Wright while working for Molyneux. Wright had begun his studies for the improvement of navigation in 1589 and had completed a draft of his work, including his chart projection, by 1592 under the title of Certain Errors in Navigation. His projection was published in part by Blundeville in 1594 and by Barlow in 1597, both times with his permission, but his own work was not published until 1599, when he felt bound to bring it out under his own name because of plagiarism by several persons, including Hondius. In Holland, in 1597, Hondius published a map of the world and the four continents using Wright's projection together with an explanation similar to Wright's text but without the acknowledgement due him. (2) Hondius' apology in light of his Latin inscriptions on the Broadside Map is interesting: "... I was purposed to have set this forth under your name: but I feared that you would be displeased therewith, because I have but rudely translated it into Latine." (3)

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1. See Richard Hakluyt, Principall Navigations, 1589, preface.
 2. See D. W. Waters, The Art of Navigation, p. 221.
 3. See L. A. Brown, The Story of Maps, p. 138.

THE HONDIUS BROADSIDE MAP

In 1593 or 1594, Hondius returned to the Low Countries, setting up shop in Amsterdam in 1595, where he built up a map publishing business which he continued until his death in 1612, when it was then carried on by his son Henry. The Broadside Map of the Drake and Cavendish voyages may have been offered for sale shortly after opening business in Amsterdam.

The likelihood, that it was not published in London seems to be borne out by two statements on the map. The first is in the legend concerning Drake's islands at the end of South America, the existence of which was denied by Cavendish and the Spaniards. In effect, he sides with the latter by saying that "It is credible that Drake, driven there by storms, scarcely observed the region." It seems hardly possible that Hondius would have made this statement in London on a map dedicated almost exclusively to Drake's voyage while the popular hero was still alive to defend his discovery and frequently in residence there. Secondly, in the description of Drake's ship at the bottom of the map, the statement that the voyage was accomplished in at least 8500 German miles suggests also that the map was intended for the European market; the German miles were in use in Holland, and by proportion, the English reckoned 20 miles to a degree of latitude; whereas 15 German miles made a degree.

A somewhat minor point against the chance that the map was produced in London is the fact that Hondius' specific view of the Golden Hind is so erroneous that it seems doubtful if he ever saw the ship. Yet, the Golden Hind was permanently berthed ashore at Deptford, not far from London, and it would seem that if he had been so minded, he could have easily made the short excursion down the Thames to make a sketch of her. It is quite evident, however, that his source for the Golden Hind was the reverse of the ship shown in the Portus Javae Majoris inset. Although details of the hull differ and perhaps suffer in the copying process, the outline, rig and setting of the sails are identical, including errors in rigging common to both. As a small drawing of the ship undoubtedly appeared in his original source, he was probably emboldened to use it for his portrait of the ship with assurance that it was an authentic likeness. In all fairness, however, he was cautious in his presentation of the ship and possibly realizing its shortcomings, he almost obliterates all detail with dense crosshatching.

THE HONDIUS BROADSIDE MAP

Comparison between the silver medallion (Silver Map) by Michael Mercator and Hondius' Broadside Map shows that Hondius probably used the medallion or its source as the model for his map. With the principal exception of South America, the geographical features of the Broadside Map closely resemble those on the medallion, and the construction of the hemispheres in the Mercator fashion with increasing distance between parallels of latitude as the poles are approached, is identical. On the Broadside Map the prime meridian is located at the center of the hemisphere instead of at the edge, as on the medallion. A further indication of borrowing from the Mercators is that Hondius' conjectural arrangement of the Arctic region follows the conception of Gerardus Mercator's map of the world, 1569.

Hondius was deceived by the pretention that Drake had sailed as far north as 48° on the coast of Nova Albion, as he initially ran his track up to this latitude as shown on the silver medallion. He afterwards corrected the error on his plate by terminating the track at about $42\text{-}1/2^{\circ}$, as the portion of the track above this latitude can still be faintly seen on the print. The change was probably made on the basis of Hakluyt's Famous Voyage, which erroneously credits Drake with reaching only 42° North latitude.

It seems evident also that Hondius drew upon the French or Dutch Drake maps, or possibly their source, for the placement of the inset views. As a point of comparison, ships shown on the track of the Broadside Map have counterparts on the French and Dutch maps with similarities in both location and number of ships shown. One of the most revealing parallels occurs in the section illustrating the Central American coast where the French and Dutch maps erroneously show a two mast ship with a billowing main course and no bowsprit; Hondius shows here a similar ship with billowing main course and no bowsprit, except that where a crease is shown in the sail on the other maps, Hondius shows a stunted fore course with a small topmast.

One feature on the Broadside Map that differs widely from all other published Drake maps is the representation of Drake's islands at the tip of South America. They are more plausible than any shown up to that time, and bear some relation to what might be expected from speculative observations by Drake in the region of Cape Horn. In addition, it is particularly significant that their arrangement is similar to a group

THE HONDIUS BROADSIDE MAP

of islands shown in this region on a map contained in Francis Fletcher's account of Drake's voyage. (1) However, from the note which Hondius attached adjacent to the islands, it is evident that he did not necessarily accept them, and defends himself by making it clear that Drake located them there.

The outermost island in Hondius' group is placed in too high a latitude, 57° or more, and he also does this on his 1589 world map. Nuño da Silva gives the same latitude for the island in his log and deposition, (2) but it is far more likely that it derives from the fact that at one point in this region Drake was driven by storms to more than 57° South, and this high latitude was probably common knowledge in England. World Encompassed states that "the vttermost cape or hedland of all these Ilands, stands neere in 56 deg.", which is within a few minutes of the true latitude of Cape Horn.

Notwithstanding some shortcomings to his map, Hondius assuredly had confidence in his sources in order to boldly proclaim on the title of his map that it was "A TRUE DESCRIPTION OF THE ENTIRE NAVAL EXPEDITION of Sir Francis Drake..." To judge from his associations in the then relatively small community of London, he was obviously in a good position to assemble a body of data for his map, though from certain errors in the map it seems unlikely that Hondius had any direct information or guidance from Drake. It is evident from the chronological study of the sources published up to the time Hondius left London, there was very meagre information in circulation concerning Drake's voyage, a situation that Hondius would have been well aware of. As his map goes, it stands as the finest map published up to that time tracing Drake's voyage, and no map published afterwards improved upon it.

Although certain aspects of Drake's voyage, such as his actual discoveries on the coast of Northwest America, were well kept secrets, the subjects of the insets, such as the Portus Novae Albionis, were safe bits of illustration, and if not copied altogether from similar insets on a source map, such as the one at Whitehall, the views could have been shown or loaned to Hondius long enough for him to make copies for his own use,

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1. See Zelia Nuttall, New Light on Drake, Plate facing p. 42.
 2. Ibid. pp. 247, 260, 285, 298.

THE HONDIUS BROADSIDE MAP

possibly surreptitiously. Knowledge of Drake's track, in the only form that it seems to have been published, or presented to the public, could not have been of any value to England's competitors or enemies.

THE HONDIUS BROADSIDE MAP

Extracts from the Dutch text surrounding the copy of the map
in the British Museum.

...maer vindende deses weeghs een ghedurighe stilte/wert hy ghedronghen den Spaenschen coers te nemen/noemtelijs meer Noort-waerts/seylende ten minsten 600 legues in longitudine, om wint te becomen/daer over hy seylde vanden 16. April/ tot den 3. Junij/bevindende den 5 Junij (doens wesends 42. graden nae den Polus Arcticus,) sodanighe coude/dat zijn volck de selvighe niet en conde verdraghen/derhalven hy benoodicht was landt te soecken/ende vant een effen/plat landt/overdeekt met snee/soo dat hy tselve verliet sonder landen/tot dat hy quam binnen 38. graden nae de Linie/alwaer hy een schoone Baye vant/eñ aldaer ankerende quam t'volck das lants haer verthoenen/de welcke haer woontügen haben tu huyskens dicht aen't water/eñ die selvighe gaven haer gheschencken aen hem eñ als zy saghen sodanighe fracye dingen als Draeck hadde/ verwonderdẽ zy haer/ daer van hy ooch onder andere dingen haer mede verschenckte eentghe dingen om haer naecktheyt mede te becleeden/derhalven zy hem eñ den zynen achten Goden te wesen/sonder daer van anders te willen onderricht zijn; hare giften aen hem waren Plumagien/ ende Huyven van netwerck; haer huysen varen rontom begraven mit aerde/ hebbende vanden benedensten circkel opstaende ghespaerde houters (?) uytende aenden top te samen/ghelijck een spits/de welcke om reden haerder dichticheyt seer warm ware/Haer beddinghe was de aerde mit biesen overstroeyt/ligghende rontom in hare huysen/hebben zy een vier in't midden; die Mannen gaen naeckt: maer de Vrouwen hebbẽ een los hanghende cleet van ghekemde Biesen (ghelijck ghekemden Hennen) om haer middel ghebonden/eñ om haer schouderen een huijt van een Rhee met het naer/zynde haer mannen gehoorsaem eñ dienstbaer. Ende aldaer richtede Draeck zijn Tenten beneden de bergen/alwaer t'volck des landes hem dagelicks quamen verseeren met Plumagien eñ sacxkens vol Tabaco, hebbende eene onder haer die hem seer verpynighde om een ghevallighe Orati op haer wyse te doen; de Vrouwẽ bleben midler tijt op de berghen/tormenterendt haer selven met het vleesch van hare wanghen te scheuren/daer door hy vermerckte datse met eenighe sacrificien besich waren. Ende also tgheruchte van Draecks aencoemst deur het landt liep/quam veel volcks/met oock den Coningh tot hem aftrecken/eñ voord/aencoemste des Conincks/warender twee Ambassadeurs tot hem ghesonden/voorderende aen ⁽¹⁾ hem door teekenen eñ wysinge'/dat hy aenden

1. aen (correction of misprint in original text).

THE HONDIUS BROADSIDE MAP

Coningh eenige versekeringhe van vrede wilde seijnden/twelck tot des Coninghs verneugen ghedaen zijnde/quam hy in Prynclijcke majesteyt aentrecken/habbende eenen Cepter voor hem ghedraghen/welcke Cepter behangen was met twee Croonen/eñ dry kunstighe ghewrochte Ketenen/van een beenige substantie/naest den Cepter drager/quam den Coningh met zijn Guarde/hy ghecleet zijnde met Conijns vellen eñ andere velwerck; na hem volghde een menichte gemeen naeckt volck/wiens aenghesichten met verscheyden coleuren vermaelt waren; elck een van haer/jae oock hare kinderen selfs yet mede brenghende tot vereeringhe van Draeck/waer op Draeck zijn volck in zijn beschauste plaetse in flach-ordere ghestelt hebbede⁽¹⁾/bewees hy voor haer een fray orloghs verthoon. Daer na dede den Cepter drager een verclaringe/die hem door een ander(daer toe gheordineert zijnde) aenghedient werde/tselve gheeyndicht zijnde/scheen vanden gantschen omstant een Amen daer op te gheschieden/daer nae den Coningh met alle zignen staten tot hem aentreckende⁽²⁾/begost den Cepter dragher al dansende te singhen/daer in den Coningh en al het volck hem singhende en dansende volghden/uytghenomen de Vrouwen dansté mede sonder te singhen/als dit een goede poose gheduert hadde/versochden Coningh en veel van zijn gheselschapaen Draeck/dat hy haren Coningh wilde wesen/doende hem verstaen/dat zy hem den tytel ende trecht van haer landt wilden overgheven/ende tot versekeringhe van dien quam den Coningh ende zijn gheselschap met grooter reverentie vrolijk singende/eñ setté hem de Croone op zijn hooft/vercierende zynen hals met haer Ketenen/eerende hem onder den name van Hioch, voeghende daer by so't scheen eenigh bewijs van triumphhe: twelck Draeck oock niet prospelijck achtete weygheren/niet wete wat rijkdom eñ eere dattet Enghelandt gheven moght/derhalven hy in den name/ende tot nut van hare Majesteyt den Cepter/Croone/ende digniteijt des lands aenveerde wenschende dat den rijkdom daer van comen moghte tet profijt van haren Coninghrijcke/ghelijck hy tselve aldaer bevant overvloeyende. Terwylen datmen Draeck dese eere aen dede/ghinck tghemeyne volck hare sacrificien doen aen eenighe van Draecks gheselschap/schreyende ende crabbende tvleesch van haren () () de Enghelsche wesen haer opwaerts ten Hemel/dat daer eenen levendighen Godt was/diemen⁽³⁾ alleen aenbidden ende eeren moest.

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1. hebbende.
 2. aentreckende.
 3. die men.

THE HONDIUS BROADSIDE MAP

T volck van hem ghescheyden zijnde/reysde Draeck met zijn gheselschap opwaerts in't landt/eñ vont aldarr⁽¹⁾ Wilt-braet/als Herten/etc. by duysenden tsamen/ende tgantsche landt haest beset van Connynen/hobbende onder elcke zyde von haer kinne een hanghent sacxkeu⁽²⁾ daer zy haer spijs in vergaren/de vellen daer van zijn by haer in grooter extune/want des Coninghs cleedinge was van sulcks. Draeck noemde dit Eylandt Nova Albion, om dorsake van zijn witte clippé/en dattet ooc eenige gelijkheyt hebben soude met Enghelandt/tweick in voortyden oock so genoemt was. In dit Eylandt canmen haest geen aerde vinden/oft daer is een goet deel gout oft silver in/eñ tot ghedachtenis dat hy daer gheweest hadde/als mede insonderheydt van wegen het recht eñ tytel/die hy in den name van har Majesteyt oner over ontfangé had/richtede hy op/een plate silvers aen eenen pilaer/daer den name van hare majesteyt ghesneden was/met den dach zijnder aencomste/als ooc de vrywillighe overghevinge des landts aen hare Majesteyt/en onder de selvige plate silvers bevestighe by hare Majesteyts picture eñ wapen/zijnde een halven Enghelschen schellingh/ onder welcke hy zynen eygen naem schreef; ende het schijnt dat de Spaengiaerden noyt so verre en hebben gheweest....

NOTA (which is printed at the end of the full account)

Also hier de verclaringe van Sr. Draeck eyndicht, so volcht nu t'verhael vā Mr. Thomas Candish, de principale materié van beyde voyagien, ghetoegen zijnde uyt hetghene dat de Ghedeputeerde der Majesteyt van Engellants Druckers daer van gedruickt hebben, eñ om te doen verstaen wat weg dat Draeck en Candish elck besonder gheseylt hebben, so is inde Caerte geteijckent een omloopendelinie aldus..... beteeckenende de passagié van Draeck, eñ eẽ⁽³⁾ ander aldus..... aenwysende de passagié van Candish. Oock is te verstaen dat een Legue weynth⁽⁴⁾ differeert van een myle, want 17-1/2 Legues, maken ghelijck 15, mylen eenen gradus.

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1. aldaer
 2. sacxken
 3. een
 4. weyth

THE HONDIUS BROADSIDE MAP

Translation of extracts from the Dutch text.

(The following translation was made in free form by M. P. Dillingham of the Drake Navigators Guild and amended by John Dillon of Dillon, Agnew & Marton, Amsterdam, 1967, into which minor revisions were incorporated.)

. . . but, finding on this route a perpetual calm, he was forced into the Spanish route (course), namely more to the north, sailing at least 600 leagues in longitude to get the wind. In doing so he sailed from the 16th of April until the 3rd of June, finding on the 5th of June (then being 42° toward the Pole Arctic) such a cold that his people could not bear it. Therefore, he needed to seek land, and he found an even flat land covered with snow, so that he left it without landing until he came to within 38° of the line where he found a fair bay and there anchoring, the people of the country came to show themselves, who had their dwellings in small houses near the water, and they gave their presents to him and when they saw what wonderful things Drake had they were astonished. There he presented them, among other things, things to clothe their nakedness. They thought him and his people to be Gods without wanting to be taught otherwise. Their gifts to him were feathers and caps of network. Their houses were covered (lit. buried) all around with earth, having, from the basic circle, upright-standing pointed wooden poles the ends coming together at the top in a peak, which were very warm because of their tightness. (1) Their beds were the earth, strewn with rushes, and, lying around in their houses, they have a fire in the midst. The men go naked, the women, however, have a loosely hanging garment of combed rushes (like combed hemp) bound around their middles and around their shoulders the skin of a deer with its hair. They are obedient and serviceable to their men. And there Drake erected his tents beneath the hills (mountains) where the people of the country came to him daily to honor him with feathers and little sacks full of tobacco, having one among them who took great pains to make a pleasing oration in their manner. The women, meanwhile, remained on the hills (mountains), tormenting themselves by tearing the flesh of their cheeks, by which he noticed that they were making some sacrifices. And as the

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1. The houses described seem to have been covered (buried) with earth -- a construction, perhaps, of poles thickly plastered with earth to form a weather-tight coating. Ed.

THE HONDIUS BROADSIDE MAP

news of Drake's arrival went through the country, many folk came down to him, among them the King and before the arrival of the King two ambassadors were sent to him who demanded from him by signs and gestures that he should send some assurances of peace and when that had been done to the King's pleasure, he came forward in princely majesty with a scepter carried before him and the scepter was hung with two crowns and three ingeniously braided chains of a bony substance. Next to the scepter-bearer came the King with his guards, he being dressed in cony skins and other pelt-work. After him followed a multitude of common people, naked, whose faces were painted with several colors. Each of them, yes, even their children, brought something to honor Drake, whereupon Drake, placing his troops in battle order in his fortified place, showed them a proper military parade. After that the scepter-bearer made a speech which was given to him by another delegated to do so and when this was finished, it seemed as if all those standing around said "Amen". After that the King with all his followers came near to him and the scepter-bearer started to sing, dancing, in which the King and all his people followed, singing and dancing, with the exception of the women, who danced without singing, and when this had lasted a good while, the King and many of his company requested Drake to be their king, making it clear to him that they wished to surrender to him the title and right to their land. To assure this, the King and his company came with greater reverence, singing happily to him, and put the crown on his head, gracing his neck with their chains, honoring him under the name of Hioch and adding to that, it appeared, some signs of triumph. All of which Drake thought not profitable to refuse, not knowing what richness and honor it might give to England. Therefore, he accepted in the name and for the use of Her Majesty the scepter and the crown and dignities of the country, wishing that the richness of it might come to the profit of her kingdom, as he found it there abundant. While they were honoring Drake in this way, the common people started to make sacrifices to some of Drake's company, shouting and tearing at the flesh of their (.) (.) ⁽¹⁾ but the Englishmen pointed upwards to heaven to show that there was a living God to whom alone one should offer prayer and honor. When the people were separated from him, Drake travelled with his company upwards into the land and found there wildlife such as deer, etc., in multitudes of thousands and found the whole country nearly overrun with conies having on

1. What of their flesh they tore is not specified in the Dutch text. Ed.

THE HONDIUS BROADSIDE MAP

each side of their chins a little hanging pouch into which they gather their food. The skins of these are highly esteemed among them because the King's clothes were made of them. Drake named this island Nova Albion because of its white cliffs and its resemblance to England, which, in former times, was so named. In this island one can scarcely find any earth in which there is not a good deal of gold or silver. In commemoration of the fact that he had been there, and also especially for the right and title which he received there in the name of Her Majesty, he erected a silver plate on a pillar on which Her Majesty's name had been cut, together with the date of his arrival and the freely offered giving over of the land to Her Majesty, and below the silver plate he fastened Her Majesty's picture and arms, being an English half-shilling, (1) under which he wrote his own name, and it seems that the Spaniards have never been this far....

NOTE

Here the account of Drake ends, so follows now the story of Mr. Thomas Candish. The principal material for both voyages has been extracted from that which the deputy of Her Majesty of England's printers has printed of them (the voyages) and, to make clear what way Drake and Candish, each apart, has sailed, a curving line is drawn (.....) to show Drake's passage, and another line (-----) to show the passage of Candish. Also it must be understood that a league differs widely from a mile because 17-1/2 leagues make, like 15 miles, one degree.

1. The silver plate fixed to the pillar had Elizabeth's name cut on it, but her picture and arms were on the half-shilling. Ed.

THE HONDIUS BROADSIDE MAP
c. 1595

Translation of Original Latin Statements
Appearing at Various Places on the Face
of the Map

A translation from the original Latin to English was made for the Guild by Professor W. H. Alexander of the Department of Classics at the University of California, Berkeley, in February, 1953.

In each case, the original Latin text is given before the English translation.

1 - Upper center -- Title of Map:

VERA TOTIUS EXPEDITIONIS NAUTICAE. Descriptio D. Franc. Draci qui 5. navibus probè instructis, ex Anglia solvens 13 Decembris anno 1577. terrarum orbis ambitum circumnavigans, unica tantum navi, ingeni cum gloria, ceteris partim flammis, partim fluctibus correptis, in Angliam redijt 27 Septembris 1580. ADDITA est etiam viva delineatio navigationis Thomae Caundish nobilis Angli, qui cundem Draci cursum, ferè tenuit etiam ex Anglia per universum orbem, sed minori damno and temporis spacio: vigesimo-primo enim tulij 1586 navem conscendit, & decimo quinto Septembris 1588, in patria portum Plimmouth, unde pruis exierat, magnis divitijs & cum omnium admiratione re-versus est. Iudocus Hondius.

A true description of the entire naval expedition of Sir Francis Drake, who set out from England with five well equipped ships on the 13th of December, 1577, circumnavigated the globe and returned to England on the 27th of September, 1580, with only a single ship, but with great glory. His other ships were destroyed partly by fire and partly by storms at sea. There is also included a lively outline of the voyage of Thomas Cavendish, an English nobleman who followed almost the same course as Drake from England around the world, but with less loss of ships and in a shorter space of time. He sailed on July 21, 1586 and returned to his native country at the Port of Plymouth, whence he had started, on September 15, 1588. He acquired great riches and won the admiration of all his countrymen.

THE HONDIUS BROADSIDE MAP

- 2 - Upper left corner -- Portus Novae Albionis Inset:

Portus Novae Albionis. Harbor of New Albion (New England)

Foeda corporum laceratione et crebris in montibus sacrificiens hujus Novae Albionis portus incolae Draci, jam bis coronati, decessum deflent.

With appalling lacerations of their bodies and with numerous sacrifices in the mountains (hills) the inhabitants of this port of New Albion lament the departure of Drake, whom they have already twice crowned.

- 3 - Upper right corner -- Portus Iavae Majoris Inset:

Ex hoc Iavae Majoris portu solvens, per tanti equoris intervallū, unicum tantum attingens portum in Angliam sola navi redijt.

Sailing from this harbor of Java-the-Larger, he returned to England with a single ship after traversing a vast expanse of sea and putting into only one port on the way.

- 4 - Statements on Map Adjacent to Nova Albion:

Hic prae ingenti frigore in Austrum reuerti coactus est lat. 42. die 5. Iunij.

Because of the intense cold, on June 5, at latitude 42, he was compelled to return to the south.

Sic à Francisco Draco 1579 dicta, qui bis ab incolis eodem die diademate redimitus, eam Ser. Reginae Angliae consecravit.

(Nova Albion) So named by Francis Drake in 1579, when he was crowned by the inhabitants twice on the same day, but reserved that honor for her serene Highness, the Queen of England.

THE HONDIUS BROADSIDE MAP

5 - Statement on Map of South America Immediately Below "Caribana":

Ad C. S. Francisci & ad universum Peruanæ tractum, magnam auri & argenti vim, adipiscitur Dracus

At Cape San Francisco and along the entire coast of Peru, Drake came into possession of a great amount of gold and silver.

6 - Statement on Map of South America at Southeast Coast:

Hoc loco flammis una navis F. Draci perit eodem fere tempore quaeda alia abeo in Angliam decedit.

In this place one of Francis Drake's ships was lost by fire and at about the same time another left him to return to England.

7 - Statement on Map Below South America in Antarctica:

Insulas illas ad Fretu(m) Magell(anum) Fr. Dracus posuit; verum Tho Caundish & Hispani omnes ei reclamant, fretum solummodo affermant & creibile est Dracum tempestatibus ibi fluctuantem vix loca a serio observavit duas navis hic amisit.

Francis Drake placed these islands off the Straits of Magellan, but Thomas Cavendish and the Spaniards confirmed only their finding of the Straits. It is credible that Drake, driven there by storms, scarcely observed the region. He lost two ships there.

8 - Statement on Map, Northwestern Australia:

Non longe ab insula Celebe Septentrione versus, Draci navis in scopulum 20 horaris spacio illidebatur.

Not far north of the Celebes Islands, Drake's ship was hung up on a reef for twenty hours.

THE HONDIUS BROADSIDE MAP

9 - Lower Left Corner of Map: GILOLO Inset:

Quam mirifice a Rege Moluccarum tubaru(m) clangorem admirante introvectus fuerit, delineatio.

This shows how wonderfully Drake was piloted to port by the King of the Moluccas amidst the fanfare of trumpets.

10 - Framed Statement Below Western Hemisphere of Map:

Non immerito, amice lector, formam navis F. Draci huic nostrae tabulae adjungi putavimus miraculu(m) enim videri poterit, non solum hujus magnitudinis, navi: sed & 20 horarum spacio, in scopulum illisa, onusta praeterea auro & argento etc. posse tantum iter perfici, sct (scilicet) ad minimum, 8500 miliarium Germanicerum Servatur in Anglia etiam num navis illa, perpetuae memoriae causa, Dedfordiae ad Tamesin. vale.

Not undeservedly, friendly reader, we have decided to add to our map a representation of Francis Drake's ship. This is but just, for it seems miraculous that a ship of this size laden with gold and silver, etc., which had been hung on a reef for twenty hours, could accomplish such a long journey -- one of at least 8500 German miles. This ship is preserved even yet in everlasting memory at Deptford on the Thames. Farewell.

11 - Framed Statement Below Eastern Hemisphere of Map:

In hac tabula mirabitur fore aliquis, nos nudam terrae faciem reliquisse verum cum sit instituti nostri solummodo peregrinationes Fr. Draci & Thom Caundish designare, videbatur supervacuu(m) interiora loca describero, nec possint etiam universe littoris nomina commode asscribi, spacio, navigationum notulis ubique occupato. Quocirca lectori sufficiat nos loca ab iis vis vel lustrata una eu perigrinatum navigatione adjecisse.

Someone will perhaps wonder why we have left the face of the earth bare on this map, but since it is our sole intent to trace the voyages of Francis Drake and Thomas Cavendish, it seemed unnecessary to describe the interior country; nor can all the names along the shore

THE HONDIUS BROADSIDE MAP

be entered for lack of space, since the coast is occupied everywhere by notes on the voyages. Therefore, let it suffice the reader that we name only those places seen by the Navigators themselves.

12 - Inset of ship on reef at lower right corner of map:

Navis 20 horarum spacio in scopulum illisa est tandem, ingenti cum armaturae iactura, Divino auxilio servate triste spectaculum.

The ship, cast upon a reef for the space of 20 hours, finally, with great loss of equipment, was lifted by Divine aid. A sorry sight.

JOHN DAVIS

The Worlde's Hydrographical Discription,
London, 1595

John Davis, known as Davis the Navigator, was one of the most famous seamen of his time. He made three voyages to the Arctic, north of Labrador, in search for the Northwest Passage in 1585, 1586 and 1587, and he accompanied Thomas Cavendish on Cavendish's fatal voyage in 1591 for what was intended to be a raid on the west coast of South America. Davis's part in the expedition was to continue north to make a search for the Northwest Passage, or Strait of Anian, from the west side of North America. The voyage was unfortunately aborted at the Strait of Magellan. When Davis published the Worlde's Hydrographical Discription, he still believed that the Northwest Passage existed and that England should make every effort to find it in order to carry on trade with India and China.

In his book he gives a brief account of Drake's voyage which is almost entirely devoted to the Strait of Magellan and the importance of Drake's discovering it for the English nation. The balance of the voyage from the Strait is given in one short paragraph.

Davis notes that Drake coasted the western shore of America to 48^o, but in a copy of the book in the Huntington Library, there is a manuscript notation opposite his latitude which reads "but 43 degs" in what seems to be the same handwriting as that at the end of the book, "Reed be me. N. Hughes 1595 -- november."

The following account was extracted from the full account reprinted in Wagner's Sir Francis Drake's Voyage Around the World.

And after that Syr Frauncis was entred into the South Sea he coasted all the Westerne shores of America untill he came into the Septentrionall latitude of forty eight degrees being on the backe syde of newfound land. And from thence shaping his course towardses Asia found by his traueells that the Ills of Molucca are distant from America more than two hundreth leages.

THE FAMOUS VOYAGE

This account, issued by the well known English geographer and publisher of voyages and travels, Richard Hakluyt, is the first detailed description of Drake's voyage of circumnavigation. Printed on six unnumbered folio leaves, it was inserted between pages 643 and 644 of his The Principall Navigations Voiages and Discoveries of the English Nation, printed in London, 1589. As a few copies of the book were sold without the leaves, they were not included with the initial issue, though printed on the same paper as the book and by the same type.

Hakluyt apparently composed his account from several sources. The part carrying Drake to the Strait of Magellan was derived largely from an account by John Cooke, a member of the expedition who returned to England from the Strait in the Elizabeth after she became separated from the Golden Hind. The second part of the account was compiled partly from the Anonymous Narrative and material that appears to derive from notes by Francis Fletcher and other sources that are unknown. That part of the account that deals with Nova Albion is almost certainly derived for the most part from notes made by Francis Fletcher. Some additional details may have been supplied from interview with Drake, as Hakluyt was in an excellent position to approach him by way of their mutual friendship with Francis Walsingham. (1)

Very soon after Drake's return from the voyage Hakluyt had an interview with him, as in the dedicatory epistle to his Divers Voyages touching the Discouerie of America, London, 1582, Hakluyt refers to his endeavour to get Drake to provide a fund for a lecture on navigation and of the enthusiasm with which the proposal was accepted.

The inclusion of a condensed version of Fletcher's notes pertaining to Nova Albion and certain departures from them in comparison with a more detailed version of them in World Encompassed can be taken as a further indication of personal contact with Drake. Fletcher's notes made on the voyage would have been taken over by Drake to draw up his own account of the voyage. That Hakluyt had a special regard for the Nova Albion section of his account is shown by the fact that he printed

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1. Hakluyt was encouraged by Walsingham in the study of cosmography and the furthering of new discoveries. In 1583 Walsingham sent him to Paris as chaplain to the English embassy. He returned to London in 1588.

THE FAMOUS VOYAGE

it separately in the 1600 edition of his Principal Navigations.

In the 1589 edition of Principall Navigations, Hakluyt stated in the preface that he had intended to include an account of Drake's voyage that he had taken more than ordinary pains with, but had been persuaded from doing so because another man was drawing all of Drake's services into one volume. As long as Drake was alive, Hakluyt was probably faithful in abstaining from publishing his account in view of Drake's evident intentions of having someone else perform that service for him, but as the time for Drake's last voyage approached in 1595 and no account had as yet appeared, it can be assumed that Hakluyt became anxious to obtain a clearance for publishing his own. In addition, he would want to obtain further details from Drake personally, if at all possible, lest the chance be lost forever through misfortune. Under these circumstances, it is conceivable that Drake loaned Fletcher's voyage notes to Hakluyt for a short time, and that Hakluyt received some additional first-hand information from Drake.

There are errors in Famous Voyage, however, that make it unlikely that Drake had any direct hand in the production of the account, and it also seems unlikely that it would have been published in its present state while he was alive. It is particularly noteworthy that it was not materially corrected in the 1600 edition, as it surely would have been if Drake had had an opportunity to review it.

The account confuses events that occurred prior to leaving Mexico and also those on the Northwest Coast. In particular, the highest latitude reached by Drake is given as only 42° , whereas he reached at least 44° , and that statement alone could not have found much favor with Drake.

Of much greater potential annoyance to Drake, however, is the fact that Hakluyt does not mention at all that Drake found broken islands below the Strait of Magellan and that the Atlantic and Pacific Oceans were joined below these. Hakluyt may have been prompted to leave out these details on the basis of Cavendish's denial that this situation existed, but he would hardly have risked the displeasure of Drake. On learning of Drake's death, therefore, Hakluyt was probably prompted to hurriedly issue the Famous Voyage in the form as it then stood.

THE FAMOUS VOYAGE

When using Famous Voyage as a source of descriptive clues pertaining to Nova Albion and the site of Drake's encampment, it must be borne in mind that Hakluyt edited for a relatively concise account of Drake's voyage and therefore deleted material, reworded and sometimes missed the fine points of the original description. At the same time, however, he was writing at a time when he had the opportunity to personally interview persons who made the voyage and thereby obtain clarifications or first-hand details. Famous Voyage follows a period of extraordinary public ignorance relative to this region and Drake's voyage.

THE FAMOUS VOYAGE

The famous voyage of Sir Francis Drake into the South Sea, and there hence about the whole Globe of the Earth, begun in the yeere of our Lord 1577.

The following text is from the Hakluyt Society's facsimile reprint of Richard Hakluyt's 1589 edition of The Principall Navigations Voiages and Discoveries of the English Nation. Hakluyt published a second edition of The Principal Navigations in 1600 in which he made a few changes to Famous Voyage as indicated by our footnotes.

The 1600 edition includes an additional account of the voyage from the Isle of Cano to the departure from Nova Albion. This account is basically the same as that part in Hakluyt's full account of the voyage, the principal difference being that he attempted to untangle the confused sequence of events between the Isle of Cano and Guatulco. In both editions of the full account he has Drake sailing to the island from Guatulco instead of the other way around. Some further confusion was introduced, however, by transposing to the account of the departure from Guatulco the text of Drake's early decision to go to the Moluccas, a decision that he made either at the Isle of Cano or before he reached that place. The additional account carries the following lengthy title: THE COURSE WHICH SIR FRANCIS DRAKE HELD FROM THE HAVEN OF GUATULCO, IN THE SOUTH SEA, ON THE EAST SIDE OF NEUVA ESPANNA, TO THE NORTHWEST OF CALIFORNIA, AS FAR AS FORTIE THREE DEGREES: AND HIS RETURNE BACK ALONG THE SAID COAST TO THIRTY EIGHT DEGREES: WHERE, FINDING A FAIRE AND GOODLY HAUEN, HE LANDED AND STAYING THERE MANY WEEKES, AND DISCOVERING MANY EXCELLENT THINGS IN THE COUNTRY, AND GREAT SHEWE OF RICH MINERALL MATTER, AND BEING OFFERED THE DOMINION OF THE COUNTRY BY THE LORD OF THE SAME, HE TOOKE POSSESSION THEREOF IN THE BEHALFE OF HER MAIESTIE, AND NAMED IT NOUA ALBION.

Differences from the 1589 edition of Hakluyt's account and the above are also indicated by our footnotes. The additional account is reprinted in The World Encompassed by Sir Francis Drake, edited by N. M. Penzer, 1926.

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... We therefore set saile, and sailed in longitude 600. leagues at the least for a good winde, and thus much we sailed from the 16. of Aprill, till the 3. of June. (1)

The 5. day of June, being in 42. degrees (2) towards the pole Arctike, we found the aire so colde, that our men being greeuously pinched with the same, complained of the extremitie thereof, and the further we went, the more colde increased vpon vs. Whereupon we thought it best for that time to seeke the land, and did so, finding it not mountanous, but lowe plaine land, & clad, and couered ouer with snowe, so that we drewe backe againe without landing, (3) till we came within 38. degrees towards the line. In which heighth it pleased God to send vs into a faire and good Baye, with a good winde to enter the same. (4)

In this Baye we ankered, (5) and the people of the Countrey, hauing their houses close by the waters side, shewed themselues vnto vs, and sent a present to our Generall.

When they came vnto vs, they greatly wondred at the things that we brought, but our Generall (according to his naturall and accustomed humanitie) curteously intreated them, and liberally bestowed on them

1. 1600 edition omits "in longitude". THE COURSE... reads "..., and sayled 800 leagues at the least for a good winde, and thus much we sayled from the 16th of Aprill, after our olde stile, till the third of June."
2. 1600 edition reads "43. degrees".
3. 1600 edition omits "& clad, and couered ouer with snowe, so that we drewe backe againe without landing,"
4. THE COURSE reads "The fift day of June, being in fortie-three degrees towards the pole Arcticke, being speedily come out of the extreame heat, wee found the ayre so colde, that our men being pinched with the same, complayned of the extremitie thereof, and the further we went the more the cold increased upon us; whereupon we thought it best for that time to seeke land, and did so, finding it not mountainous, but lowe plain land (and we drew backe againe without landing, til we came within thirtie-eight degrees towards the line. In which height, it pleased God to send us into a faire and good bay, with a good winde to enter the same)."
5. THE COURSE reads "wee ankered the seuenteenth of June, and..."

THE FAMOUS VOYAGE

necessarie things to couer their nakednes, whereupon they supposed vs to be gods, and would not be perswaded to the contrarie: the presents which they sent to our Generall, were feathers, and calcs of networke.

Their houses are digged round about with earth, and haue from the vttermost brimmes of the circle, cliffs of wood set vpon them, ioyn- ing close together at the toppe like a spire steeple, which by reason of that closenes are very warme.

Their beds is the ground with rushes strowed on it, and lying about the house, haue the fire in the middest. The men goe naked, the women take bulrushes, and kembe them after the manner of hempe, and there- of make their loose garments, which being knit about their middles, hang downe about their hippes, hauing also about their shoulders a skinne of Deere, with the haire vpon it. These women are very obedient and ser- uiceable to their husbands.

After they were departed from vs, they came and visited vs the second time, and brought with them feathers and bags of TABACCO for presents: And when they came to the top of the hill (at the bottome whereof we had pitched our tents) they staid themselues: where one appointed for speaker, wearied himselfe with making a long oration, which done, they left their bowes vpon the hill, and came downe with their presents.

In the meane time, the women remaining on the hill, tormented themselues lamentably, tearing their flesh from their cheekes, where- by we perceiued that they were about a sacrifice. In the meane time, our Generall, with his companie, went to praier, and to reading of the Scriptures, at which exercise they were attentie, & seemed greatly to be affected with it: but when they were come vnto vs, they restored again vnto vs those things which before we bestowed vpon them.

The newes of our being there, being spread through the Countrey, the people that inhabited round about came downe, and amongst them the King himselfe, a man of goodly stature, & comely personage, with many other tall, and warlike men: before whose coming were sent two Ambassadors to our Generall, to signifie that their King was comming, in doing of which message, their speech was continued about halfe an howre. This ended, they by signes requested our General to send some

THE FAMOUS VOYAGE

thing by their hand to their King, as a token that his coming might be in peace: wherein our Generall hauing satisfied them, they returned with glad tidings to their King, who marched to vs with a princely maiestie, the people crying continually after their manner, and as they drewe neere vnto vs, so did they strue to behaue themselues in their actions with comelines.

In the fore front was a man of goodly personage, who bare the scepter, or mace before the King, whereupon hanged two crownes, a lesse and a bigger, with three chaines of a maruelous length: the crownes were made of knit worke wrought artificially with fethers of diuers colours: the chaines were made of a bonie substance, and few be the persons among them that are admitted to weare them: and of that number also the persons are stinted, as some ten, some 12.&c. Next vnto him which bare the scepter, was the King himselfe, with his Garde about his person, clad with Conie skins, & other skins: after them followed the naked common sort of people, euery one hauing his face painted, some with white, some with blacke, and other colours, & hauing in their handes one thing or another for a present, not so much as their children, but they also brought their presents.

In the meane time, our Generall gathered his men together, and marched within his fenced place, making against their approaching, a very warlike shewe. They being trooped together in their order, and a general salutation being made, there was presently a generall silence. Then he that bare the scepter before the King, being informed by another, whome they assigned to that office, with a manly and loftie voice, proclaimed that which the other spake to him in secret, continuing halfe an howre: which ended, and a generall AMEN as it were giuen, the King with the whole number of men, and women (the children excepted) came downe without any weapon, who descending to the foote of the hill, set themselues in order.

In coming towards our bulwarks and tents, the scepter bearer began a song, obseruing his measures in a daunce, and that with a stately countenance, whom the King with his Garde, and euery degree of persons following, did in like manner sing and daunce, sauing onely the women which daunced, & kept silence. The Generall permitted them to enter within our bulwarke, where they continued their song and daunce a reasonable time. When they had satisfied themselues, they made

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signes to our General to sit downe, to whom the King, and diuers others made seueral orations, or rather supplications, that he would take their prouince & kingdome into his hand, and become their King, making signes that they would resigne vnto him their right and title of the whole land, and become his subjects. In which, to perswade vs the better, the King and the rest, with one consent, and with great reuerence, ioyfully singing a song, did set the crowne vpon his head, enriched his necke with all their chaines, and offred vnto him many other things, honouring him by the name of HIOH, adding thereunto as it seemed, a signe of triumph: which thing our Generall thought not meete to reiect, because he knewe not what honour and profite it might be to our Countrey. Wherefore in the name, and to the vse of her Maiestie, he took the scepter, crowne, and dignitie of the said Countrey into his hands, wishing that the riches & treasure thereof might so conuentiently be transported to the enriching of her kingdome at home, as it aboundeth in ye same.

The common sorte of people leauing the King, and his Garde with our Generall, scattered themselues together with their sacrifices among our people, taking a diligent viewe of euery person: and such as pleased their fancie, (which were the yongest) they inclosing them about offred their sacrificies vnto them with lamentable weeping, scratching, and tearing the flesh from their faces with their nailes, whereof issued abundance of bloode. But wee used signes to them of disliking this, and staied their hands from force, and directed them upwards to the liuing God, whome onely they ought to worshippe. They shewed vnto vs their wounds, and craued helpe of them at our hands, whereupon wee gaue them lotions, plaisters, and ointments agreeing to the state of their gricfes, beseeching God to cure their diseases. Euery thirde day they brought their sacrifices vnto vs, vntill they vnderstoode our meaning, that we had no pleasure in them: yet they could not be long absent from vs, but daily frequented our companie to the houre of our departure, which departure, seemed so greeuous vnto them that their ioy was turned into sorrow. They intreated vs, that being absent we would remember them, and by stelth prouided a sacrifice, which we misliked.

Our necessarie business being ended; our Generall with his companie traualled vp into the Countrey to their villages, where wee found heardes of Deere by 1000. in a companie, being most large, and fat of bodie.

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We found the whole Countrey to be a warren of a strange kind of Conies, their bodies in bignes as be the Barbarie Connies, their heads as the heads of ours, the feete of a Want, and the taile of a Rat being of great length: vnder her chinne on either side a bagge, into the which she gathereth her meate, when she hath filled her bellie abroad. The people eate their bodies, and make great accompt of their skinnes, for their Kings coate was made of them.

Our Generall called this Countrey, NOUA ALBION, and that for two causes: the one in respect of the white bankes and cliffes, which lie towards the sea: and the other, because it might haue some affinitie with our Countrey in name, which sometime was so called.

There is no part of the earth here to be taken vp, wherein there is not a reasonable quantitie of gold or siluer. (1)

At our departure hence our General set vp a monument of our being there, as also of her Maiesties right and title to the same, namely a plate, nailed vpon a faire great poste, whereupon was ingrauen her Maiesties name, the day and yeare of our arriuall there, with the free giuing vp of the prouince and people into her Maiesties hands, together with her highnes picture and armes, in a peece of sixe pence of current English money vnder the plate, where vnder was also written the name of our Generall.

It seemeth that the Spaniards hitherto had neuer bene in this part of the Countrey, neither did euer discover the land by many degrees, to the Southwards of this place. (2)

After we had set saile from hence, we continued without sight of land till the 13. day of October following ...

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1. THE COURSE reads "not some speciall likelihood of gold or silver." 1600 edition reads "wherein there is not some probable shew of gold or silver."
 2. THE COURSE ends here.

WILLIAM CAMDEN

Annales Rerum Anglicarum, et Hibernicarum, regnante Elizabetha, ad Annvm Salvts M, D, L XXXIX. London, 1615.

Annales, The True and Royall History of the famous Empress Elizabeth. Darcie translation. Edition 1625, London

Also, later editions.

William Cecil, Lord Burghley, about 1596 or 1597, asked the leading English historian and antiquary, William Camden, to write a history of the reign of Elizabeth, and turned over for his use a great mass of official documents. The first edition, in Latin, was published in 1615. A translation into French was issued in London in 1624 and from this Abraham Darcie made the first English translation published in 1625. In this is found the account of Drake's voyage around the world included in a general account of Drake's life through 1589. Wagner states: "That this was written before 1600 is manifest from the fact that Camden did not use Hakluyt's revised version of the 'Famous Voyage' but the original one of 1589. Camden, who had been born in 1551, was evidently well acquainted with Drake as he obtained from him about all the information concerning his early life which is known to us. He did not assert that he also obtained from him his account of the voyage around the world which, as a matter of fact, he made up from the 'Anonymous Narrative', supplementing this with a few facts from the 'Famous Voyage' and a few from unknown sources, . . ." (1) Wagner used Darcie's True and Royall History of the Famous Empress Elizabeth for the account which follows and which we have extracted from Sir Francis Drake's Voyage Around the World, in which the full account is reproduced. (2) Wagner does not indicate that Camden's Annales Rerum Anglicarum was consulted nor does he give any clue as to whether the original differed from Darcie's translation of 1625. The Guild has recently acquired a Latin edition published in Leyden, Holland, (Lvg. Batavorvm) in 1625, which differs from the 1615 Latin edition, in that portion we have transcribed, only in the matter of spelling.

1. Henry R. Wagner, Sir Francis Drake's Voyage Around the World p. 316.
2. Ibid., pp. 317-323.

WILLIAM CAMDEN

"... Drake then tooke his way toward the North, at the latitude of 42. Degrees, to discouer in that part if there were any straight, by which he might find a neerer way to returne; But discerning nothing but darke and thicke cloudes, extremity of cold and open Cliffes couered thicke with snow, hee landed at the 38. Degree, and hauing found a commodious Rode, remained there a certaine time. The inhabitants of that Countrie were naked, merry, lusty, jumping, leaping and dancing perpetually, sacrificing, and showing by signe and words, that they would elect Francis Drake for their King; neither could it be coniectured that euer the Spaniard had bin there, or so farre in that Countrie: Drake named that very countrey, being fat and good, full of Deeres and Conies, The new Albion; Causing a great Poste to be there erected, vpon which there was ingrauen an Inscription, which shewed the yeere of our Lord, the name of Queene ELIZABETH, and their landing there, and vnderneath a piece of siluer of Queene ELIZABETHS Coine was nailed to the said Poste.

"Afterwards hauing weighed Anchor, in the moneth of Nouember, he arriued in the Ilands of the Mollucques,..."

WILLIAM CAMDEN

Original Latin from the Lvg Batavorum edition
of 1625 in possession of the Drake Navigators Guild.

Novam
Albion
detegit.

M. D.
LXXX

Ad Meluc-
cas venit.

"....Cursum itaque in Septentriones ad Latitudinem
XLII Grad. tenuit, ut exploraret si quod fretum esset
in illa parte, per quod compendio domum rediret.
Verum cum nihil nisi spissas nebulas, frigus inten-
sum, littora aperta & nive canescentia videret, ad
XXXVIII Grad. descendit, commodamque nactus sta-
tionem, ibi aliquandiu mansit. Incolae erant nudi,
lepidissimi, assidue in orbem saltantes, sacrificia
adolentes, quique suis indiciis Dracum in Regem el-
ligere longa oratione videbantur; nec suspicari ille
poterat Hispanos hucusque unquam pertigisse. Reg-
ionem hanc uberi gleba, damis & cuniculis refertis-
simam, NOVAM ALBION placuit nominare, inscrip-
tione posti infixam, quae annum Domini, nomen Eliza-
bethae Reginae, & eorum appulsum notaret, nummo
argenteo Elizabethae subfixo. Hinc oram solvens
mense Novembrii ad Moluccas Insulas delatus...."

THEODORE DE BRY

An account of Drake's voyage was included in de Bry's collection of voyages, Grands et Petits Voyages, published in Frankfort, Germany, between 1590 and 1634, and printed in both German and Latin. De Bry completed only six parts of the work before his death in 1598, although he may already have gathered material for subsequent parts. The balance of the work was published in part at various times by his widow and two sons. After the death of the younger son, the older continued publication until his own death in 1623, after which the work was completed by his sons-in-law. A complete set of de Bry's illustrated "Voyages" consists of 57 volumes. There are 13 parts of the America series in Latin and 14 parts of the America series in German. The text for the German source account in this paper was translated by the Guild from an extract (photocopy) furnished by The Huntington Library, San Marino, and the text from the Latin source was furnished by the University of California, Berkeley.

Theodore de Bry was a Flemish engraver, and a goldsmith by profession. He was forced to leave his birthplace, Liege, in 1570 because of Philip II's attack on the protestants of the Netherlands; he went first to Strasbourg and then to Frankfurt. He traveled to London early in 1588 to buy Le Moyne's pictures of Florida, but was unsuccessful and returned to Germany, but was back in London within a year. There he worked on engravings for the English edition of the Dutch Mariner's Mirrour. After Le Moyne's death, he was able to negotiate the purchase of his paintings from Le Moyne's widow -- a fact which he reported to Richard Hakluyt with great joy. Hakluyt, however, persuaded him to engrave John White's pictures of the Virginia colony before those of Le Moyne, and de Bry's illustrated account of Virginia followed a year later. This and one on Florida thus initiated de Bry's monumental series.

What de Bry has to say of Drake on the California coast reveals no new evidence, but nevertheless his comment can be considered primary source material because of his associations, his dates of residence in London, and his avidity as a collector of facts about the voyages of his day. His accuracy is sometimes to be questioned, as can be seen in translation of his account of Drake at Nova Albion, which appears to have been condensed from Famous Voyage and may have suffered by translation and condensation into German and Latin. There is some indication that he may also have consulted Camden, as he used the word "springend", which when translated into English means "springing" or

THEODORE DE BRY

"jumping" or "leaping." Camden is the only other known source which mentions that the natives jumped and leaped.

As previously mentioned, the Dutch text surrounding Hondius' Broadside Map is similar to de Bry's account and was probably taken from his. As in that account, de Bry states that the plate claiming Nova Albion for Elizabeth was of silver, a misinterpretation of the English word "plate." He also states that Nova Albion was an island, a fact that is contradictory to Hondius' map, as well as others of this period, but indicates that the theory of California being an island had reached Northern Europe before the end of the sixteenth century.

THEODORE DE BRY

Americae, achter Teil
Frankfurt, 1599

(The following translation was made in free form by M. P. Dillingham of the Drake Navigators Guild and amended by John Dillon of Dillon, Agnew & Marton, Amsterdam, 1967, into which minor revisions were incorporated.)

. . . therefore he sailed at least 600 miles in longitude so that he might get a wind; in doing which he sailed from the 16th of April until the 3rd of June. He found, however, on the 5th of June, when he was at 42 degrees toward the Pole Arctic, such cold that his men could no longer endure it. Whereupon he was obliged to seek the land, which he found to be a level flat land covered entirely with snow. So he withdrew without landing until he came within 38 degrees towards the line, where he found a fair bay and anchored. Soon the people of the country, who dwelled in small houses built near the shore, showed themselves and brought him their presents. When they saw the delightful and desirable things which Mr. Drake had with him, they wondered not a little. Whereupon he presented to them several things with which they could cover their nakedness. Henceforth, they held him and his company to be gods because they had never been taught otherwise. The gifts which they brought were feathers and caps worked like netting. Their houses were dug up around the circumference and covered with earth; and from the lowest circle to the topmost, became more and more pointed so that they closed together at the tops like a spire. Because of their tight construction they were very warm. Their beds were the bare earth overstrewn with rushes, and lying about their houses, hold a fire in the midst. The men go entirely naked. The women, however, have only a simple hanging garment of rushes combed similarly to hemp, which hangs from their waists. Around their shoulders they carry a rude, unworked deer skin. They are very obedient and serviceable to their men.

Mr. Drake pitched his tent encampment at the foot of a hill, to which then, the people of the country came daily to make presents to him of feathers and several small bags of tobacco. They had a man with them whom they coaxed to make an oration after their fashion. Meanwhile, the women remained on the hill, tormenting themselves by tearing the flesh of their cheeks. From which it is to be understood that

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they were making several incantations and sacrifices.

After the news had been spread throughout the country, there came many people together with the King to greet him. And before the King himself came, two ambassadors were sent who requested by signs and gestures that one should give their King some assurance of safe conduct. When this had been done to the King's satisfaction, he marched forward in Kingly solemnity. Borne in front of him was a scepter. From the scepter hung two crowns and three ingeniously braided chains of a bone-like substance. Next after the scepter bearer was the King himself, with his bodyguards. His robe was of Coney pelts and other skins. After him followed a multitude of naked common folk whose faces had been painted with all kinds of colors, each bearing something as a present. Yes, even their children brought presents and gifts.

Hereupon, Mr. Drake placed his company within the field works in fair order of battle, which he showed to the people of the country, to their delight. After this, he who held the scepter made an oration, proclaiming aloud that of which he was informed by another. When he had ended, an "Amen" was spoken by the whole assembly. Thereupon the King, with all of his followers, came to Drake, requesting of the scepter-bearer that he sing and dance; and in this, the King and all his people joined, singing and springing in succession, except for the women, who danced but during the singing were not permitted to be heard.

After some time, the King, no less than many of his subjects, made it known that they would like to make Drake their king, giving assurances that they would give over to him the title and rights to their land. Whereupon the King and his courtiers, with great reverence and happily singing, placed the crown on Mr. Drake's head, decorated his neck with their chains, honored him with the name Hioch, and added thereto further signs of triumph. All of this, no doubt, Mr. Drake thought not meet to reject or despise, since he could not know to what riches and honors this might lead. Wherefore, in the name of his Queen, and for the use and benefit of her Royal Majesty, he took the scepter, the crown and the regalia of this kingdom, wishing only that its wealth might reach to the welfare and profit of the realm of his Queen in the same way as there all of these things were to be found in abundance. Meanwhile, as Mr. Drake was given the highest honor, the common folk offered sacrifices to Drake's people, crying out and tearing at the flesh of their faces as they

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did so. But the Englishmen pointed upwards toward Heaven to signify that there is a living God to whom we all should pray and give reverence.

When the people of the country had departed from him, Drake went up into the land with his company; and everywhere he found wildlife, such as deer by the thousand in a herd; and the whole land was filled with conies. They had hanging on both sides of the chin a little pouch where they accumulated their food. The pelts of these little animals are held in great worth by the people, especially since the clothes of the King were made of them.

This island was named Noua Albion by Drake for the reason that it has such white cliffs and for its affinity to England, which once was also called Albion. In this land, one can find almost no earth wherein there is not mixed a good part of gold or silver.

In commemoration of his coming there, and especially of the way in which he had accepted right and title to the Land in the name of his Queen, he fastened to a post a silver plate on which was engraved the Queen's name together with the date of his arrival and the free-willed giving over of the land to her Queenly Majesty. Beneath that he left an English half-shilling, on which were struck the Queen's countenance and arms. And below, he inscribed his own name.

It appears that hitherto the Spaniards had never come so far.

After all this he sailed from there. . .

Americae, achter Teil, in the Original German

. . . da er denn noch zum wenigsten 600 Meyl in longitudinem, auss dass er Windt bekommen möcht/geseglet. Darüber schiffete er von dem 16. Aprilis an/biss auff den 3. Iunij. Befande aber den 5. Iunij, als er war under dem 42. Grad nach dem Polo Arctico, ein solche Kälte/ dass sein Volck dieselbe nicht mehr vertragen kundt. Derhalben er benöttigt wurde ein Landt zusuchen/fandt demnach ein eben plat Land/gantz mit Schnee uberdeckt/so dass er selbe verliesse/ und nicht anländete/biss dass er kame under den 38. Grad der Lini, alda er ein schön Meerbusen fandte/und warffe sein Ancker auss. So baldt kame das Volck selben Landts sich zuerzeigen/welche ihr Wohnung hatten in Häuselein hart an dem Ofer gebawet/dieselbe brachten ime ihr Geschenck/und als sie solche freye und lustige Ding sahen/wie Herr Drack bey sich hatte/verwunderten sie sich nicht wenig. Derhalben verehrete er ihnen etlich Sachen/damit sie ihre Nackigkeiten bedecken möchten. Dannen her hielten sie ihn und seine Gesellschaft/gleichsam sie Götter weren. Weil sie anderst hieruon nicht unterricht waren. Ihre Gaben so sie brachten/waren Federn und Hauben wie Netz gewürcket/Ihre Häuser waren gerings umbgraben und mit Erde umschüttet/Auch von dem understen Cirkel an biss oben auss je mehr und mehr zugespitzt/welche sich an den Gipffeln zusammen schlossen/als ein Spitze/und wegn der harten Gedigkeit sehr warm waren. Ire Better war die liebe Erde mit Bintzen uberstrewet/ligen rund herumb in den Häusern/halten ein Feuer in der mitte. Die Männer gehen gantz nackent. Die Frawen aber haben nur ein bloss hangendts Kleydt von gekämpften Bintzen/gleich gekämpften Hanff umb die mitte gebunden. Umb die Schutlern (sic) ein rauhe ungearbeitte Hautd von einem Rehe. Seynd ihren Männern sehr gehorsam unnd diensthaft. Alda schluge Herr Drack sein Gezelt beneben an einem Berg auff dahin denn das Landvolck zu ihme täglich kame/und ine mit Federn und etlichen Säcklein von Tabaco verehreten. Sie hatten einen Mann under ihnen den sie sehr vexirten/dass er ein Oration auff ihre weise thun solte. Hierzwische blieben die Weiber auff den Bergen/peinigten sich selber/dass sie das Fleisch von ihren Wangen rissen/darauss zuersehen/dass sie mit etlichen Beschwerden und Opfferen umbgehen. Und nach dem das Gerüchte durch das gantze Land erschollen/kame viel Volcks sampt dem König ihne zubegrüssen/und ehe dann der König selber kame/waren zwen Ambassadenos gesandt die begehrten durch Deuttung und Weisung dass man ihrem König etwas Versicherung oder ein sicher Geleit wolte mittheilen. Also solches zu dess Königs

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vernügen beschehen/kame er in Königlicher Solennitet herein getretten/
liesse einen Scepter vorher tragen/welcher war mit zwoen Cronen und
dreykünstliche geflochtenen Ketten von einer beinichten Substantz behan-
gen. Nechst dem Cepter (sic) nach/kame der König mit seiner Liebguar-
di. Sein Kleidt war von Königlin's Feller und anderm Felwerck. Nach
ihme folgte ein Menge Gemein nackt Volck/deren Angesicht mit aller-
hand Farben gemahlet waren/ein jeder unter ihnen/ja auch ihre Kinder
selbst brachten ihre Geschenck und Gaben. Darauff stellte Herr Drack
sein Volck in der Schantz/so er gemacht/in eine schöne Schlachtordnung/
welche er sie zum Lust sehen liesse. Nach diesem thet der jenig/ so
den Scepter truge eine Rede/welche Dracken durch einen andern inson-
derheit darzu verordnet/angedeut worden. Als er solches geendet/ges-
chahe vor dem gantzen Umstandt ein Amen sprechen. Darauff der Kö-
nig mit allen seinen Ständen zu ihme kommen/und also baldt begerte der
Scepter träger gleichsam tanzend zusingen/zu welchem ihme der König
und das gantze Volck singend und springend nachfolgten/aussgenommen
die Weiber/welche zwar mit tanzte/aber mit singen sich nichts vernem-
men liessen. Als solches auch ein gut weil gewähret/versuchte sie der
König/wie auch nicht weniger viel von seinen Unterthanen/dass sie Drac-
ken möchten zu ihrem König machen/ denn sie ihme den Titul unnd Recht
von ihrem Landt ubergeben wolten/auch darüber gutte Versicherung thun.
Heizwischen kame der König und sein Anhang mit grosser Ehrerbietung
frölich singende/setzten Herr Dracken die Cron (sic) auff sein Häupt/
zierten ihm seinen Hals mit ihren Ketten/theten ihne ehren unter dem
Namen Hioch, hielten ihme auch gleichfals etliche sehr schöne Triumph.
Solches alles dauchte zwar herr Dracken nicht rathsam zuerschmähen
oder verachten/wiewol er nicht eygentlich wissen konte/was Reichthumb
und Ehre/dannenhero Engellandt erspriessen möchte Derwegen im Na-
men unnd von wegen/auch zu nutz und erspriessligkeit ihrer Königlichen
Majestet seiner Königin/name er den Scepter/die Crone und Regalien
dieses Königreichs an/wündschte allein dass der Reichthumb daruon zu
seiner Königin Königreich wohlfahrt unnd nutzen gereichen möchte/glei-
chwie er denn solches alles überflüssig alda fande. Hierzwischen als
Herr Dracken erstgedachte Ehr bewiesen warde/thete das gemeine Volck
mit opfferung etliche dess Dracken Diener gleichfals verehren/sonder-
lich aber mit einem Geschrey und grawsamen ausreissen dess Fleisches
von ihrem Angesicht. Aber die Engelländer weiseten auffwertz gehn
Himmel/damit zuerstehen zugeben/dass allda ein lebendiger Gott were/
den wir alle anbetten und ehren solten. Als nun das Volck von ihme ges-
cheiden/zog Drack mit seiner Gesellschaft auffwerts ins Landt/und fande

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alda Wilpret/als nemlich Hirtzen/u. allezeit bey die tausent beysamen/
sonsten war das gantze Landt mit Königlin besetzt. Die hatten zu beyden
seytten der Kinn ein hangend Säcklein/darein sie ihre Speise versamlen.
Die Fell von diesen Thierlein seyndt bey ihnen in grossem werth/sond-
erlich weil dess Königs Kleidung daraus gemacht werden. Von Dracken
wurde diese Insel Noua Albion gennant/auss Orsachen/ dass es so weis-
se Klippen hat/und dem Engellandt/ welches zorzeitten auch Albion gen-
ant gewest/etwas gleichförmig seyn soll. In diesem Landt kan man
schieer kein Erde finden/darin nit ein gut theil Goldt oder Silber ver-
mengt ist. Zur Gedächtnuss aber/dass er alda gewesen/und insonder-
heit von wegen des Rechts und Tituls/so er im Namen seiner Königin
empfangen/richtete er daselbst an einem Anfort eine Silberne Platte
auff/darauff der Königin Namen/sampt dem Tag seiner Ankunfft/und die
freywillige ubergabung des Landts an ihre Königliche Majest. eingegra-
ben war. Vnden dran liesse er einen halben Englischen Schilling/auff
welchem der Königin Contrafactur und Wapen anschlagen/ zu unterst
unterschriebe er seinen eygnen Namen. Es Läst sich ansehen/als ob
die Spanier noch so fern nicht kommen seyen. Nach allem diesem seg-
let er von dannen/...

THEODORE DE BRY

Americae, Pars VIII
Frankfurt, 1599

(The following translation was made for the Guild by
Dr. A. E. Gordon, Professor of Classical Languages,
University of California, Berkeley, 1966.)

. . . Therefore, wishing to bring the fleet home, as he had determined, through the Moluccas and finding meantime a very high degree of calm, he was compelled to keep a Spanish course, northwards, and he went on for 600 leagues so as to be able to find a suitable wind. This long sail extended from the 16th of April to the third of June.

On the fifth of June, when he was at 42° north, he experienced such cold weather that his men couldn't stand it any longer. Therefore he was forced to look for land and to put ashore. The first region that he caught sight of was so covered with snow that he decided not to disembark. So, proceeding farther, he reached the 38th degree [and] there, after entering a beautiful and most charming bay, anchored.

Immediately thereafter the inhabitants of that region rushed up to him; their dwellings were built very near the shore. They presented the Leader with gifts, and on seeing the very beautiful and costly things that Drake and his men had brought with them they greatly admired them. Drake moreover presented them with things for covering their nakedness. So they thought both him and his companions gods. For at that time these people knew no better. The gifts that they offered were feathered ornaments or plumes, and headbands made like a net.

Their dwellings were all grouped in a sort of circle and from bottom to top were pointed like a spear, and at the points they were joined so tightly on all sides that almost all the cold was shut out. Their beds were the ground itself covered with rushes of a rather thin sort; the people would lie down here and there throughout the house, keeping a fire going in the center. The men walk about entirely naked. The women, however, have a hanging garment made of carded rush, not unlike carded hemp, fastened around their middle; on their shoulders they wear untreated deerskin; to their men they are very obedient and compliant.

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Here Drake placed his tent at the foot of some hills [or mountains], where the natives came every day with headdress and with little pouches filled with tobacco. One particular man they urged in a strange manner to make a speech to their new guests in ancestral fashion. In the meantime the women, deviating from the bounds of propriety, tortured themselves by hideously tearing the flesh of their cheeks or jaws. From which it could be gathered that the people were bewitched by incantations and chants. The news having spread throughout the region, many of the inhabitants, and even the King himself, came to greet our Leader. And before the King himself should come, there were sent two chiefs, whom we call envoys, to ask for safe conduct for the King. This granted to his satisfaction, he came forth in royal procession, having sent ahead a royal sceptre, two crowns, and three chains very skilfully made of some sort of bone. The King with his guard followed the sceptre-bearer. The King was dressed in rabbit and other skins. He himself was followed by a crowd of naked men, whose faces were painted in the most various colors. Some of them, even children, brought gifts for Drake. As these persons came forward in this way, Drake drew up his men on those earthworks built up there, in the form of a battle line, not unpleasing to look at. Then the Royal sceptre-bearer delivered a speech, which was explained by someone else provided for this purpose. This finished, all those standing by, by their assent, approved it with an Amen. Finally the King himself with his nobles approached [Drake] himself. Meantime the sceptre-bearer began a song, as if going to dance [or, almost on the point of dancing], whom the King with the whole crowd gladly imitated, singing and dancing. The women indeed followed in the dance, but none of them was willing to sing. After this the King himself and his chiefs, with the people, decided to elect Drake himself king, intimating that they would hand over to him the title and all the rights of this kingdom, [and] would even pledge their warranty accordingly. And soon the King with his retinue quickly went up to Drake with remarkable deference, dancing joyfully, to place a crown on his head. His neck they adorned with their own chains, worshipping him under the name of Hioch, and they honored him as if for very many great triumphs. Drake, though he didn't know what advantage, riches, or dignity for the kingdom of England would come out of this, nevertheless as a courtesy to his Queen joyfully took to himself and his men this sceptre -- whatever it was --, the crown, and the legal authority of this kingdom, praying only that thus it would all redound to the distinction and praise of Her Majesty the Queen herself, so that before her eyes she might in person see the great riches

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here waiting. Meantime, as this honor was being conferred upon Drake, the crowd too were presenting gifts to his comrades and servants, with wailing and the pitiable tearing of their cheeks. But the English, deprecating such mutilation, pointed out the sky to them, intimating that there was the living God, whom all must adore and worship.

Then, when the people had all left him, Drake with his companions, walking farther inland, came upon a very great number of wild animals, and especially deer, a herd of almost a thousand, everywhere. The whole region, moreover, was full of rabbits, which had a little pouch on each side of their chin, in which they stored food for themselves. The skins of these little animals are highly prized among the people for the reason that they provide the King with clothing.

This island Drake called New Albion because of the white cliffs and because it has some similarity to England, which was once called Albion. In this place you will scarcely touch any lump of earth that doesn't have some mixture of gold or silver. Furthermore, in memory of the fact that he had been there and that he had been given the name of King and the title of authority in the name of his Queen, in a certain harbor he set up a silver memorial on which he inscribed the name of the Queen, the day of arrival, and the voluntary and spontaneous offer of this kingdom. On the base of it he attached a half shilling, or [basic] English coin, together with a picture and the insignia of the Queen, having inscribed his own name on the base. It is not likely that the Spaniards had ever got as far as this region.

Having done all this, he again set sail and on the 13th of October reached an island situated 8 degrees from the line, toward the North.

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Americae Pars VIII in the original Latin text:

[p. 11] . . . Quare cum classem, vti instituerat, per MOLVCCAS traducere domum vellet, interimq; maximam tranquillitatem ventorum persentisceret: cogebatur seruare cursum Hispanicum, vtpote Septentrionem versus: permensusq; adhuc 600. leucas in longitudinem, vt v̄tū idoneum assequi posset. Protrahebatur haec longa nauigatio à 16. Aprilis die, vsque ad tertium Iunij.

[p. 12] Quinta Iunij, cum esset sub 42. Gradu versus polum arcticum, eiusmodi frigus expertus est, vt socij ipsius tolerare id amplius non possent. Quare terram aliquam inuestigare ibiq; appellere cogebatur. Prima ergo quam conspexit regio ita niuibus obruta erat, vt nauibus egredi no luberet. Progressus igitur vlterius sub 38. gradum lineae peruenit, ibi pulchrum & amoenissimum sinum maris ingressus anchoras eiecit: Quo facto statim ad eum accolae illius regionis accelerarunt, aedes horum proxime ad littora exstructae erant. Hi Ducem suis muneribus afficiebant, & visis pulcherrimis atq; preciosissimis istis rebus, quas Draco & socij secum attulerant, vltra modum commirati sunt. Draco autem remunerauit eos eiusmodi quibusdam rebus, quibus nuditatem suam tegere possent. Itaque tam ipsum quam socios eius Deos existimabant. Aliter enim gens ista edocta tum non erat. Munera quae offerebant, erant ornamenta pennacea siue cristae, & vittae in morem retis constructae. Aedes eorum in circulum quasi conuallatae & ab infimo loco vsque ad cacumen, in cuspidis modum acuminatae erant, & in cuspidibus tam arcte vndiquaq; connexae, vt propter nimiam coarctationem frigiditas ferè omnis excluderetur. Lecti eorum erant terra ipsa strata iuncea quadam tenuiori materia, decumbunt hinc inde per aedes: in medio domus ignem fouentes. Viri prorsus nudi incedunt: Mulieres vero carminatum iuncum, non absimilem cannabi carminata pro vestibis pendulis habent, circiter corporis medium alligatum, super humeris pellem ceruinam crudam gerunt: viris admodum obediētes & morigerae. Hic Draco tabernaculum suum ad radices montium ponebat, quò se populus iste cum cristis & sacculis suis Tabaco refertis quotidie conferebat. Virum quendam miris modis exagitabant, vt more patrio orationem ad nouos hospites haberet. Interea foeminae ab honestatis norma deflectentes seipsas excruciant carnes genarum siue malarum suarum tetrè dilacerantes. Ex quibus colligi licebat, quod coniurationibus & decantationibus quibusdam effascinati essent. Fama per vniuersam regionem peruagata, multi ex incolis, imò Rex etiam ipse, Ducem nostrum salutadi gratia conuenerunt. Et ante quam Rex quidem ipse accessisset, missi fuerunt duo primarij

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viri, quos legatos nominamus, saluum conductum pro Rege exoraturi. Quo concesso ad regis placitum, in pompa Regia ingrediebatur, praemisso sceptro regio, duabus coronis & tribus artificiosissime contextis catenis ex ossea quadam materia insignito. Sceptrigerum Rex è vestigio sequebatur, cum sua GVARDIA siue custodia militari. Rex vestitus erat pellibus cuniculorum & aliis pelliceis. Ipsum sequebantur turba nudorum virorum, quorum facies diuersissimis coloribus illuminatae erant: Quilibet eorum, etiam liberi munera DRACONI afferebant. His sic incedentibus, DRACO suos in ordinem redegit in cuniculis illis, ibidem extractis, in formam aciei cuiusdam, visu non iniucundae. Postmodum sceptriger ille Regius orationem habuit, quae per alium ad hoc instructum exposita fuit: Qua finita omnes astantes, suo suffragio per Amen eam approbabant. Tandem Rex ipse cum suis optimatibus ad ipsum appropinquabat. Interea Sceptriger inchoabat cantum quendam, quasi saltaturus: quem Rex, cum vniuersa turba, laetus cantans & saltans imitabatur. Mulieres quidem in saltu sequebantur, verum canere nulla voluit. Quo peracto, tandem Rex ipse proceresq; cum populo Draconem Ducem nostrum in regem eligere voluerunt: innuentes se titulum iuraq; omnia eius regni ipsi tradituros, etiam desuper cautionem prestituros. Et non longè post Rex cum comitatu suo ad DRACONEM cum singulari reuerentia properabant, laeti saltantesq; coronam capiti eius imposituri. Collum ornabant suis catenis, venerantes eum sub nomine Hioch: condecorabantq; eum quasi maximis plurimisq; triumphis. DRACO licet ignarus esset, quid commoditatis, diuitiarum aut amplitudinis regno Angliae inde emersurum esset, tamen in gratiam Reginae suae hoc quicquid erat sceptrum, coronam & iurisdictionem huius regni, animo ouanti in se suosq; transumebat: hoc vnicum in votis habens, vt sic omne in incrementum & laudem Regiae ipsius Maiestatis redundaret, vti ante oculos magnas opes hic coram videret paratas. Interea quo DRACONI iste honos conferebatur, vulgus etiam sociis & ministris sua offerebant munera, cum eiulatu & dilaceratione miserabili malarum suarum. Verum Angli detestati eiusmodi lanienam coelum ipsis monstrabant innuentes, ibi Deum viuum esse, quem omnes adorare & reuereri deberent.

Cum deinde populus omnis ab eo discessisset, DRACO cum sociis suis in terram longius exspaciatus, ferarum maximum numerum inuenit, imprimisq; ceruos quasi mille vbiq; congregatos. Tota vero regio cuniculis abundabat, qui ex vtraq; menti parte sacculum gestabant, quo cibũ suum sibi colligebant. Pelles horum animalculorum apud ipsos

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sunt in maximo precio, ea de causa quod Regi vestes praebeant. Insulam hunc DRACO NOVAM ALBIONEM vocabat, ob scopulos albos, & quia aliquá cum Anglia, quae olim ALBION dicta fuit, conformitatem habeat. Hoc in loco vix glebam aliquam attinges, quae non aliquid auri aut argenti admixtum habeat. In eius autem rei memoriam, quod ibi fuisset, ipsiq; datum essetius & titulus imperij nomine Reginae suae, in portu quodam monumentum quoddam argenteum extruxit, cui nomen Reginae, diem aduentus, & voluntarium spontaneamq; illam oblationem huius regni insculpsit. In pede eius dimidium solidum siue assem Anglicanum, vna cum Reginae pictura & insigniis adfigebat. In basi suo nomine ascripto. Hispanos in hanc regionem vnquam penetrasse, verosimile non est.

His omnibus peractis, vela rursus ventis concessit. & 13. Octob. ad insulam quandam venit, quae 8. gradus à linea versus Aquilonem sita est. . . .

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Although printed nearly fifty years after Drake's voyage, this account is the most detailed and valuable source for his activity on the Northwest Coast and identification of his haven at Nova Albion. It was published by Drake's nephew, Sir Francis Drake, and follows an account of Drake's expedition to the Spanish Main in 1572-73, Sir Francis Drake Revived, published by the nephew in 1626. Sir Francis Drake Revived was compiled and written by a man named Philip Nichols in 1592, or before, but the compiler and writer of World Encompassed is not identified.

The compilation of this account may have started under the direction of Drake, but if in 1592 Sir Francis Drake Revived was the first fruit of his efforts to record his past services, as he stated in a dedicatory epistle to the account, it seems unlikely that he had much time to devote to World Encompassed after that date. A clue to authorship is perhaps discernable in the nephew's dedication of Sir Francis Drake Revived to Charles the First, in which he states that "Your favorable acceptance, may encourage my Collecting of more neglected Noates." In the title page to World Encompassed it is then stated that the account was "Carefully collected out of the notes of Master Francis Fletcher Preacher in this imployment, and diuers others his followers in the same," Philip Nichols stated that his account was "Faithfully taken out of the Report of M. Christopher Ceely, Ellis Hixom and others, who were in the same Voyage with him" (Drake) and that the account was "Reviewed by Sir Francis Drake himselfe before his death, and much holpen and enlarged by divers Notes with his owne hand here and there Inserted." In this case, the nephew merely takes credit for publishing the account. If World Encompassed had been published under the same circumstances he would probably have given a similar credit, particularly if there was any evidence that Drake had a hand in it.

It may be significant that there was a lapse of two years between Sir Francis Drake Revived and World Encompassed, for if the latter had come into the nephew's hands complete, it is logical to suppose that, because of its importance, the account would have been published much sooner. It would have taken easily two years to compile and put into print, although some, or most, of the source material had probably been collected while Drake was still living. Probability leans almost conclusively toward the nephew as the author of World Encompassed.

Considering the sources of World Encompassed, Wagner pointed out that the writer had at hand the accounts of Edward Cliffe, Nuño de

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Silva, and Lopez Vaz, all published by Hakluyt in 1600. (1) It goes without saying, however, that he could have had access to everything bearing on the voyage published up to 1628, including Hakluyt's Famous Voyage. With respect to the latter, Wagner makes this significant statement: "There is no evidence that he saw either of the manuscript accounts which went to make up the 'Famous Voyage,' and indeed, almost all those parts of the 'Famous Voyage' derived from the 'Anonymous Narrative' were replaced by other entirely different versions, thus affording a very good indication that he did not copy the 'Famous Voyage' but took his facts of the latter part of the voyage from manuscript sources." He adds that the book contains passages of suspicious origin, though this should be expected and looked for in situations where the editor may have had no first-hand source to bridge events or statements. We can also expect that the nephew would be biased in favor of Drake.

Most important, however, is the fact that in regard to Nova Albion, Fletcher's writing can be detected by comparing World Encompassed with accounts of the voyage written after 1588. It has previously been assumed that the Fletcher "notes" originated from that account, but it has not been considered that the notes more likely refer to records that Fletcher was required to keep on the voyage, just as was Richard Madox, and were not from a personal account written after the voyage. In addition, the part of his account that would have described Nova Albion may never have been written, as it ends at the Island of Mocha. From all appearances, Fletcher's post 1588 account was drawn from memory, whereas the descriptions of Nova Albion in World Encompassed contain specific references to Indian words, dates, and minute detail that could not have been recalled accurately nine years or more after the event.

It can be expected that Fletcher's records, as well as diaries and notes kept by others, would have been required to be turned over to the subscribers of the voyage. Because of the raid on Spanish possessions, there would have been more than routine justification for doing this, and the documents probably were given to the principal investors, perhaps Hatton or Walsingham. The Queen, who was also an investor, had Drake's own log, so unless she insisted on taking the other material, she would

1. None of these accounts deal with Drake on the northwest coast of America.

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have trusted Hatton and Walsingham to see that it was properly cared for.

When the time came for Drake to write up his past services, it would have been relatively easy for him to acquire the notes, as he was also a heavy investor and friend of both Hatton and Walsingham; in fact, he may have inherited the notes when Walsingham died in 1590 and Hatton in 1591. In line of inheritance, they would have logically gone to Thomas Drake, Drake's youngest and sole surviving brother, and then to Thomas's son, Sir Francis Drake, Bart.

For descriptions of Nova Albion, then, it is highly possible that we have reference to some first-hand notes, probably written on the spot. Archaeological and ethnographical studies have shown these to be remarkably accurate, and the account describes phenomena actually experienced that can be verified today by similar existing conditions. Unlike Hakluyt, the writer of World Encompassed was attempting to compile as detailed a narrative as possible to take full advantage of these notes, and he apparently made little or no effort to edit them or put them into his own words, as Hakluyt had. We should probably keep in mind the statement in the introduction to the account:

It shall for the present be deemed a sufficient discharge of duty to register the true and whole history of that his voyage, with as great indifferency of affection as a history doth require, and with the plaine evidence of truth, as it was left recorded by some of the chiefe, and diuers other actors in that action.⁽¹⁾

Fletcher's notes particularly, and possibly those of the others too, were probably not kept as a running account but merely recorded significant events, descriptions of things seen, or actions and council taken, some of which Fletcher may have been instructed by Drake to record. Editorial splicing must consequently be anticipated with the chance of error or misinterpretation. As a whole, World Encompassed appears to be reasonably well compiled. That it is favorable to Drake, particularly with respect to the execution of Thomas Doughty, is to be expected;

1. See N. M. Penzer, ed., The World Encompassed, pp. 1, 2.

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first, because it was edited by a member of the family, and second, because no subordinate, including Fletcher, would have dared to keep a report on board the Golden Hind that was critical of his commanding officer. ⁽¹⁾ Fletcher later aired his private, unfavorable views in his own account written long afterwards.

The text and title page which follows is from the Argonaut Press reprint of The World Encompassed By Sir Francis Drake in The World Encompassed, N. M. Penzer, ed.

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1. Madox kept a private diary in cipher in which he recorded his personal opinions of his superiors and subordinates.

THE WORLD

Encompassed

By

Sir FRANCIS DRAKE

Being his next voyage to that to Nombre

de Dios formerly imprinted;

Carefully collected out of the notes of Master

FRANCIS FLETCHER Preacher in this im-

ployment, and diuers others his followers in

the same:

Offered now at last to publique view, both for the honour of
the actor, but especially for the stirring vp of heroick spirits,
to benefit their Countrie, and eternize their names
by like noble attempts.

LONDON,

Printed for NICHOLAS BOVRNE
and are to be sold at his shop at the
Royal Exchange. 1628.

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From Guatulco we departed the day following, viz., April 16, setting our course directly into the sea, whereon we sayled 500 leagues in longitude, to get a winde: and betweene that and June 3, 1400 leagues in all, till we came into 42 deg. of North latitude, where in the night following we found such alteration of heate, into extreame and nipping cold, that our men in generall did grieuously complaine thereof, some of them feeling their healths much impaired thereby; neither was it that this chanced in the night alone, but the day following carried with it not onely the markes, but the stings and force of the night going before, to the great admiration of vs all; for besides that the pinching and biting aire was nothing altered, the very roapes of our ship were stiffe, and the raine which fell was an vnatural congealed and frozen substance, so that we seemed rather to be in the frozen Zone then any way so neere vnto the sun, or these hotter climates.

Neither did this happen for the time onely, or by some sudden accident, but rather seemes indeed to proceed from some ordinary cause, against the which the heate of the sun preuailes not; for it came to that extremity in sayling but 2 deg. farther to the Northward in our course, that though sea-men lack not good stomaches, yet it seemed a question to many amongst vs, whether their hands should feed their mouthes, or rather keepe themselues within their couerts from the pinching cold that did benumme them. Neither could we impute it to the tendernesse of our bodies, though we came lately from the extremitie of heate, by reason whereof we might be more sensible of the present cold: insomuch as the dead and sencelesse creatures were as well affected with it as ourselues: our meate, as soone as it was remooued from the fire, would presently in a manner be frozen vp, and our ropes and tackling in a few dayes were growne to that stiffnesse, that what 3 men afore were able with them to performe, now 6 men, with their best strength and vttermost endeauour, were hardly able to accomplish: whereby a sudden and great discouragement seased vpon the mindes of our men, and they were possessed with a great mislike and doubting of any good to be done that way; yet would not our General be discouraged, but as wel by comfortable speeches, of the diuine prouidence, and of God's louing care ouer his children, out of the Scriptures, as also by other good and profitable perswasions, adding thereto his own cheerfull example, he so stirred them vp to put on a good courage, and to quite themselues like men, to indure some short extremity to haue the speedier comfort, and a little trouble to obtaine the greater glory, that euery man was throughly armed with

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willingnesse and resolved to see the uttermost, if it were possible, of what good was to be done that way.

The land in that part of America, bearing farther out into the West than we before imagined, we were neerer on it then wee were aware; and yet the neerer still wee came vnto it, the more extremitie of cold did sease vpon vs. The 5 day of June, wee were forced by contrary windes to runne in with the shoare, which we then first descried, and to cast anchor in a bad bay, the best roade we could for the present meete with, where wee were not without some danger by reason of the many extreme gusts and flawes that beate vpon vs, which if they ceased and were still at any time, immediately upon their intermission there followed most uile, thicke, and stinking fogges, against which the sea preuailed nothing, till the gusts of wind againe remoued them, which brought with them such extremity and violence when they came, that there was no dealing or resisting against them.

In this place was no abiding for vs; and to go further North, the extremity of the cold (which had now vtterly discouraged our men) would not permit vs; and the winds directly bent against vs, hauing once gotten vs under sayle againe, commanded vs to the Southward whether we would or no.

From the height of 48 deg., in which now we were, to 38, we found the land, by coasting alongst it, to bee but low and reasonable plaine; euery hill (whereof we saw many, but none verie high), though it were in June, and the sunne in his neere approach vnto them, being couered with snow.

In 38 deg. 30 min. we fell with a conuenient and fit harborough, and June 17 came to anchor therein, where we continued till the 23 day of July following. During all which time, notwithstanding it was in the height of summer, and so neere the sunne, yet were wee continually visited with like nipping colds as we had felt before; insomuch that if violent exercises of our bodies, and busie employment about our necessarie labours, had not sometimes compeld us to the contrary, we could very well haue been contented to haue kept about us still our winter clothes; yea (had our necessities suffered vs) to haue kept our beds; neither could we at any time, in whole fourteene dayes together, find the aire so cleare as to be able to take the height of sunne or starre.

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And here hauing so fit occasion (notwithstanding it may seeme to be besides the purpose of writing the history of this our voyage), we will a little more diligently inquire into the causes of the continuance of the extreame cold in these parts, as also into the probabilities or vnlikelihoods of a passage to be found that way. Neither was it (as hath formerly beene touched) the tendernesse of our bodies; comming so lately out of the heate, whereby the poores were opened, that made vs so sensible of the colds we here felt: in this respect, as in many others, we found our God a prouident Father and carefull Physitian for vs. We lacked no outward helpes nor inward comforts to restore and fortifie nature, had it beene decayed or weakened in vs; neither was there wanting to vs the great experience of our Generall, who had often himselfe proued the force of the burning Zone, whose aduice alwayes preuailed much to the preseruing of a moderate temper in our constitutions; so that euen after our departure from the heate wee alwayes found our bodies, not as sponges, but strong and hardned, more able to beare out cold, though we came out of excesse of heate, then a number of chamber champions could haue beene, who lye on their feather beds till they go to sea, or rather, whose teeth in a temperate aire do beate in their heads at a cup of cold sack and sugar by the fire.

And that it was not our tendernes, but the very extremitie of the cold itselfe, that caused this sensiblenes in vs, may the rather appeare, in that the naturall inhabitants of the place (with whom we had for a long season familiar intercourse, as is to be related), who had neuer beene acquainted with such heate, to whom the countrey, ayre, and climate was proper, and in whom custome of cold was as it were a second nature; yet vsed to come shiuering to vs in their warme furies, crowding close together, body to body, to receiue heate one of another, and sheltring themselues vnder a lee bancke, if it were possible, and as often as they could labouring to shroude themselues vnder our garments also to keepe them warme. Besides, how vnhandsome and deformed appeared the face of the earth itselfe! shewing trees without leaues, and the ground without greennes in those moneths of June and July. The poore birds and foules not daring (as we had great experience to obserue it), not daring so much as once to arise from their nests after the first egge layed, till it, with all the rest, be hatched and brought to some strength of nature, able to helpe itselfe. Onely this recompence hath nature afforded them, that the heate of their owne bodies being exceeding great, it perfecteth the creature with greater expedition, and in shorter time

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then is to be found in many places.

As for the causes of this extremity, they seeme not to be so deeply hidden but that they may, at least in part, be guessed at. The chiefest of which we conceiue to be the large spreading of the Asian and American continent, which (somewhat Northward of these parts), if they be not fully ioyned, yet seeme they to come very neere one to the other. From whose high and snow-couered mountaines, the North and North-west winds (the constant visitants of those coasts) send abroad their frozen nimphes, to the infecting the whole aire with this insufferable sharpnesse: not permitting the Sunne, no, not in the pride of his heate, to dissolve that congealed matter and snow, which they haue breathed out so nigh the Sunne, and so many degrees distant from themselues. And that the North and North-west winds are here constant in June and July, as the North wind alone is in August and September, we not onely found it by our owne experience, but were fully confirmed in the opinion thereof, by the continued obseruations of the Spaniards. Hence comes the generall squalidnesse and barrennesse of the cuntry; hence comes it, that in the midst of their summer, the snow hardly departeth euen from their very doores, but is neuer taken away from their hills at all; hence come those thicke mists and most stinking fogges, which increase so much the more, by how much higher the pole is raised: wherein a blind pilot is as good as the best director of a course. For the Sunne striuing to performe his naturall office, in eleuating the vapors out of these inferior bodies, draweth necessarily abundance of moisture out of the sea; but the nipping cold (from the former causes) meeting and opposing the sunnes indeuour, forces him to glue ouer his worke imperfect; and instead of higher eleuation, to leaue in the lowest region, wandring vpon the face of the earth and waters as it were a second sea, through which its owne beames cannot possibly pierce, vlesse sometimes when the sudden violence of the winds doth helpe to scatter and breake through it; which thing happeneth very seldome, and when it happeneth is of no continuance. Some of our mariners in this voyage had formerly beene at Wardhouse, in 72 deg. of North latitude, who yet affirmed that they felt no such nipping cold there in the end of the summer, when they departed thence, as they did here in those hottest moneths of June and July.

And also from these reasons we coniecture, that either there is no passage at all through these Northerne coasts (which is most likely), or if there be, that it is vnauigable. Adde hereunto, that though we

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searched the coast diligently, eune vnto the 48 deg., yet found we not the land to trend so much as one point in any place towards the East, but rather running on continually North-west, as if it went directly to meet with Asia; and euen in that height, when we had a franke wind to haue carried vs through, had there beene a passage, yet we had a smooth and calme sea, with ordinary flowing and reflowing, which could not haue beene had there been a frete; of which we rather infallibly concluded, then coniectured, that there was none. But to returne.

The next day, after our comming to anchor in the aforesaid harbour, the people of the countrey shewed themselues, sending off a man with great expedition to vs in a canow. Who being yet but a little from the shoare, and a great way from our ship, spake to vs continually as he came rowing on. And at last at a reasonable distance staying himselfe, he began more solemnely a long and tedious oration, after his manner: vsing in the deliuerie thereof many gestures and signes, mouing his hands, turning his head and body many wayes; and after his oration ended, with great shew of reuerence and submission returned backe to shoare againe. He shortly came againe the second time in like manner, and so the third time, when he brought with him (as a present from the rest) a bunch of feathers, much like the feathers of a blacke crow, very neatly and artificially gathered vpon a string, and drawne together into a round bundle; being verie cleane and finely cut, and bearing in length an equall proportion one with another; a speciall cognizance (as wee afterwards obserued) which they that guard their kings person weare on their heads. With this also he brought a little basket made of rushes, and filled with an herbe which they called Tabáh. Both which being tyed to a short rodde, he cast into our boate. Our Generall intended to haue recompenced him immediatly with many good things he would haue bestowed on him; but entring into the boate to deliuer the same, he could not be drawne to receiue them by any meanes, saue one hat, which being cast into the water out of the ship, he tooke vp (refusing vtterly to meddle with any other thing, though it were vpon a board put off vnto him) and so presently made his returne. After which time our boate could row no way, but wondring at vs as at gods, they would follow the same with admiration.

The 3 day following; uiz., the 21, our ship hauing receiued a leake at sea, was brought to anchor neerer the shoare, that, her goods being landed, she might be repaired; but for that we were to preuent any danger

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that might chance against our safety, our Generall first of all landed his men, with all necessary prouision, to build tents and make a fort for the defence of our selues and goods: and that wee might vnder the shelter of it with more safety (what euer should befall) end our businesse; which when the people of the countrey perceiued vs doing, as men set on fire to war in defence of their countrie, in great hast and companies, with such weapons as they had, they came downe vnto vs, and yet with no hostile meaning or intent to hurt vs: standing, when they drew neere, as men rauished in their mindes, with the sight of such things as they neuer had seene or heard of before that time: their errand being rather with submission and feare to worship vs as Gods, then to haue any warre with vs as with mortall men. Which thing, as it did partly shew itselfe at that instant, so did it more and more manifest itself afterwards, during the whole time of our abode amongst them. At this time, being willed by signes to lay from them their bowes and arrowes, they did as they were directed, and so did all the rest, as they came more and more by companies vnto them, growing in a little while to a great number, both of men and women.

To the intent, therefore, that this peace which they themselues so willingly sought might, without any cause of the breach thereof on our part given, be continued, and that wee might with more safety and expedition end our businesses in quiet, our Generall, with all his company, vsed all meanes possible gently to intreate them, bestowing vpon each of them liberally good and necessary things to couer their nakednesse; withall signifying vnto them we were no Gods, but men, and had neede of such things to couer our owne shame; teaching them to vse them to the same ends, for which cause also wee did eate and drinke in their presence, giuing them to vnderstand that without that wee could not liue, and therefore were but men as well as they.

Notwithstanding nothing could perswade them, nor remoue that opinion which they had conceiued of vs, that wee should be Gods.

In recompence of those things which they had receiued of vs, as shirts, linnen cloth, etc., they bestowed vpon our Generall, and diuerse of our company, diuerse things, as feathers, cawles of networke, and quiuers of their arrowes, made of fawne skins, and the very skins of beasts that their women wore vpon their bodies. Hauing thus had their fill of this times visiting and beholding of vs, they departed with ioy to

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houses, which houses are digged round within the earth, and haue from the vppermost brimmes of the circle clefts of wood set vp, and ioyned close together at the top, like our spires on the steeple of a Church; which being couered with earth, suffer no water to enter, and are very warme; the doore in the most part of them performes the office also of a chimney to let out the smoake; its made in bignesse and fashion like to an ordinary scuttle in a ship, and standing slopewise: their beds are the hard ground, onely with rushes strewed vpon it, and lying round about the house, haue their fire in the midst, which by reason that the house is but low vaulted, round, and close, giueth a maruelous reflexion to their bodies to heate the same.

Their men for the most part goe naked; the women take a kinde of bulrushes, and keming it after the manner of hemp, make themselues thereof a loose garment, which being knitte about their middles, hanges downe about their hippes, and so affordes to them a couering of that which nature teaches should be hidden; about their shoulders they weare also the skin of a deere, with the haire vpon it. They are very obedient to their husbands, and exceedingly ready in all seruices; yet of themselues offering to do nothing, without the consents or being called of the men.

As soone as they were returned to their houses, they began amongst themselues a kind of most lamentable weeping and crying out; which they continued also a great while together, in such sort that in the place where they left vs (being neere about 3 quarters of an English mile distant from them) we very plainely, with wonder and admiration, did heare the same, the women especially extending their voices in a most miserable and dolefull manner of shreeking.

Notwithstanding this humble manner of presenting themselues, and awfull demanour vsed towards vs, we thought it no wisdom too farre to trust them (our experience of former Infidels dealing with vs before, made vs carefull to prouide against an alteration of their affections or breach of peace if it should happen), and therefore with all expedition we set vp our tents, and intrenched ourselues with walls of stone; that so being fortified within ourselues, we might be able to keepe off the encmie (if they should so proue) from comming amongst us without our good wills: this being quickly finished, we went the more cheerefully and securely afterward about our other businesse.

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Against the end of two daies (during which time they had not againe beene with vs), there was gathered together a great assembly of men, women, and children (inited by the report of them which first saw vs, who, as it seems, had in that time of purpose dispersed themselues into the country, to make knowne the newes), who came now the second time vnto vs, bringing with them, as before had beene done, feathers and bagges of Tobàh for presents, or rather indeed for sacrifices, vpon this perswasion that we were gods.

When they came to the top of the hill, at the bottom whereof wee had built our fort, they made a stand; where one (appointed as their chiefe speaker) wearied both vs his hearers, and himselfe too, with a long and tedious oration; deliuered with strange and violent gestures, his voice being extended to the vttermost strength of nature, and his wordes falling so thicke one in the necke of another, that he could hardly fetch his breath againe: as soon as he had concluded, all the rest, with a reuerend bowing of their bodies (in a dreaming manner, and long producing of the same) cryed Oh: thereby giuing their consents that all was very true which he had spoken, and that they had vttered their minde by his mouth vnto vs; which done, the men laying downe their bowes vpon the hill, and leauing their women and children behinde them, came downe with their presents; in such sort as if they had appeared before a God indeed, thinking themselues happy that they might haue accesse vnto our Generall, but much more happy when they sawe that he would receiue at their hands those things which they so willingly had presented: and no doubt they thought themselues nearest vnto God when they sate or stood next to him. In the meane time the women, as if they had beene desperate, vsed vnnatural violence against themselues, crying and shrieking piteously, tearing their flesh with their nailes from their cheekes in a monstrous manner, the blood streaming downe along their brests, besides despoiling the vpper parts of their bodies of those single couerings they formerly had, and holding their hands aboue their heads that they might not rescue their brests from harme, they would with furie cast themselues vpon the ground, neuer respecting whether it were cleane or soft, but dashed themselues in this manner on hard stones, knobby hillocks, stocks of wood, and pricking bushes, or whateuer else lay in their way, itterating the same course againe and againe; yea women great with child, some nine or ten times each, and others holding out till 15 or 16 times (till their strengths failed them) exercised this cruelty against themselues: a thing more grieuous for vs to see or suffer,

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could we haue holpe it, then trouble to them (as it seemed) to do it. This bloudie sacrifice (against our wils) beeing thus performed, our Generall, with his companie, in the presence of those strangers, fell to prayers; and by signes in lifting vp our eyes and hands to heauen, signified vnto them that that God whom we did serue, and whom they ought to worship, was aboue: beseeching God, if it were his good pleasure, to open by some meanes their blinded eyes, that they might in due time be called to the knowledge of him, the true and euerliuing God, and of Jesus Christ whom he hath sent, the saluation of the Gentiles. In the time of which prayers, singing of Psalmes, and reading of certaine Chapters in the Bible, they sate very attentiuely: and obseruing the end at euery pause, with one voice still cried, Oh, greatly reioycing in our exercises. Yea they tooke such pleasure in our singing of Psalmes, that whensoever they resorted to vs, their first request was commonly this, Gnaáh, by which they intreated that we would sing.

Our Generall hauing now bestowed vpon them diuers things, at their departure they restored them all againe, none carrying with him anything of whatsoever hee had receiued, thinking themselues sufficiently enriched and happie that they had found so free accesse to see vs.

Against the end of three daies more (the newes hauing the while spread itselue farther, and as it seemed a great way vp into the countrie), were assembled the greatest number of people which wee could reasonably imagine to dwell within any conuenient distance round about. Amongst the rest the king himselfe, a man of goodly stature and comely personage, attended with his guard of about 100 tall and warlike men, this day, viz., June 26, came downe to see vs.

Before his comming, were sent two ambassadors or messengers to our Generall, to signifie that their Hióh, that is, their king, was coming and at hand. They in the deliery of their message, the one spake with a soft and low voice, prompting his fellow; the other pronounced the same, word by word, after him with a voice more audible, continuing their proclamation (for such it was) about halfe an houre. Which being ended, they by signes made request to our Generall, to send something by their hands to their Hióh or king, as a token that his comming might be in peace. Our Generall willingly satisfied their desire; and they, glad men, made speedy returne to their Hióh. Neither was it long before their king (making as princely a shew as possibly he could) with

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all his traine came forward.

In their coming forwards, they cryed continually after a singing manner, with a lustie courage. And as they drew neerer and neerer towards vs, so did they more and more striue to behaue themselues with a certaine comelinesse and grauity in all their actions.

In the forefront came a man of a large body and goodly aspect, bearing the Septer or royall mace, made of a certaine kind of blacke wood, (and in length about a yard and a halfe) before the king. Whereupon hanged two crownes, a bigger and a lesse, with three chaines of a maruellous length, and often doubled, besides a bagge of the herb Tabáh. The crownes were made of knitworke, wrought vpon most curiously with feathers of diuers colours, very artificially placed, and of a formall fashion. The chaines seemed of a bony substance, euery linke or part thereof being very little, thinne, most finely burnished, with a hole pierced through the middest. The number of linkes going to make one chaine, is in a manner infinite; but of such estimation it is amongst them, that few be the persons that are admitted to weare the same; and euen they to whom its lawfull to use them, yet are stinted what number they shall vse, as some ten, some twelue, some twentie, and as they exceed in number of chaines, so thereby are they knowne to be the more honorable personages.

Next vnto him that bare this Scepter, was the king himselfe with his guard about him; his attire vpon his head was a cawle of knitworke, wrought vpon somewhat like the crownes, but differing much both in fashion and perfectnesse of worke; vpon his shoulders he had on a coate of the skins of conies, reaching to his wast; his guard also had each coats of the same shape, but of other skins; some hauing cawles likewise stucke with feathers, or couered ouer with a certaine downe, which groweth vp in the countrey vpon an herbe much like our lectuce, which exceeds any other downe in the world for finenesse, and beeing layed vpon their cawles, by no winds can be remoued. Of such estimation is this herbe amongst them, that the downe thereof is not lawfull to be worne, but of such persons as are about the king (to whom also it is permitted to weare a plume of feathers on their heads, in signe of honour), and the seeds are not vsed but onely in sacrifice to their gods. After these, in their order, did follow the naked sort of common people, whose haire being long, was gathered into a bunch behind, in which stucke plumes of

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feathers; but in the forepart onely single feathers like hornes, euery one pleasing himselfe in his owne deuice.

This one thing was obserued to bee generall amongst them all, that euery one had his face painted, some with white, some blacke, and some with other colours, euery man also bringing in his hand one thing or other for a gift or present. Their traine or last part of their company consisted of women and children, each woman bearing against her breast a round basket or two, hauing within them diuers things, as bagges of Tobáh, a roote which they call Petáh, whereof they make a kind of meale, and either bake it into bread, or eate it raw; broyled fishes, like a pilchard; the seede and downe aforenamed, with such like.

Their baskets were made in fashion like a deep boale, and though the matter were rushes, or such other kind of stuffe, yet was it so cunningly handled, that the most part of them would hold water: about the brimmes they were hanged with peeces of the shels of pearles, and in some places with two or three linkes at a place, of the chaines forenamed: thereby signifying that they were vessels wholly dedicated to the onely vse of the gods they worshipped; and besides this, they were wrought vpon with the matted downe of red feathers, distinguished into diuers workes and formes.

In the meane time, our Generall hauing assembled his men together (as forecasting the danger and worst that might fall out) prepared himselfe to stand vpon sure ground, that wee might at all times be ready in our owne defence, if any thing should chance otherwise than was looked for or expected.

Wherefore euery man being in a warlike readinesse, he marched within his fenced place, making against their approach a most warlike shew (as he did also at all other times of their resort); whereby if they had beene desperate enemies, they could not haue chosen but haue conceiued terrour and fear, with discouragement to attempt anything against vs, in beholding of the same.

When they were come somewhat neere vnto vs, trooping together, they gaue vs a common or generall salutation, obseruing in the meane time a generall silence. Whereupon, he who bare the Scepter before the king, being prompted by another whom the king asigned to that office,

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pronounced with an audible and manly voice what the other spake to him in secret, continuing, whether it were his oration or proclamation, at the least halfe an houre. At the close whereof there was a common Amen, in signe of approbation, giuen by euery person: and the king himselfe, with the whole number of men and women (the little children onely remaining behind) came further downe the hill, and as they came set themselues againe in their former order.

And being now come to the foot of the hill and neere our fort, the Scepter bearer, with a composed countenance and stately carriage began a song, and answerable thereunto obserued a kind of measures in a dance; whom the king with his guard and euery other sort of person following, did in like manner sing and daunce, sauing onely the women, who danced but kept silence. As they danced they still came on: and our Generall perceiuing their plaine and simple meaning, gaue order that they might freely enter without interruption within our bulwarke. Where, after they had entred, they yet continued their song and dance a reasonable time, their women also following them with their wassaile boales in their hands, their bodies bruised, their faces torne, their dugges, breasts, and other parts bespotted with bloud, trickling downe from the wounds, which with their nailes they had made before their comming.

After that they had satisfied, or rather tired themselves in this manner, they made signes to our Generall to haue him sit down; unto whom both the king and diuers others made seuerall orations, or rather, indeed, if wee had vnderstood them, supplications, that hee would take the Prouince and kingdome into his hand, and become their king and patron: making signes that they would resigne vnto him their right and title in the whole land, and become his vassals in themselves and their posterities: which that they might make vs indeed beleaue that it was their true meaning and intent, the king himselfe, with all the rest, with one consent and with great reuerence, ioyfully singing a song, set the crowne vpon his head, inriched his necke with all their chaines, and offering vnto him many other things, honoured him by the name of Hyóh. Adding thereunto (as it might seeme) a song and dance of triumph; because they were not onely visited of the gods (for so they still iudged vs to be), but the great and chiefe God was now become their God, their king and patron, and themselues were become the onely happie and blessed people in the world.

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These things being so freely offered, our Generall thought not meet to reiect or refuse the same, both for that he would not giue them any cause of mistrust or disliking of him (that being the onely place, wherein at this present, we were of necessitie inforced to seeke reliefe of many things), and chiefly for that he knew not to what good end God had brought this to passe, or what honour and profit it might bring to our cuntrye in time to come.

Wherefore, in the name and to the vse of her most excellent maiesty, he tooke the sceptor, crowne, and dignity of the sayd cuntrye into his hand; wishing nothing more than that it had layen so fitly for her maiesty to enjoy, as it was now her proper owne, and that the riches and treasures thereof (wherewith in the vpland cuntries it abounds) might with as great conueniency be transported, to the enriching of her kingdome here at home, as it is in plenty to be attained there; and especially that so tractable and louing a people as they shewed themselues to be, might haue meanes to haue manifested their most willing obedience the more vnto her, and by her meanes, as a mother and nurse of the Church of Christ, might by the preaching of the Gospell, be brought to the right knowledge and obedience of the true and euerliuing God.

The ceremonies of this resigning and receiuing of the kingdome being thus performed, the common sort, both of men and women, leauing the king and his guard about him, with our Generall, dispersed themselves among our people, taking a diligent view or suruey of euery man; and finding such as pleased their fancies (which commonly were the youngest of vs), they presently enclosing them about offred their sacrifices vnto them, crying out with lamentable shreekes and moanes, weeping and scratching and tearing their very flesh off their faces with their nailles; neither were it the women alone which did this, but euen old men, roaring and crying out, were as violent as the women were.

We groaned in spirit to see the power of Sathan so farre preuaile in seducing these so harmelesse soules, and laboured by all meanes, both by shewing our great dislike, and when that serued not, by violent withholding of their hands from that madnesse, directing them (ly our eyes and hands lift vp towards heauen) to the liuing God whom they ought to serue; but so mad were they vpon their Idolatry, that forcible withholding them would not preuaile (for as soone as they could get liberty to their hands againe, they would be as violent as they were before)

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till such time, as they whom they worshipped were conueyed from them into the tents, whom yet as men besides themselues, they would with fury and outrage seeke to haue againe.

After that time had a little qualified their madnes, they then began to shew and make knowne vnto vs their griefes and diseases which they carried about them; some of them hauing old aches, some shruncke sinewes, some old soares and canchred vlcers, some wounds more lately receiued, and the like; in most lamentable manner crauing helpe and cure thereof from vs; making signes, that if we did but blowe vpon their griefes, or but touched the diseased places, they would be whole.

Their griefes we could not but take pittie on them, and to our power desire to helpe them: but that (if it pleased God to open their eyes) they might vnderstand we were but men and no gods, we vsed ordinary meanes, as lotions, emplaisters, and vnguents, most fitly (as farre as our skills could guesse) agreeing to the natures of their griefes, beseeching God, if it made for his glory, to giue cure to their diseases by these meanes. The like we did from time to time as they resorted to vs.

Few were the dayes, wherein they were absent from vs, during the whole time of our abode in that place; and ordinarily euery third day they brought their sacrifices, till such time as they certainly vnderstood our meaning, that we tooke no pleasure, but were displeas'd with them; whereupon their zeale abated, and their sacrificing, for a season, to our good liking ceased; notwithstanding they continued still to make their resort vnto vs in great abundance, and in such sort, that they oft-times forgate to prouide meate for their owne sustenance; so that our Generall (of whom they made account as of a father) was faine to performe the office of a father to them, relieuing them with such victualls as we had prouided for our selues, as Muscles, Seales, and such like, wherein they tooke exceeding much content; and seeing that their sacrifices were displeasing to vs, yet (hating ingratitude) they sought to recompence vs with such things as they had, which they willingly inforced vpon vs, though it were neuer so necessarie or needfull for themselues to keepe.

They are a people of a tractable, free, and louing nature, without guile or treachery; their bowes and arrowes (their only weapons, and al-

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most all their wealth) they vse very skillfully; but yet not to do any great harme with them, being by reason of their weakenesse more fit for children then for men, sending the arrowes neither farre off nor with any great force: and yet are the men commonly so strong of body, that that which 2 or 3 of our men could hardly beare, one of them would take vpon his backe, and without grudging carrie it easily away, vp hill and downe hill an English mile together: they are also exceeding swift in running, and of long continuance, the vse whereof is so familiar with them, that they seldome goe, but for the most part runne. One thing we obserued in them with admiration, that if at any time they chanced to see a fish so neere the shoare that they might reach the place without swimming, they would neuer, or very seldome, misse to take it.

After that our necessary businesses were well dispatched, our Generall, with his gentlemen and many of his company, made a journey vp into the land, to see the manner of their dwelling, and to be better acquainted with the nature and commodities of the country. Their houses were all such as we haue formerly described, and being many of them in one place, made scuerall villages here and there. The inland we found to be farre different from the shoare, a goodly country, and fruitful soyle, stored with many blessings fit for the vse of man: infinite was the company of very large and fat Deere which there we sawe by thousands, as we supposed, in a heard; besides a multitude of a strange kinde of Conies, by farre exceeding them in number: their heads and bodies, in which they resemble other Conies, are but small; his tayle, like the tayle of a Rat, exceeding long; and his feet like the pawes of a Want or moale; vnder his chinne, on either side, he hath a bagge, into which he gathereth his meate, when he hath filled his belly abroad, that he may with it, either feed his young, or feed himselfe when he lists not to trauaile from his burrough; the people eate their bodies, and make great account of their skinnes, for their kings holidiaies coate was made of them.

This country our Generall named Albion, and that for two causes; the one in respect of the white bancks and cliffes, which lie toward the sea; the other, that it might haue some affinity, euen in name also, with our own country, which was sometime so called.

Before we went from thence, our Generall caused to be set vp a monument of our being there, as also of her maiesties and successors

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right and title to that kingdome; namely a plate of brasse, fast nailed to a great and firme post; whereon is engrauen her graces name, and the day and yeare of our arriuall there, and of the free giuing vp of the prouince and kingdome, both by the king and people, into her maiesties hands: together with her highnesse picture and armes, in a piece of six-pence currant English monie, shewing itselfe by a hole made of purpose through the plate; vnderneath was likewise engrauen the name of our Generall, etc.

The Spaniards neuer had any dealing, or so much as set a foote in this country, the vtmost of their discoueries reaching onely to many degrees Southward of this place.

And now, as the time of our departure was perceiued by them to draw nigh, so did the sorrowes and miseries of this people seeme to themselues to increase vpon them, and the more certaine they were of our going away, the more doubtfull they shewed themselues what they might doe; so that we might easily iudge that that ioy (being exceeding great) wherewith they receiued vs at our first arriuall, was cleane drowned in their excessiue sorrow for our departing. For they did not onely loose on a sudden all mirth, ioy, glad countenance, pleasant speeches, agility of body, familiar reioycing one with another, and all pleasure what euer flesh and blood might bee delighted in, but with sighes and sorrowings, with heauy hearts and griued minds, they powred out wofull complaints and moanes, with bitter teares and wringing of their hands, tormenting themselues. And as men refusing all comfort, they onely accounted themselues as cast-awayes, and those whom the gods were about to forsake: so that nothing we could say or do, was able to ease them of their so heauy a burthen, or to deliuer them from so desperate a strait, as our leauing of them did seeme to them that it would cast them into.

Howbeit, seeing they could not still enjoy our presence, they (supposing vs to be gods indeed) thought it their duties to intreate vs that, being absent, we would yet be mindfull of them, and making signes of their desires that in time to come wee would see them againe, they stole vpon vs a sacrifice, and set it on fire erre we were aware, burning therein a chaine and a bunch of feathers. We laboured by all meanes possible to withhold or withdraw them, but could not preuaile, till at last we fell to prayers and singing of Psalmes, whereby they were allured immedi-

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ately to forget their folly, and leaue their sacrifice vnconsumed, suffering the fire to go out; and imitating vs in all our actions, they fell a lifting of their eyes and hands to heauen, as they saw vs do.

The 23 of July they tooke a sorrowfull farewell of vs, but being loath to leaue vs, they presently ranne to the top of the hills to keepe vs in their sight as long as they could, making fires before and behind, and on each side of them, burning therein (as is to be supposed) sacrifices at our departure.

Not farre without this harborough did lye certaine Ilands (we called them the Ilands of Saint James), hauing on them plentifull and great store of Seales and birds, with one of which wee fell July 24, whereon we found such prouision as might competently serue our turne for a while. We departed againe the day next following, viz., July 25. And our Generall now considering that the extremity of the cold not only continued, but increased, the Sunne being gone farther from vs, and that the wind blowing still (as it did at first) from the Northwest, cut off all hope of finding a passage through these Northerne parts, thought it necessarie to loose no time; and therefore with generall consent of all, bent his course directly to runne with the Ilands of the Moluccas.

SIR WILLIAM MONSON

"Sir William Monson's Naval Tracts,"
Churchill's Collection of Voyages, Vol. III, pp. 163-560, 1704

Sir William Monson, a distinguished naval officer (1569-1643), wrote his observations on the naval history of his time about 1604. Although an extract was published in 1682, A True and Exact Account of the Wars with Spain in the Reign of Queen Elizabeth, the work was not published in full until 1704.

A captain by 1589, Monson sailed with most of the expeditions sent by the Queen against the Spanish fleet, but he does not seem to have taken part in any with Drake.

He prefaces his resume of Drake's and Cavendish's voyages with what Wagner considers a curious note: ". . . with some Addition of Sir Francis Drake himself, which is the next that follows." Wagner states: "it would be interesting to know what these were. The words seem to indicate that Monson had written them before Drake died, but this is very unlikely. The other explanation would be that Monson had copied, or at least extracted his story from, some account to which Drake had made some additions and this appears to be the more reasonable one as there is nothing to show that this part of the book, at least, was written before 1640."

In his introduction, Monson states of Drake: ". . . but lastly, and principally, that after so many Miseries and Extremities he endur'd, and almost two Years spent in unpractis'd Seas, when reason would have bid him sought home for his Rest, he left his known Course, and ventur'd upon an unknown Sea in 48 Degrees, which Sea or Passage we know had been often attempted by our Seas, but never discover'd."

Wagner tells us: "An examination of his (Monson's) account of the voyage shows most extraordinary errors, most of which no doubt arose from careless reading of his manuscript when the book was printed. What few dates are correctly given, or nearly so, seem to have been taken from the World Encompassed, and of the places mentioned some are to be found in that book and one at least, in the 'Famous Voyage.'"

The following account is extracted from Wagner's Sir Francis Drake's Voyage Around the World.

SIR WILLIAM MONSON

"From the 16th of April till the 5th of June, he sail'd without seeing Land, and arriv'd in 48 Degrees, thinking to find a Passage into our Seas, which Land he nam'd Albion; the People were courteous, and took his Men for Gods; they live in great extremity of Cold and Want: Here they trim'd their Ship, and departed the 25th of July, 1579, standing his Course for the Molucco's."

ROBERT DUDLEY

The charts published by Robert Dudley in his atlas, Dell' Arcano del Mare, produced in 1646 and 1647, and an undated manuscript chart drawn by him are one of the most important sources for locating Drake's port on the California Coast. Dudley emigrated to Italy in 1605 and began work on his atlas there in about 1630. Through his family's close connection with Drake, Dudley as a very young man (or boy) was in a position to obtain first-hand information of the details of Nova Albion and the coastal navigation directly from Drake himself.

Robert Dudley, born in 1574, was the illegitimate son of the Earl of Leicester, who was one of the sponsors of Drake's voyage and until his death in 1588, one of Drake's staunchest friends. His mother was Admiral Lord Howard's sister, Lady Sheffield. From the age of six he was under the influence of his father, who sent him to Oxford and left his estate to him after the death of his brother, Ambrose Dudley, Earl of Warwick, in 1590. Dudley married the sister of Thomas Cavendish and by marriage became related to Richard Hakluyt, who married Cavendish's cousin.

It is said that Dudley was taught enough navigation for an admiral⁽¹⁾ and it is not unlikely that during this period he met Drake. Possibly of greater significance to what he may have learned from him of Nova Albion, however, is the fact that when Thomas Cavendish died at sea in 1592, two ships belonging to Cavendish were directed to be delivered to Dudley, who was administrator of Cavendish's estate. Dudley, wanting to emulate his brother-in-law's first voyage into the Pacific, immediately projected a voyage to the South Sea. This happened at a time when Drake had returned to London to take up residence there, and it therefore would have been logical for young Dudley to consult his father's good friend for details of the navigation, particularly with respect to the Pacific side of the Americas. Dudley's statements in Arcano del Mare and in his charts suggest a faith in Drake that could not have been fostered by mere hearsay or vague references. Drake had sailed to the North American west coast, he had a Spanish chart, had made his landfall just as the Manila galleons had and coasted south in their track, and through his own experience, he was in an excellent position to give the comparisons of distances and positions that Dudley, in his chart legends and text

1. See E. G. R. Taylor, The Haven Finding Art, p. 246.

ROBERT DUDLEY

of Arcano del Mare, said Drake and the Spanish pilots found there.

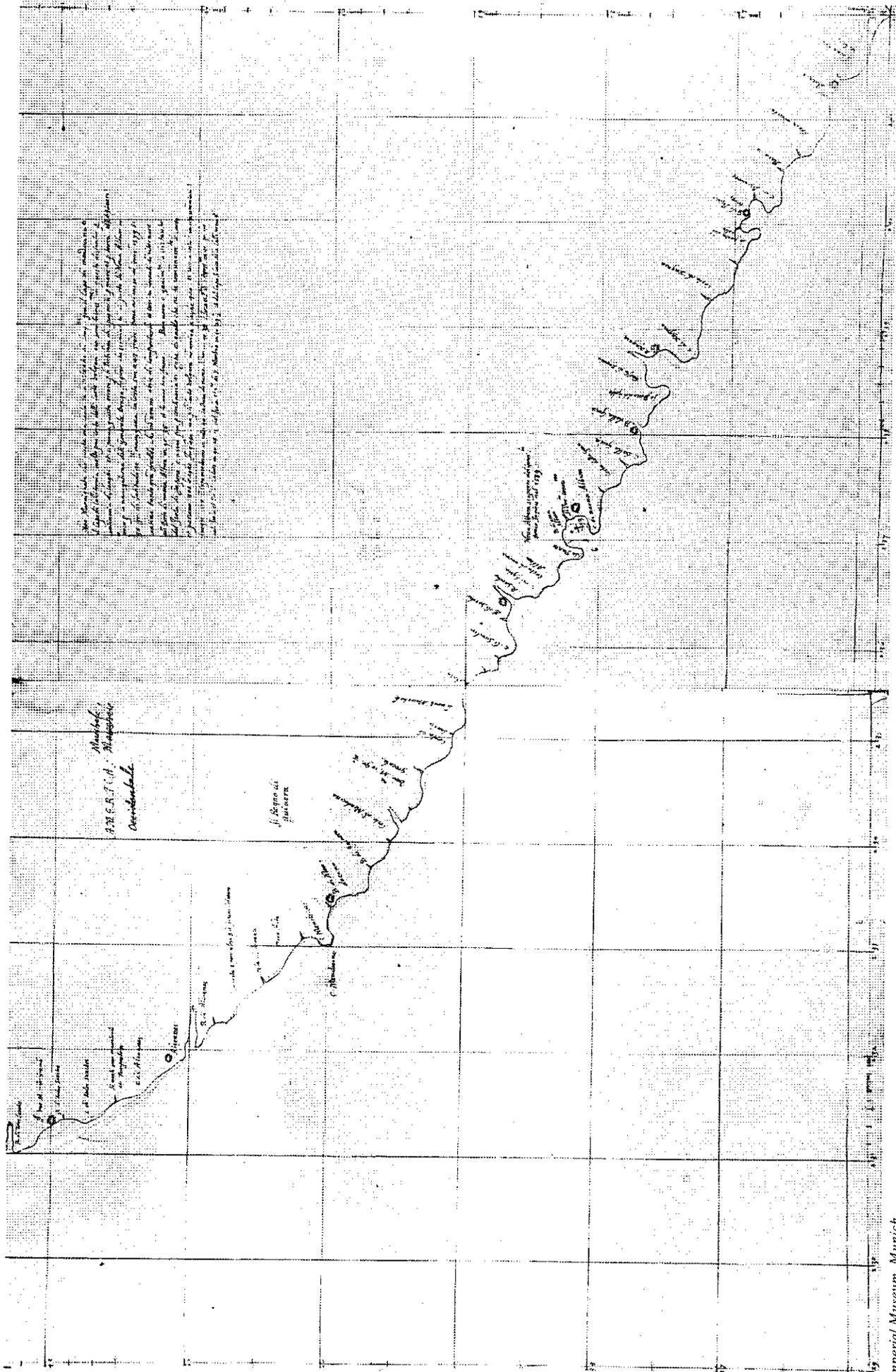
In the end, Dudley was dissuaded from making the voyage into the Pacific because of his youth and inexperience, so changed his plans instead for a voyage to the West Indies in 1594.

The first of Dudley's charts to merit attention is an undated manuscript chart, No. 85, in the Imperial Museum of Munich, which shows the northwest Coast of North America between latitude 36° North and 42-1/2° North. The chart is the northern one of a series of three beginning at the tip of Baja California. Of particular interest is a round bay at about 38° labeled B: di noua Albion showing a line of soundings beginning with 6 fathoms south of a point labeled la Punta, and leading northeast to 5 and 4 fathoms, where an anchorage is shown between 4 and 3 fathoms outside the mouth of a river, or estuary, identified as Il Por^{to} boniss.^{mo}.

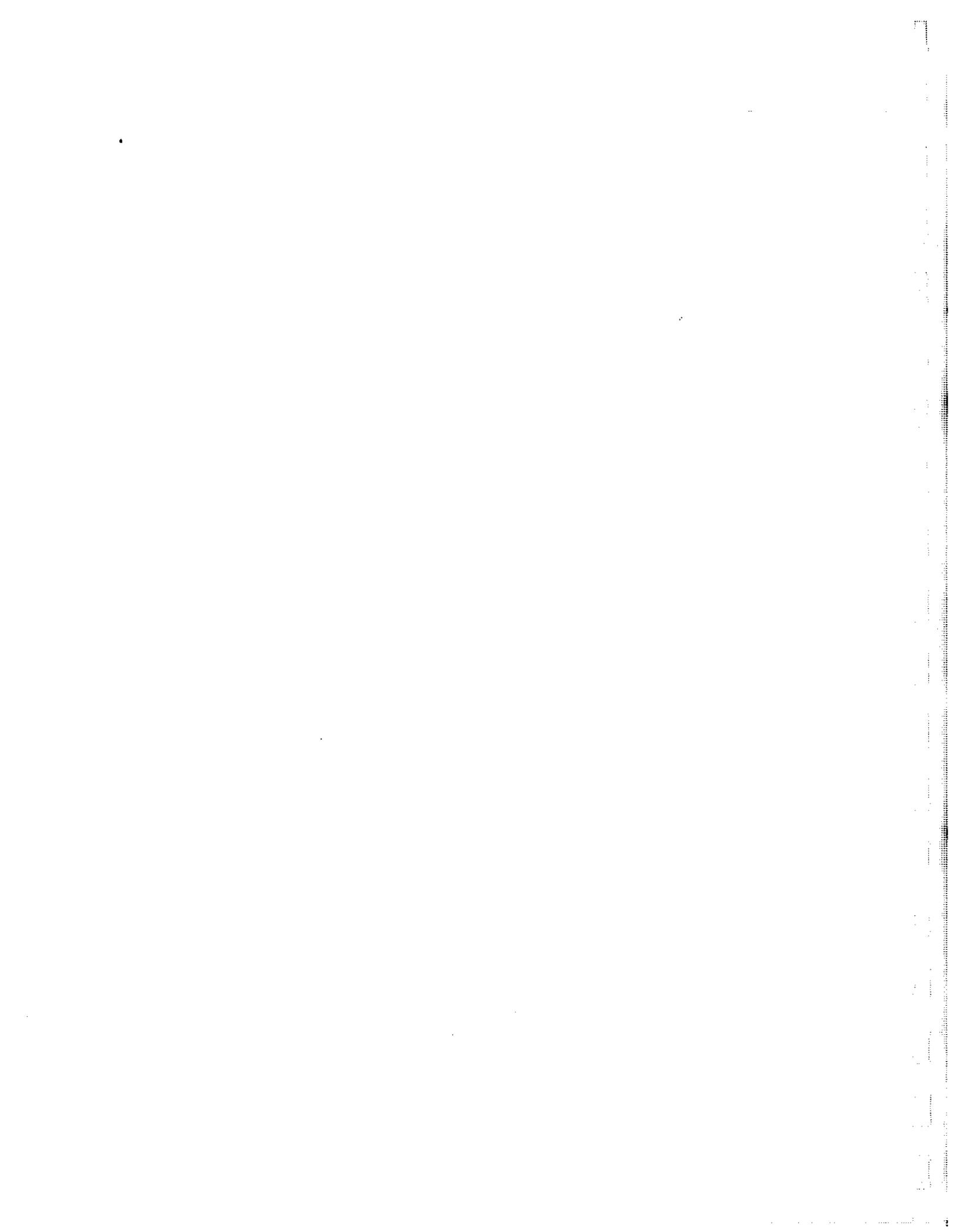
This chart first caught the attention of Davidson as having an important bearing on Drake's port. He regarded the bay as the exact counterpart of Hondius' Portus Novae Albionis, the relationship envisioned being between the point and the sweep of the bay on the northwest side to the inlet, which Davidson associated with the Estero Limantour. He questioned whether the two terms B: (Baia) and Por^{to} suggested either Dudley meant Il Por^{to} boniss.^{mo} to apply to Estero Limantour or to Drake's anchorage in Drakes Bay, and opined that Drake must have seen the Indians leaving and entering this estero, but may have considered it only a good harbor for boats. Davidson stated that Drake's ship could not have entered the estero except at the highest tide and with smooth water, "unless there was more water on the bar than there has been in late years." Of the soundings, Davidson assumed that they had reference to an anchorage which he thought to be Drake's port and landing place under the east side of Point Reyes.

South of the inlet there is a symbol which Davidson incorrectly interpreted as representing Mt. Tamalpais, but which in reality is one that Dudley clearly used on other charts to denote an Indian settlement. The symbol represents a stylized stockade of a type found on the east coast of North America. (1)

1. See Carta Particolare della Virginia Vecchia e Nuoua, Chart No. III,



ROBERT DUDLEY'S MANUSCRIPT CHART NO. 85.



ROBERT DUDLEY

Because the trend of the coast, particularly above Cape Mendocino, is so much in error, MS chart No. 85 could not have been copied from any chart made by Drake. Instead, Dudley probably attempted to delineate on his chart certain details that he had noted in his discussions with Drake. The trend shown by Dudley calls to mind the general statement in World Encompassed "yet found we not the land to trend so much as one point in any place towards the East, but rather running on continually North-west, as if it went directly to meet with Asia." (1) This sort of statement, if taken out of context, could lead to Dudley's error.

There is, however, a peculiarity in Dudley's northwest coast on MS chart No. 85 and another that he published showing Drake's discoveries, Carta Particolare dello stretto di Iezo fra L'America è L'Isola Iezo, Chart No. XXXIII, that reveals some knowledge of the Coast. If straight lines, or bearings from point to point are traced from a modern chart and overlaid on Dudley's charts, it is found that these lines coincide remarkably with the contours shown on his charts. This is not true for what we assume to be one of his reference sources, MS chart No 83 and 83 bis. Thus it appears that Dudley had grasped the change in trend but had forgotten, or failed to note, the bearings by compass, (2) and between MS chart No. 85 and Carta Particolare, No. XXXIII, we see that he was not certain as to what the compass bearings should be, though he maintained the same change in trend. The coast may have been described to him in terms of these changes rather than bearings, and it should be noted that from Cape Mendocino to Drake's bay he has related his coastline to a straight line lightly penciled in.

We can expect that Dudley used available sources based on Spanish discoveries to construct MS chart No. 85. MS chart No. 83 and No 83

(contd.) from Dell' Arcano del Mare. For reproduction, see G. Frere-Cook, ed., The Decorative Arts of the Mariner, p. 156. Theodore de Bry's map of Virginia shows a more elaborate form of this symbol with representation of Indian dwellings within.

1. See p. 158, supra.
2. The changes would have been noted by compass points and would have been easy to remember; from the north, through Cape Blanco to Cape Mendocino, the change is about one point; from Cape Mendocino to Point Reyes, about two points.

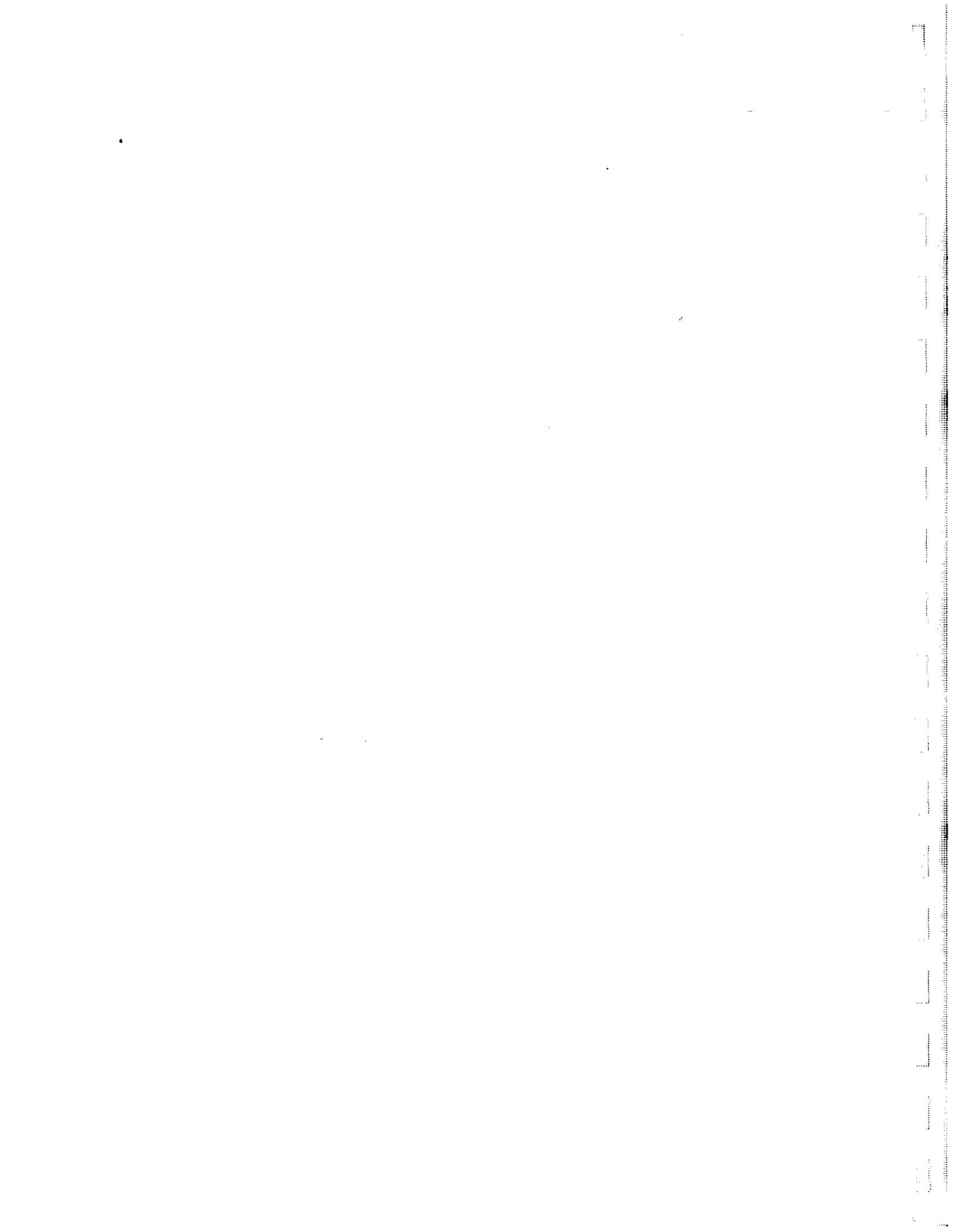
ROBERT DUDLEY

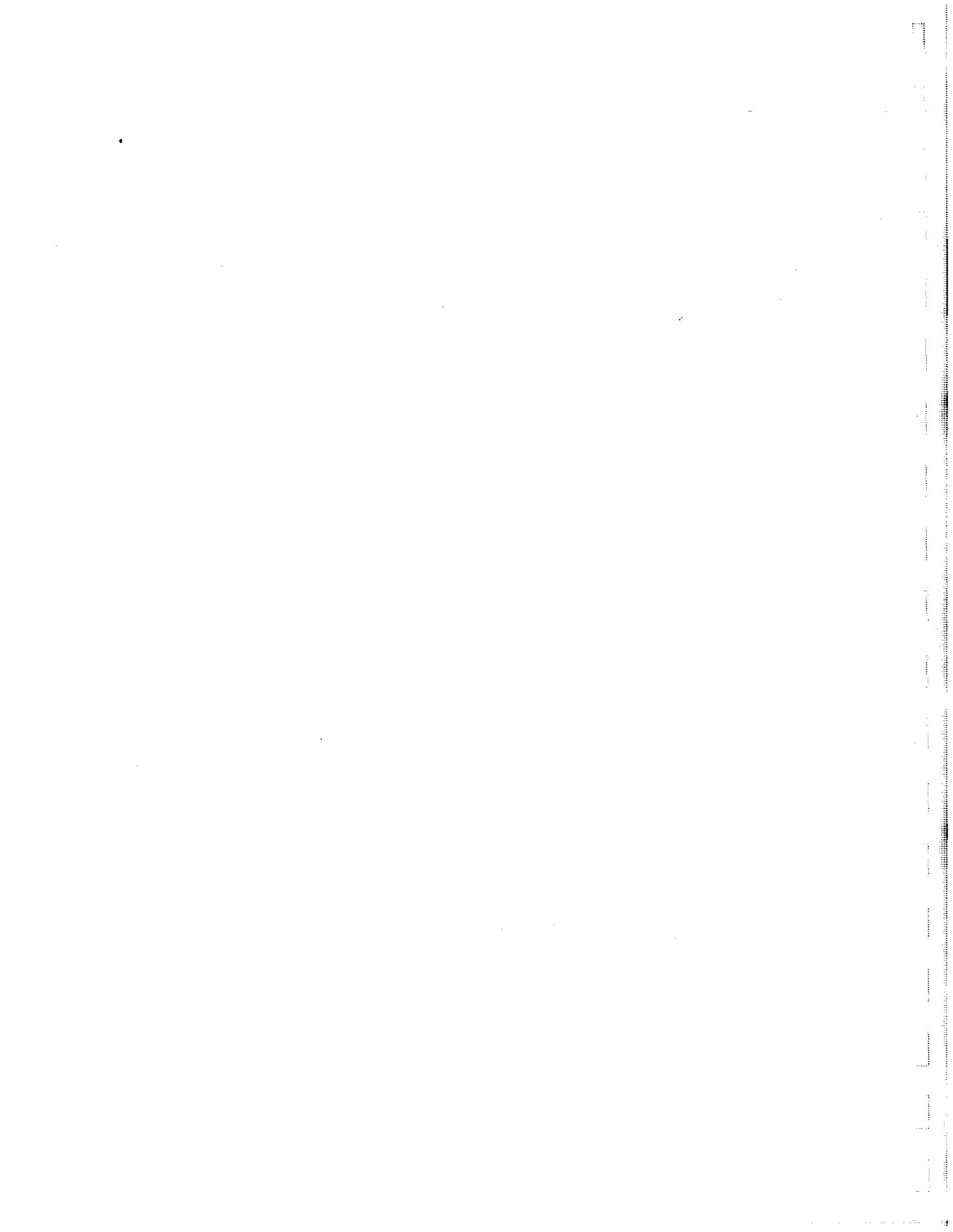
bis, also in the Imperial Museum at Munich, offers an interesting comparison with MS chart No. 85, as the two charts carry place names that are common to each other and otherwise have a number of similarities that make it apparent that he made use of MS chart No. 83 to construct MS chart No. 85. Neither chart shows anything of the Viscaïno or Cermeño discoveries, thus indicating a source that predated their voyages; several place names derive from the Cabrillo expedition. In addition, MS chart No. 83 is so elementary that it may have been constructed from sailing directions, or a rutter, such as Drake or Cavendish may have acquired from the Spanish in the Pacific, as Dudley makes reference to a book of sailing directions (Portilani) in his legend on MS chart No. 85.

A legend on MS chart No. 83 slightly contradicts Dudley's statements given on his other charts and his text in Arcano del Mare and may merely originate from a reference used by him: "The port of Quivira was discovered by Drake the Englishman about 1582, and the weather was so cold in the middle of June that they were not able to bear it, then they went to latitude 38-1/2 degrees and the wind was favorable, and it was named Noua Albion but the insupportable cold held on. Even from 42°. This was that Port." (1) There is some erasing in the legend, and a tail added below 42°, making it 43°.

The most important difference between MS chart No. 83 and MS chart No. 85 is that on MS chart No. 85 Dudley modified the trend and configuration of the coast, and below a bay situated in about 38-1/2° on both charts, which is labeled P. de Sardina on the former and B: di Sardin on the latter, he added Drake's port in about 38°. Beyond this, it is idle to speculate as to how much knowledge of the coast was learned from Drake, except that Dudley appears to have believed that there should be a bay a half degree of latitude north of Drake's port, a fact that he may have gotten from him.

1. Original Italian: "P. di Quiuera. Scoperto dal Drago Inglese nel 1582 fu tanto freddo nel mese d' giugno che nō poteua comportarlo poi andaua a gr 38-1.2 et laure fu comportabile et lo nominaua Noua Albion. ma il freddo insupportabile duro. Sin a 42 gradi. che era detto Porto." G. Davidson, Identification, p. 43.





ROBERT DUDLEY

On MS chart No. 85, the notation Terra Alta should be noted in the vicinity of Cape Mendocino. This would refer to the high country immediately behind the cape, which is one of its characteristics, a feature that would have been noted by the Spaniards and Drake. The stream just below the cape corresponds to the Mattole River and in the location of the stockade symbol, traces of Indian middens can be found today.

Dudley shows no sign of the islands that World Encompassed mentions as being not far without Drake's port at Nova Albion, but in verbal transmission their significance in relation to the port could easily be overlooked or forgotten.

Carta Particolare, No. XXXIII, in Arcano del Mare, shows that Dudley slightly modified his manuscript chart; he decreased the westerly trend of the coast but maintained the same contour; where he showed B: di Sardir there is a very compact bay called B: S: Michele having islands inside; B: di noua Albion is much the same in shape and location but is now simply identified as Po:^{to} di Nuoua Albion. The line of soundings within the bay is similar except that all but one figure was changed. The 6 fathom mark was retained south and slightly east of the point; an additional sounding of 8 fathoms is placed outside the bay, 5 fathoms is omitted and the 3 and 4 fathom marks are reversed. The stockade symbol now appears on the left side of the inlet. In the description of Carta Particolare, No. XXXIII, in the text of his atlas, Dudley gives details of Nova Albion not found in other accounts.

The final chart for consideration from the Arcano del Mare is the inset chart of the northwest coast of America on Dudley's Carta prima Generale d' America dell' India Occidẽ tale è Mare del Zur. This chart differs substantially from Carta Particolare, No. XXXIII, and appears to be based to a large extent on the Vizcaino discoveries. It has a close resemblance to a manuscript map drawn by John Daniell in London, 1637, that is in the National Library in Florence, (1) and if not copied from this map, it was most certainly derived from a similar source originating with the Vizcaino discoveries. On this chart, Cape Mendocino is located by name in about 42-1/2°, where the coast takes a sharp trend to

1. See H. R. Wagner, Cartography of the Northwest Coast of America to the Year 1800, pp. 119, 120 & Pl. XXIV, Pl. XXV.

ROBERT DUDLEY

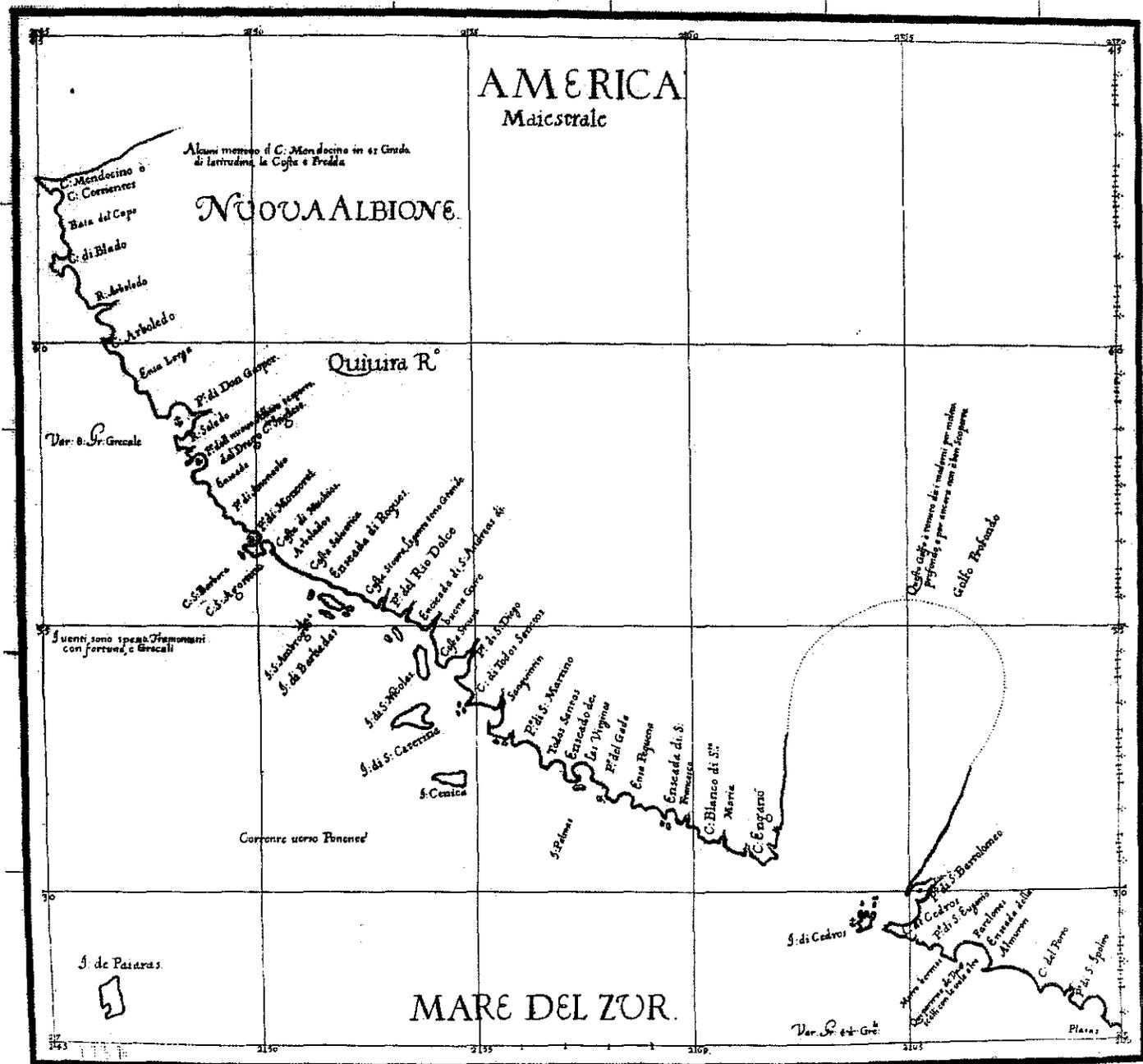
the east-northeast, though Dudley does not necessarily accept the position for the cape and elsewhere implies that this concept reflects more modern thinking. The note adjacent to the cape reads: "A few place Cape Mendocino at 41° latitude, and the coast is cold."

Carta prima Generale is significant for the fact that Dudley shows both the bay entered by Vizcaino, P. di Don Gasper, (1) which was reported to be in $38^{\circ} 30'$ as shown on the chart, and the bay entered by Drake in 38° ; the Daniell map shows only Vizcaino's bay in this area. The difference is important because it indicates that Dudley did not associate Vizcaino's bay with the bay entered by Drake and considered the two to be distinctly different bays. Of further interest is the fact that Dudley added not one, but two bays in close association with each other below Vizcaino's bay, a fact that strongly suggests that he learned from Drake that there was another immediately north of his haven. This impression is supported by the two bays shown on the French and Dutch Drake maps.

On Carta Particolare, No. XXXIII, Dudley disregarded Vizcaino's bay, probably because he concluded that Cabrillo and Drake had precedence by prior discovery. Why he named the bay north of Drake's haven B: S: Michele is intriguing, however, as the name does not appear in any other source nor was it used here by the Spaniards. As this name appears in his published work, it must be assumed that it and the islands in the bay reflect Dudley's final conclusions. He retains something of the names used in this bay from his manuscript chart by including C. di Denia and R. Denia, which appear to be an abbreviation or variation of Sardina, but obviously he had further information from another source.

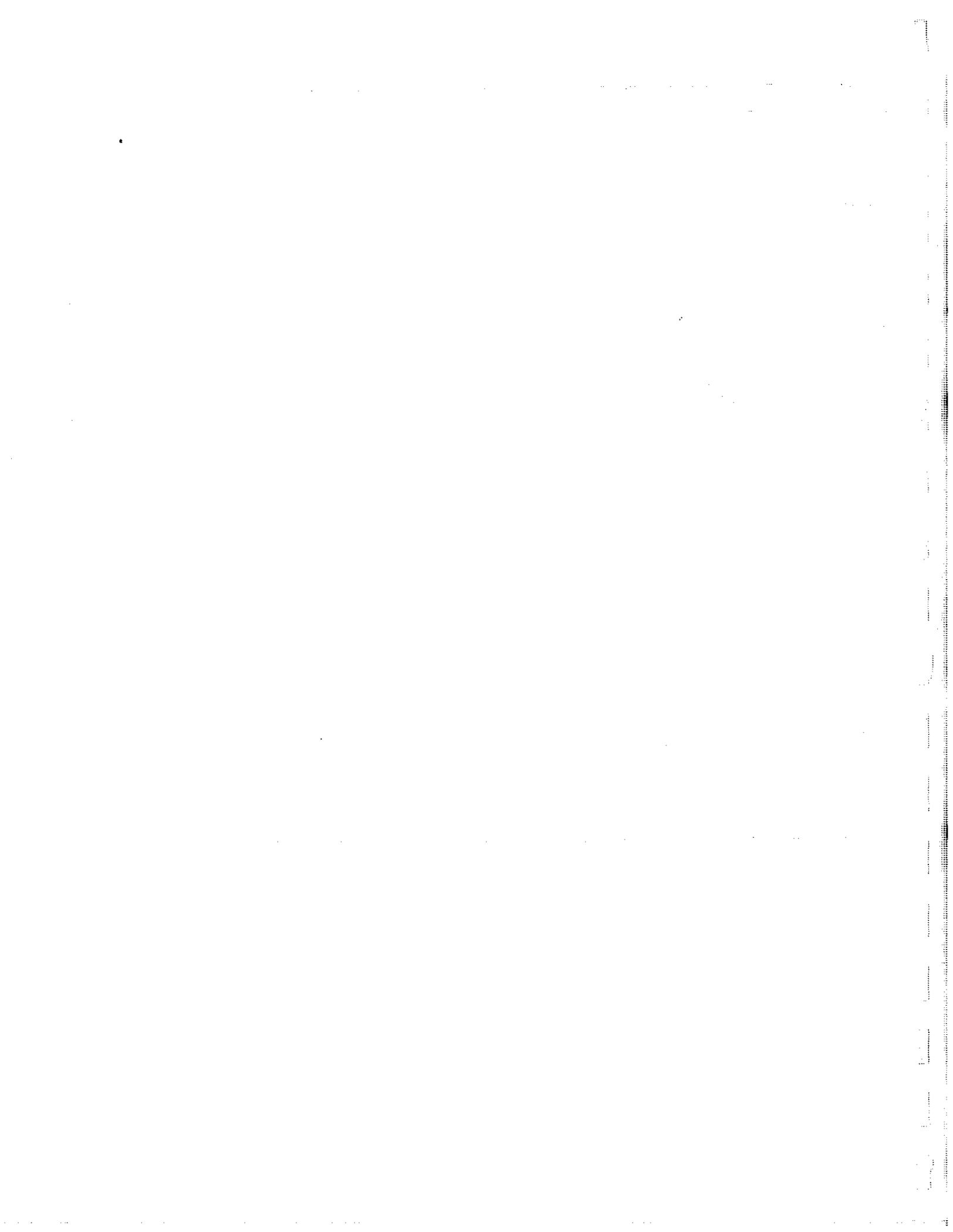
For Elizabethan seamen, the name "S. Michele" had a counterpart with St. Michael's Mount at Penzance in Cornwall or Mont-Saint-Michele off the Normandy coast. Both of these islands are connected to the mainland by natural causeways formed by a bar passable at low tide. It seems probable, therefore, that Bodega Head on the north side of Bodega

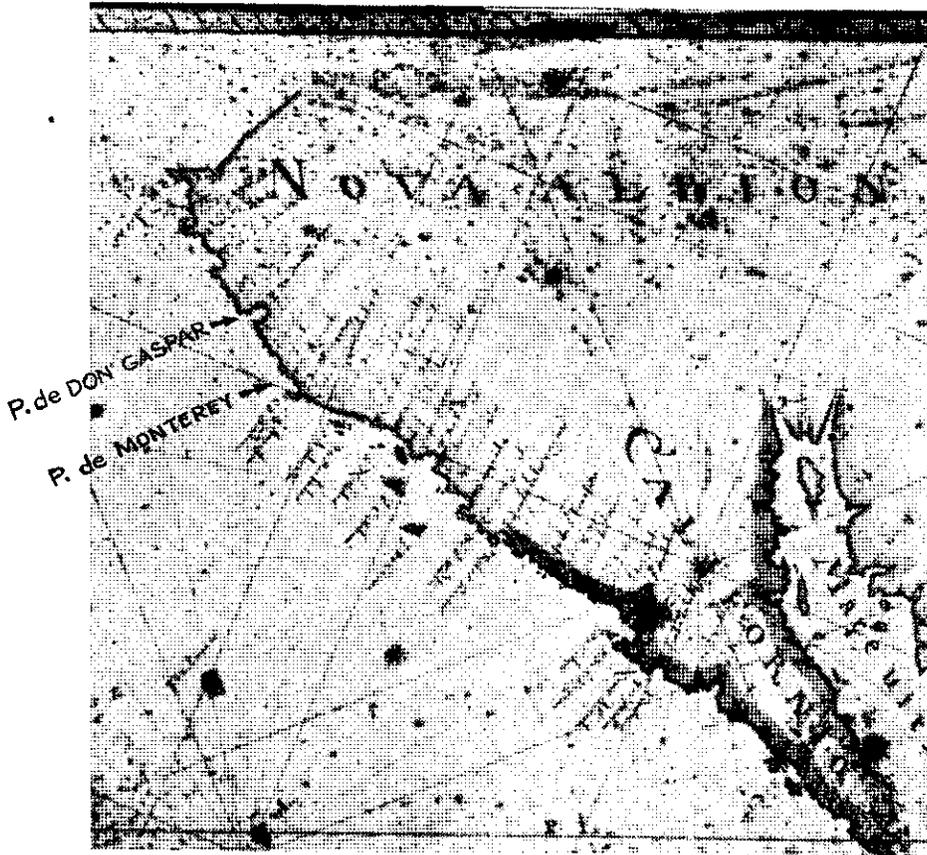
-
1. This bay was entered by Sebastian Rodriguez Cermeño in 1595, and he named it Bahia de San Francisco, a name that continued to be carried on Spanish maps and others despite Vizcaino's renaming of the bay in 1603.



National Maritime Museum

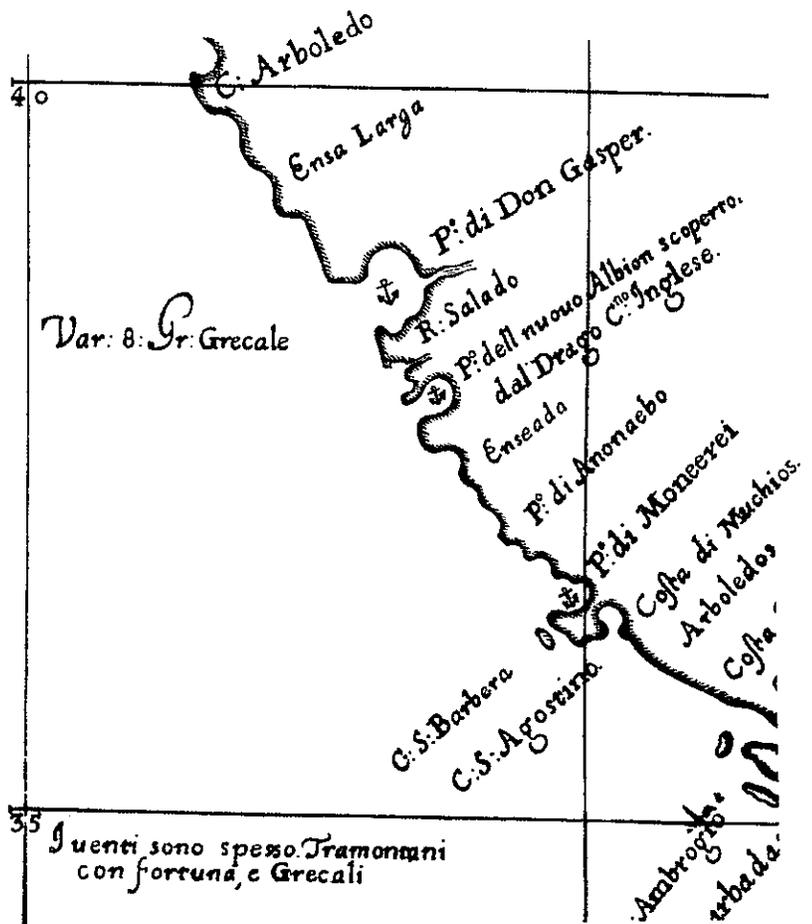
INSET CHART OF NORTHWEST COAST OF AMERICA
 FROM ROBERT DUDLEY'S *Carta prima Generale
 d'America dell'India Occidentale è Mare del Zur.*





California Historical Society

DETAIL FROM MANUSCRIPT
MAP BY JOHN DANIELL,
LONDON, 1637. COMPARE
THE COASTAL FEATURES
WITH DUDLEY'S *Carta
Prima Generale d'America
dell'India Occidentale
è Mare del Zur.*



DETAIL FROM DUDLEY'S *Carta
prima Generale d'America
dell'India Occidentale è
Mare del Zur* SHOWING THE
ADDITION OF TWO BAYS BELOW
VIZCAINO'S *P. de Don Gaspar*,
ONE OF WHICH IS IDENTIFIED
AS THE PORT DISCOVERED
BY DRAKE.

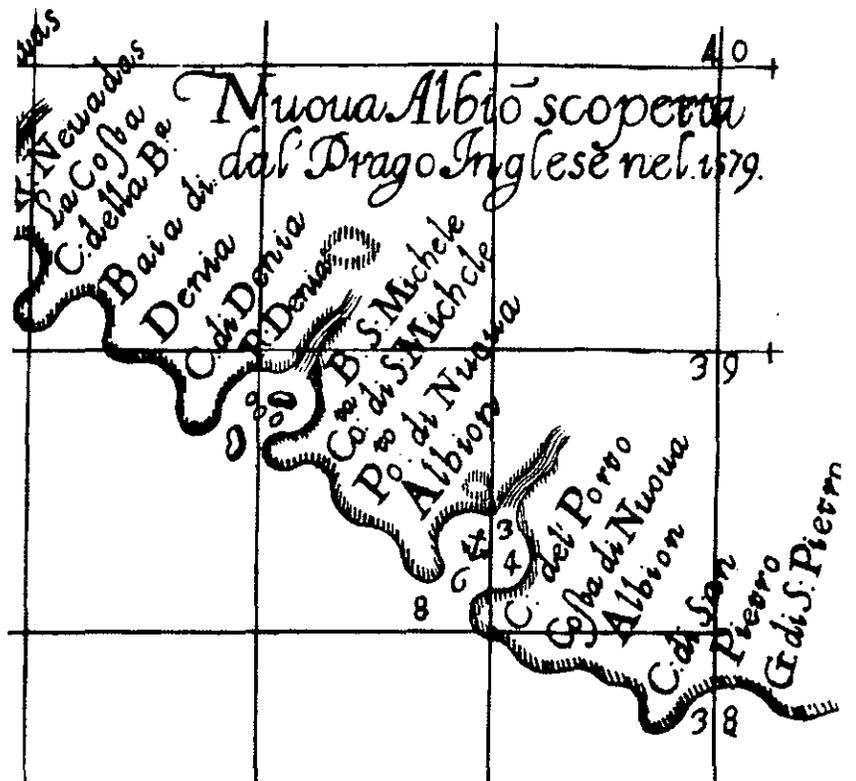


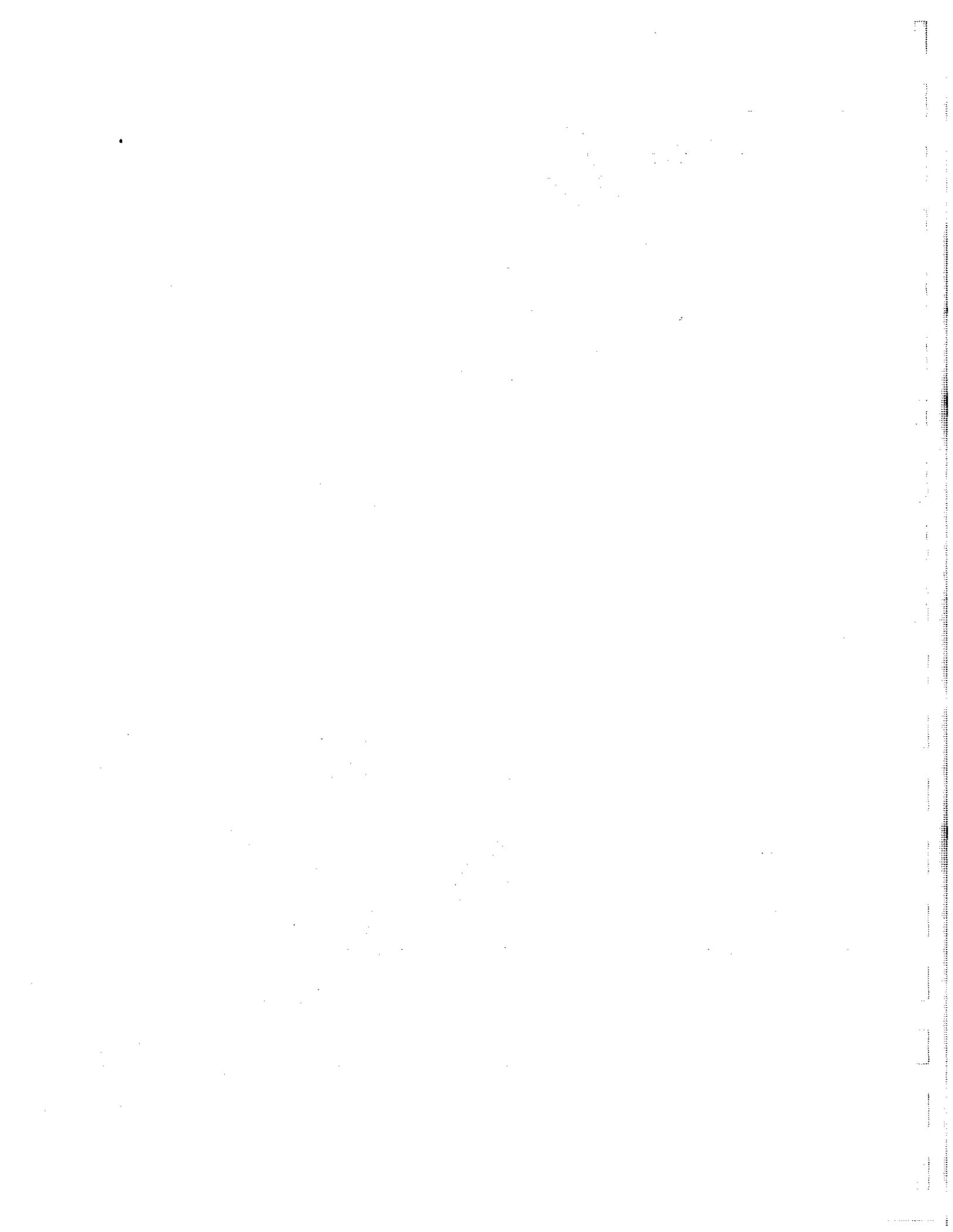


Imperial Museum, Munich

DETAIL FROM DUDLEY'S MANUSCRIPT CHART No. 85.

DETAIL FROM DUDLEY'S
 Carta particolare dello
 stretto di Iezo fra
 L'America e L'Isola
 Iezo, CHART NO. XXXIII
 FROM DELL'ARCANO DEL MARE.





ROBERT DUDLEY

Bay suggested the name, as it is geologically similar to those islands. Bodega Head is an island of granite rising a height of 266 feet lying a mile and a half outside of the general trend of the coast line and is connected to the shore by a wide bar of sand and dunes. When viewed from a few miles to the north or from the south, it appears to be an island. Because Bodega Bay is not noted in the records of either the Vizcaino or Cermeño expeditions, it is probable that Dudley obtained the name from Drake with some mention of islands or rocks that he was able only to relate to the bay in a vague manner on his chart.

The following English translations from Dell' Arcano del Mare and the inscriptions from the charts by Dudley are translated literally from the Italian by Dr. Christina Roaf, Lecturer in Italian Language and Literature, Somerville College, Oxford.

ROBERT DUDLEY

Undated Manuscript Chart, No. 85, Northwestern America

Translation of the legend on the chart:

Do not be surprised that this chart of mine makes the distance in longitude between Cape Mendocino and Cape California very much shorter than the common charts which are very mistaken in that distance by hundreds of leagues. This error is proved by the Spanish books of sailing directions by land and sea to the Kingdom of Quivera and also by the navigation of General Drake the Englishman who first discovered the port of New Albion at 38° latitude. He sailed up the coast as far as 43° where in the month of June 1579 it was so cold that they were not able to bear it and were forced to return to the Port of New Albion at 38°, and it was quite cold there too. It is also true that the distance of the island of Japan is greater by hundreds of leagues than that usually given on the charts and is more than 800 English leagues, although on the common charts it does not reach 400 leagues, and therefore the coast is uncertain except in certain places. For example: Cape Mendocino in 40°; the Bay of New Albion in 38°; the island and Port of San Augustine in 30° 40'; the island and Port of Cedros in 28° 15'; the island of Port of St. Martin in 23-1/2° and the Cape of California.

Original in Italian

"Non Maruigliate che questa mia Carta fa la distantia di Long^{ne} fra il Capo di mendocino et el Capo di Callifornia molto piu corto delli Carte Volgari che sono falass^{me}; in questa distantia per centinaria di Leaghi et si proua questa errore per li Portilani di Spagnoli per mare et per terra al R. di Quiuera et anco per la nauigatione dell Generale Drago Inglese che scopriua pr^o il porto di noua Albion in 38 Gr: di latitudine; egli nauigaua la Costa sin a 43 Gradi Doue nel mese di Giug^o 1579 si sontiue tanto grâ freddo che no erano abile di Comportarlo et cosi fu forzati di ritornare all Porto di nuoua Albion in gr: 38. et fu anco ben fresco. Ben uero è qualm^{te} la distantia del Isola di Japone e assai piu per centinaria di leghe di quello che ne fa com^{am}^{te} le Carte et passauo 800 leaghe Inglese ma per li Carte volgare no arriua a leghe 400, et pero la costa è incertu se no in certi luoghi. Cio e Il Capo mendocino in gradi 40: la Baia di nuoua Albion in gr: 38. L'Isola et p^{to} di S Agost^{no} in gr. 30° 40' dell Isola et Por^{to} di S: Martino in gr. 23-1/2 et del Capo S Luca della Callifornia."

ROBERT DUDLEY

Nova Albion and the northwest coast of North America as described by Robert Dudley in his description of Carta Particolare, No. XXXIII, from Arcano del Mare, Part II, Vol. III, Book VI, p. 58

The harbors [of California] are not very good for the large ships which come and go a few times a year to the Philippine Islands in the direction of China, and therefore, for the rest of the coast, the harbors and the names of the places, the author does not rely much on the chart because of the variations and notable differences between the more common charts which give the distance from California and Cape St. Lucas to Cape Mendocino as 1200 English leagues, but the experience of skilful pilots who pass frequently by that route has shown that the said distance is no more than a bare 600 leagues, with an error of a half, and this has been further confirmed by the Englishman Drake (1) who, in about 1579, returned by the same route and discovered New Albion; and therefore the author has good reason not to trust the common charts on this coast of Southern [sic] America.

This chart, the last of the Sixth Volume, begins with the port of New Albion, at 237° longitude and 38° latitude which was discovered by the Englishman Drake in about 1579, as we said above, a convenient place to procure water and other supplies. (2) The said Drake found that the native inhabitants of the place were very courteous and friendly, the land very fertile and the weather temperate. He saw a large number of rabbits, but with long tails like rats, and many wild horses, at which he marvelled greatly since the Spaniards never saw horses in America, and the reason why Drake looked for and found the said port was this, having passed true Cape Mendocino at $42-1/2^{\circ}$ latitude and gone as far north as $43-1/2^{\circ}$ latitude to get water, he found the coast so cold in the month of June that his crew were not able to bear it; this surprised him very much since the climatic zone is almost equal to that of Tuscany and Rome in Italy. (3) And so the aforementioned Drake found it expedient to return toward the south-southeast as far as 38° latitude, and for his

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1. Lit. Dragon.
 2. Lit. refreshments.
 3. They were in the same latitude as Tuscany and Rome. Ed.

ROBERT DUDLEY

water supplies he found the port and country mentioned above. He called it New Albion in honor of his own country England, which in ancient times had been called Albion because of the white cliffs and the coast where it was first discovered, and the same thing was true of New Albion; and moreover, the King of this coast was pleased of his own free will to make himself subject to the Crown of England, accepting the status of a dependency.

The present chart ends with Quivera and the Cape of Fortuna, although the coast of Quivera is not very accurate there because the most modern chart that has been published puts the false Cape Mendocino, or Alboredo, at 40°, as does the author here. Others put it at 41-1/2° or at 42° because this is the true Cape Mendocino, or Corientes, which in the more modern chart of Giovanni Jansonio (1) is called Cape Bianco, (2) where the coast ends and turns towards the east-northeast for 6° or 7° of longitude. And it is here that the Vermio Sea comes out as has recently been discovered by some Spaniards from new Spain. The said sea begins at Cape Santa Clara of California, as above, passes by the island called the Giants and debouches into the Northern Sea at 43° latitude by the Kingdom of Coromodo, thus making California an island off Northwestern America and not mainland as Jansonio relates on his chart. With this information is ended the sixth and last volume. The end.

Original Italian text (3)

"I porti [della California] non sono molto buoni per le navi grosse, che vengano, e vanno alcune volte dell'anno all' isole Filippine verso la Cina; e però per il restante della Costa, de' porti, e de' nomi de' luoghi, l' Autore non s' assicura molto della Carta, per le variazioni, e differenza notabile della Carte più comuni, che fanno la distanza fra la California, e'l capo s. Lucar leghe 1200. Inglese, sin' al capo Mendocino; ma per l' esperienza de' Piloti valenti, che passano spesse volte per quella via, si dimostra, che la detta distanza non è più de leghe 600. scarsamente, con errore della metà, che così è confermato ancora del Drago

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1. Jan Jansson, Dutch map-maker, 1596-1664. Ed.
 2. Cape Blanco. Ed.
 3. Quoted in George Davidson, Identification of Sir Francis Drake's Anchorage on the Coast of California in the Year 1579, p. 50.

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Inglese, che nel 1579, in circa ritornò per l' istessa via, e scopri la nuoua Albion; e però l' Autore ha buona ragione in questa Costa dell' America Australe à non fidarsi punto della Carte comuni.

"Questa Carta è l' vltima del Sesto Libro, la quale comincia co' l' porto di nuoua Albion, di longitudine gr. 237. e latitudine gr. 38. scoperto del Drago Inglese nel 1579. in circa, come di sopra, luogo comodo per far' acqua, e pigliare altri rintrescamenti: Il detto Drago trouò, che le genti saluatiche del paese erano molto cortesi e amoreuole, e la terra assai ben fruttifera, e l' aria temperata: Vidde de' Conigli in quantità grande, ma con code lunghe come i topi; e dimolti caualli salvatichi, con maggior marauiglia, attesò che gli Spagnuoli non viddero mai caualli nell' America; e la ragione perche il Drago cercò, e trouò detto porto, fu questa; che essendo passato il Capo Mendosino vero, di latitudine gr. 42. e mez. per far' acqua, sin' à gr. 43. e mez. di latitudine Tramontana, egli trouò la Costa con tanto freddo nel mese di Giugno, che le sue genti non erano alibi à comportalo, del che si marauigliò assai, essendo il clima quasi pari à quelli di Toscana, e di Roma in Italia: però il suddetto Drago trouò expediente di ritornare più verso Mezzogiorno Scirocco sin' à gr. 38. di latitudine; e per far' acqua trouò il porto, e paese sopraddetto, da lui nominato la nuoua Albion, in honore della sua partria d' Inghilterra, già anticamente nominta Albion, per gli scogli bianchi, e per la Costa, doue fu prima scoperta; e l' istesso riuscì circa la nuoua Albion; oltre che il Re de questa Costa si contentò spontaneamente di rendersi tributario, iure Clientellare, sotto la Corona d' Inghilterra.

"La present Carta finsce con Quiuera, & il capo di Fortuna; se bene della Costa di Quiuera vi é poca cartezza; perche la Carta più moderna, che si troua stampata mette il Capo Mendocino falso, ò Albor-
edo, in gr. 40. come fa què l' Autore: Altri lo mettono in gr. 41 e mez. & in gr. 42. perche questo e il Capo Mendocino vero, ò Capo Corientes, il quale nella Carta più moderna di Giouanni Jansonio vien nominatto per Capo Bianco, doue la Costa termina, e volta verso Greco Leuante, di longitud. gr. 6 ò 7. E per quella via esce il mare Vermio, come nuouamente scoperto dagli Spagnuoli della nuoua Spagna. Comincia il detto mare con il capo santa Clara della California, come di sopra, e passa per l' isola nominata de' Giganti, & esce nel mare Settentrional in gr. 43. di latitudino, per il regno di Coromendo, e fa, che la California sia isola con l' America Maestrale, e non terra firma, come racconta il detto Jansonio nella sua Carta: Con il qual' auuertimento si termina questo Libro sesto, & vltimo.

Il Fine."

ROBERT DUDLEY

Carta particolare dello stretto di Iezo fra L' America e L' Isola Iezo,
Chart No. XXXIII, from the Arcano del Mare, 1647

Legends on the chart translated from the original Italian:

- 1 - Right side at 46° latitude:

L' REGNO DI QVIVIRA

THE KINGDOM OF QUIVIRA

- 2 - Right side at 44° latitude:

Costa scoperta dal Drago Inglese' nel 1579 freddissima

Coast discovered by the Englishman Drake in 1579 is very cold.

- 3 - Right side at 41° latitude:

Alcune Carte' Commune' mettano C: Mendocino in Gradi. 50. et il C: di Fortuna in Gradi. 60. & è errore' grande perche il Drago e li Piloti Spagoli trouano il C: Mendocino in Gradi. 40. di latitudine lo mettano. 1200. leghe lontano della Callifornia per le carte comune e non e piu di. 600. leg^e: è con questa distanza Conco^{re}: il Drago e li altri Piloti.

Some common charts place Cape Mendocino in 50° and Cape Fortuna in 60°, and it is a serious error because Drake and the Spanish pilots found Cape Mendocino at 40°. In the common charts it is put at 1200 leagues from California and it is no further than 600 leagues. Drake and the other pilots agree with this distance.

- 4 - Right side of 40° latitude:

Nuoua Albiõ scoperta dal Drago Inglese nel. 1579.

New Albion discovered by the Englishman Drake in 1579.

ROBERT DUDLEY

5 - Off the coast at 43° latitude:

Var. 10. Gr. Gr^{le}

Variation 10° Northeasterly.

6 - Off the coast at 41° latitude:

Venti Sono Spesso Maestrali

The winds are often northwesterly.

7 - Off the coast at 38-1/2° latitude:

Var. 9. Gr. Gr^{le}

Variation 9° Northeasterly.

CHAPTER III

A NEW EVALUATION OF THE EVIDENCE

THE MESSAGE OF THE INSETS

When the Drake Navigators Guild began to search for the exact site of Drake's landing, Mr. F. R. Brace suggested that of the three geographical insets shown on the Hondius Broadside Map, the two East Indies scenes be compared with the places depicted, and if they proved accurate enough for a close correlation to be made, then the chances would be two out of three that the Portus Novae Albionis was also a faithful representation of Drake's haven as it appeared in 1579. It was his opinion that the inset could then be correlated closely with that haven today, unless major physical changes had occurred, and that we could then apply the test of a close interpretation of the inset in any attempt to correlate it with a given locality.

Study of the three insets revealed the following:

1. Each is basically contrived to make it an aerial perspective view -- a compromise between scene and map, and thus a logical way to present the characteristics of a place succinctly.
2. Each view was probably drawn or constructed from some actual elevation. In the case of the Java and Moluccas insets, the original drawing was probably made from the Golden Hind, which is located in the foreground and probably in the position from which the drawings were made.
3. The draftsman was influenced by low angle perspective and attempted to correct for it so that his sketch would more closely resemble a map. Perspective has these effects:
 - a. The size of a given object diminishes with distance; the greater the distance, the smaller the object.
 - b. The distance between near and far points appears to be compressed when compared with the same distance seen from directly above. The lower the angle of view, the greater the compression.
4. The insets have been constructed in accordance with the rules of perspective so that:
 - a. The observer is located at the bottom center of the picture.

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- b. Objects closest to the observer are located in the foreground at the bottom center of the picture.
 - c. Objects most distant from the observer are located in the background at the top edges of the picture.
 - d. The size of a given object diminishes with distance from the observer.
5. The insets are what would be considered today as good military or reporter's sketches -- more to be valued for their presentation of factual data than for their decorative qualities.
 6. No consistency has been found in orientation between the Moluccas and Portus Iavae Majoris insets, nor has direction been described or shown. This puts them more in the category of view than map.
 7. The size of the area shown in each inset varies with the intent of the artist. It is apparent that the view of the Moluccas encompasses many more square miles than does that of Java. The panorama of the Moluccas necessitates showing the horizon. No horizon is shown in either of the Portus views, and it is plain for that reason that each represents a limited area. Actual correlation of the Portus Iavae Majoris inset corroborates that conclusion.
 8. Generally, foreground and middleground objects in the views appear to be in good scale relationship. In the Java inset, however, the huts and the ship in the background are considerably larger than correlation would indicate their scale should be. The most obvious explanation for this is that the engraver was compelled to increase their size because the area of the views as reproduced is so small that they would not be easily recognizable at their true scale. A similar practice is followed by artists today in making cartographic maps where the "spot" illustrations bear no scalar relationship to the map itself.
 9. The draftsman, or what we can see of him through the engraver's reproduction, handled his work with skill. Certain minor errors may have resulted from transposition of each scene from an original drawing to the engraving, but the insets capture the essential nature of the terrain at Java and the Moluccas.

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10. By the time of Drake's voyage, conventional topographic symbols, often combined with pictorial delineation showing agricultural land, cities, etc., were commonly used on maps and coastal charts. Thus we would expect to find rice paddies (rectangular plots in dotted lines) and huts where they are shown in the Portus Iavae Majoris inset and rolling hills where they are shown at Portus Novae Albionis. Drake, with an acknowledged skill in all points of navigation, was bound to have been familiar with their use, and Hondius at least had the opportunity to become acquainted with them through his engravings of coastal charts for the Mariner's Mirrour. Then as now, these symbols are important to an interpretation of terrain. It must be understood, however, that the symbols do not have the precise definition of the modern topographic map. The molehill symbols denoting rolling hills do not define their number or contours -- they merely indicate the presence of hills or rolling terrain in a specific area.

THE MOLUCCAS INSET

The Moluccas inset is an ellipse measuring 2 x 2-3/4 inches, enclosing a view of the islands of Ternate (Tarenate), Tidore, Moti (Mutir), Makian (Machian) and Kajoa (Bachian) with the mainland of the large island of Halmahera (Gilolo In.) showing beyond. The scene depicts the Golden Hind being towed by the canoes of the King of Ternate to an anchorage near the principal town of that island. Hondius's caption describes this in literal translation as "A drawing showing how wonderfully he [Drake] was drawn in by the King of the Molluccas admiring the fanfare of the trumpets." However authentic Hondius's view of the islands may be, his picture of Drake being taken in tow by the King of Ternate is purely symbolic, since he was not towed to the King's anchorage until after he had come to anchor close to Ternate.

The total spread of these islands, which are distributed in a line from north to south, is slightly more than 60 nautical miles. All except Kajoa are high volcanic peaks; Ternate being 5646 feet; Tidore, 5764 feet; Moti, 3215 feet; Makian, 4685 feet. Kajoa Islands have the appearance of one rather flat island with a few elevations to 1943. ⁽¹⁾ The coast

1. H. O. No. 164, Sailing Directions for New Guinea and the Islands

GILOLO IN.

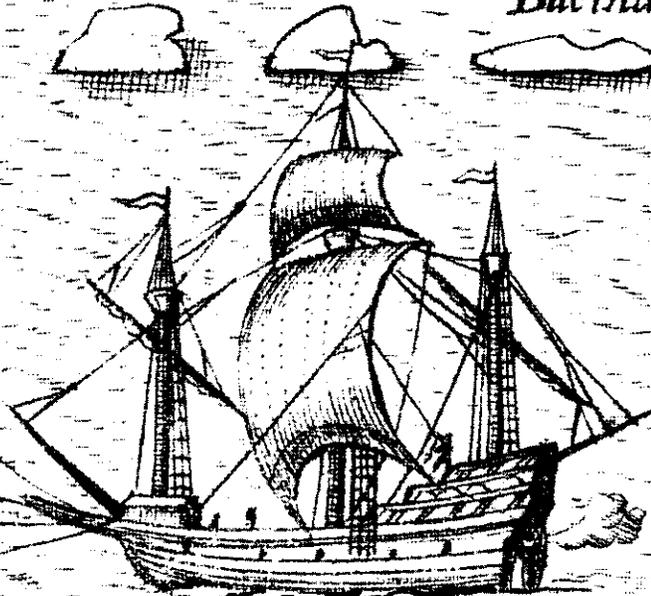
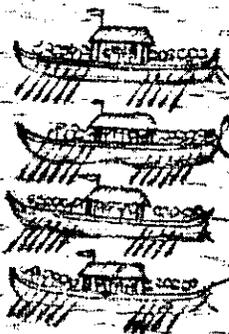
Tarenate

Tidore

Mutir

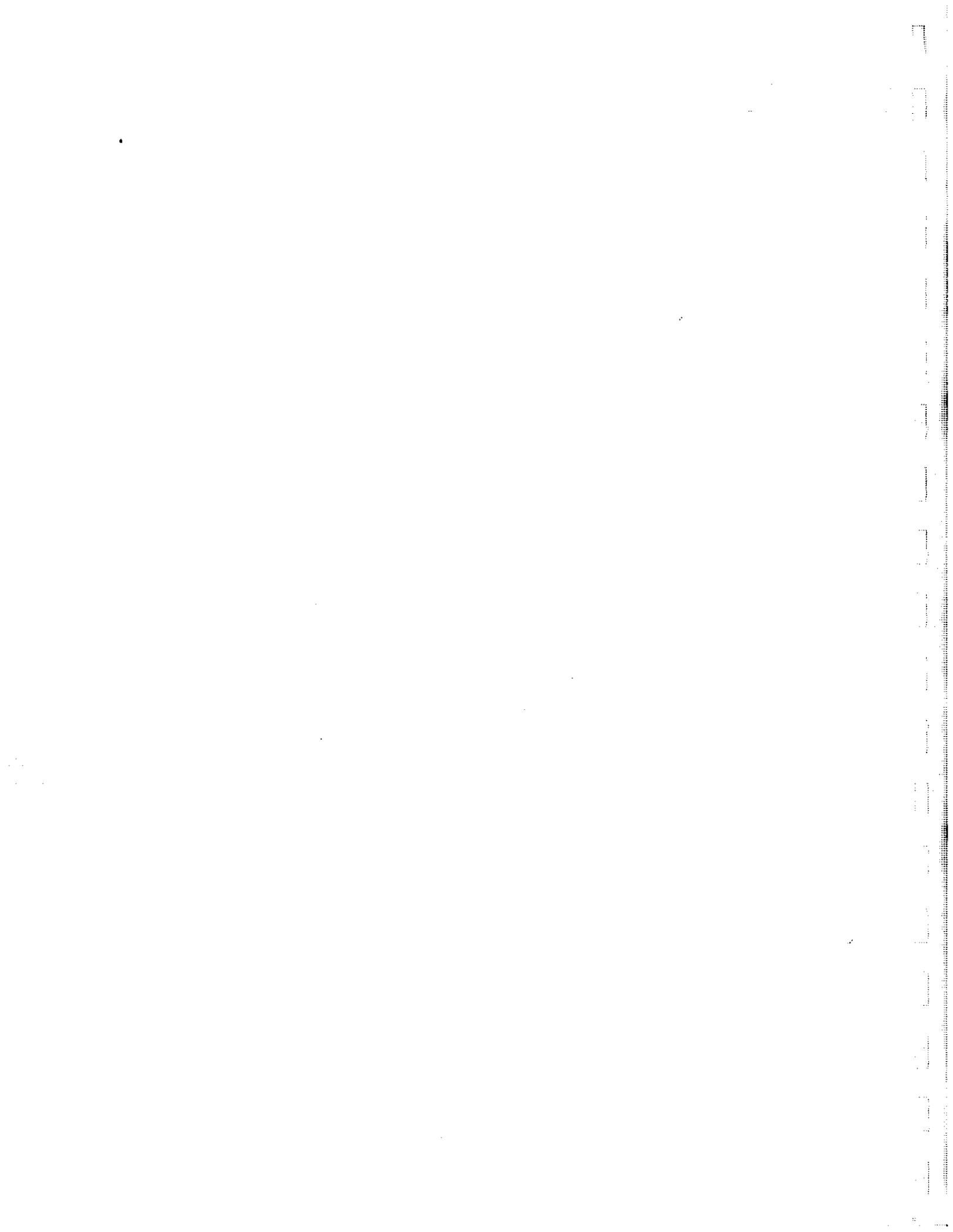
Machian

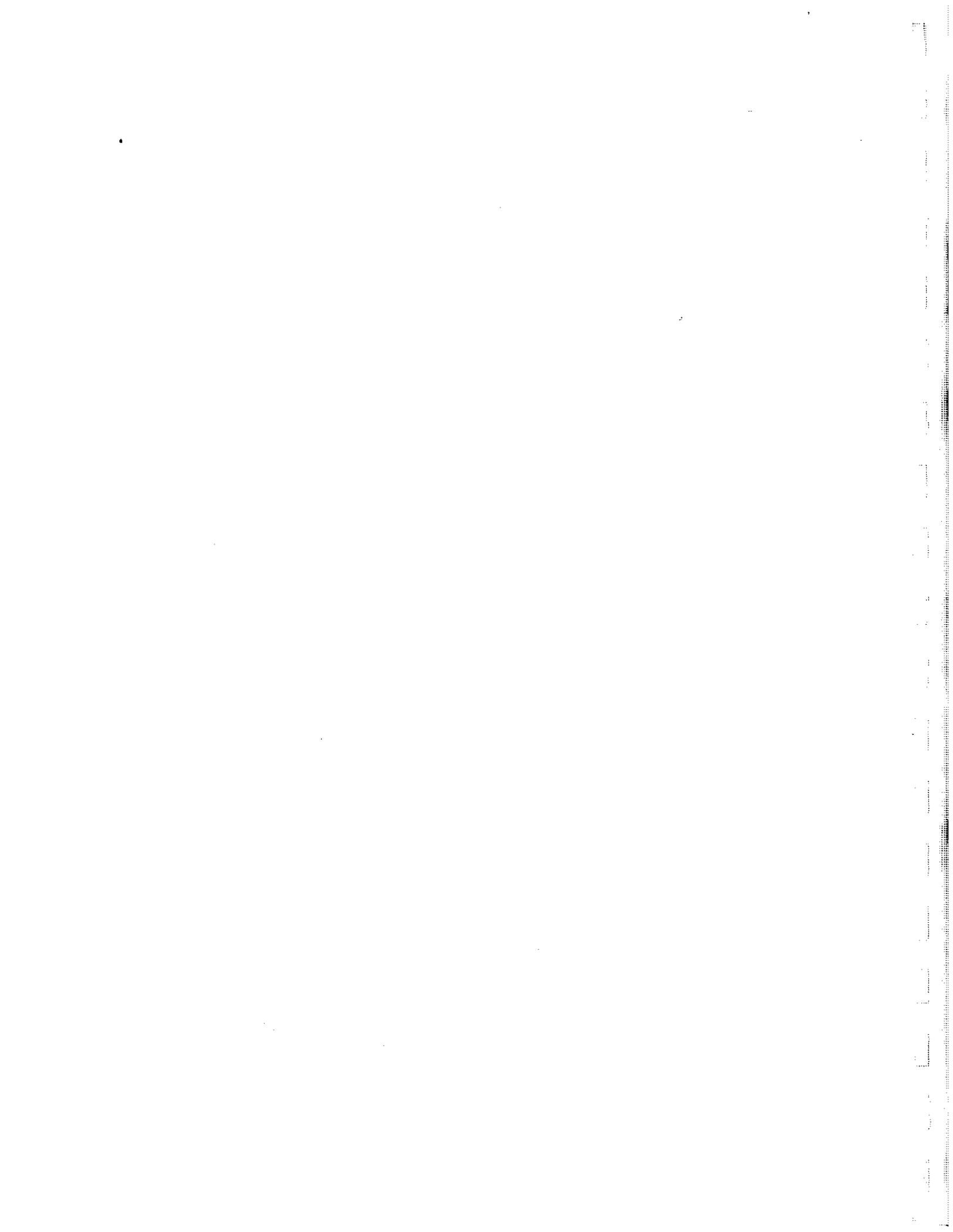
Bachian



Quam mirifice a Rege Moluccarum tubarū clangorem admirante, introvectus fuerit, delineatio.

THE HONDIUS INSET OF DRAKE'S
ARRIVAL IN THE MOLUCCAS





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of Halmahera is mostly high with mountains ranging up to more than 4000 feet. (1)

The shapes of the islands as drawn by Hondius are distorted, but their form suggests the common practice of exaggerating elevations in landmark profiles intended for navigational use. A set of drawings of islands and seacoasts observed on Drake's last expedition to the West Indies in 1595-96, preserved in the Bibliotheque Nationale, Paris, shows similar lumpy forms drawn in single line profile. These are artfully shaded in watercolors with the true coloring of islands and coasts as they were viewed from sea. Close study of the inset reveals that despite distortions introduced in copying, the features of the islands and the coast of Halmahera are recognizable and could not have been concocted by Hondius for the sake of creating an illustration. That the inset can be correlated with the region, indicates definite possibility that Hondius had obtained this view of the islands from a source based on the original voyage records, and that they are shown much as Drake saw them at a distance from west of the center of the group. The smaller islands may have been overlooked in the original source because of the distance from which they were seen, or omitted by Hondius to simplify the picture.

Seamen constructed views of this type from compass bearings taken from the ship to prominent landmarks. The bearings were then plotted on the drawing from a focal point (which might be off the drawing) to a line on the drawing representing the horizon line. The intersection of the bearing and horizon located the landmark, which might be a cape, mountain peak, stream, town, etc. Once located on the horizon line, the landmarks were drawn in and connected by eye as they appeared to the draftsman. Elevations were intentionally exaggerated as an aid to identification of landfalls. In addition, a small sketch of the ship was often added in the foreground to show the relative position from which the view was made. In the Bibliotheque Nationale drawings, the actual bearings are recorded over the landmarks, and a note gives the distance

(cont'd.) Eastward of Celebes and Timor, 1936, U. S. Navy Hydrographic Office, p. 66.

1. See Chart No. 3080, Halmahera and Adjacent Islands, U. S. Navy Hydrographic Office.

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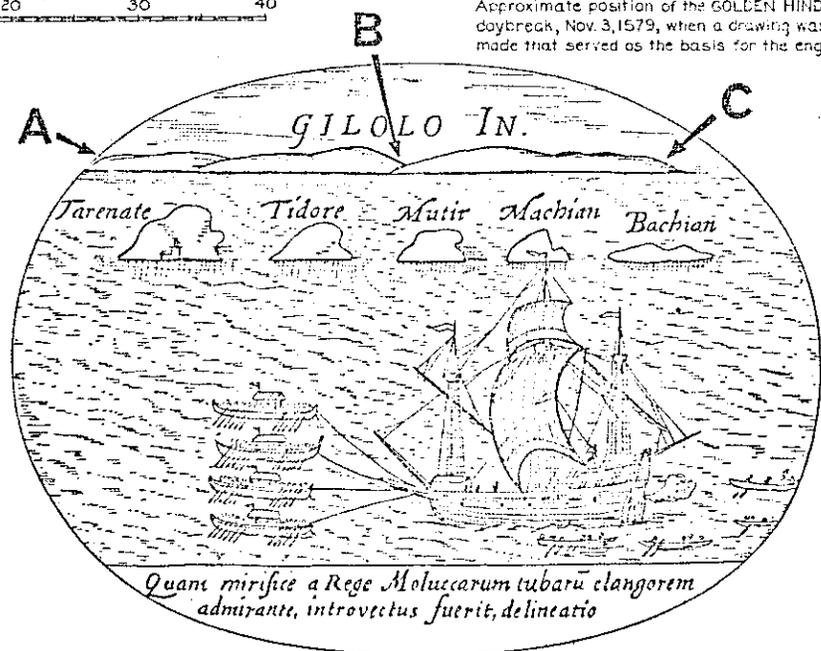
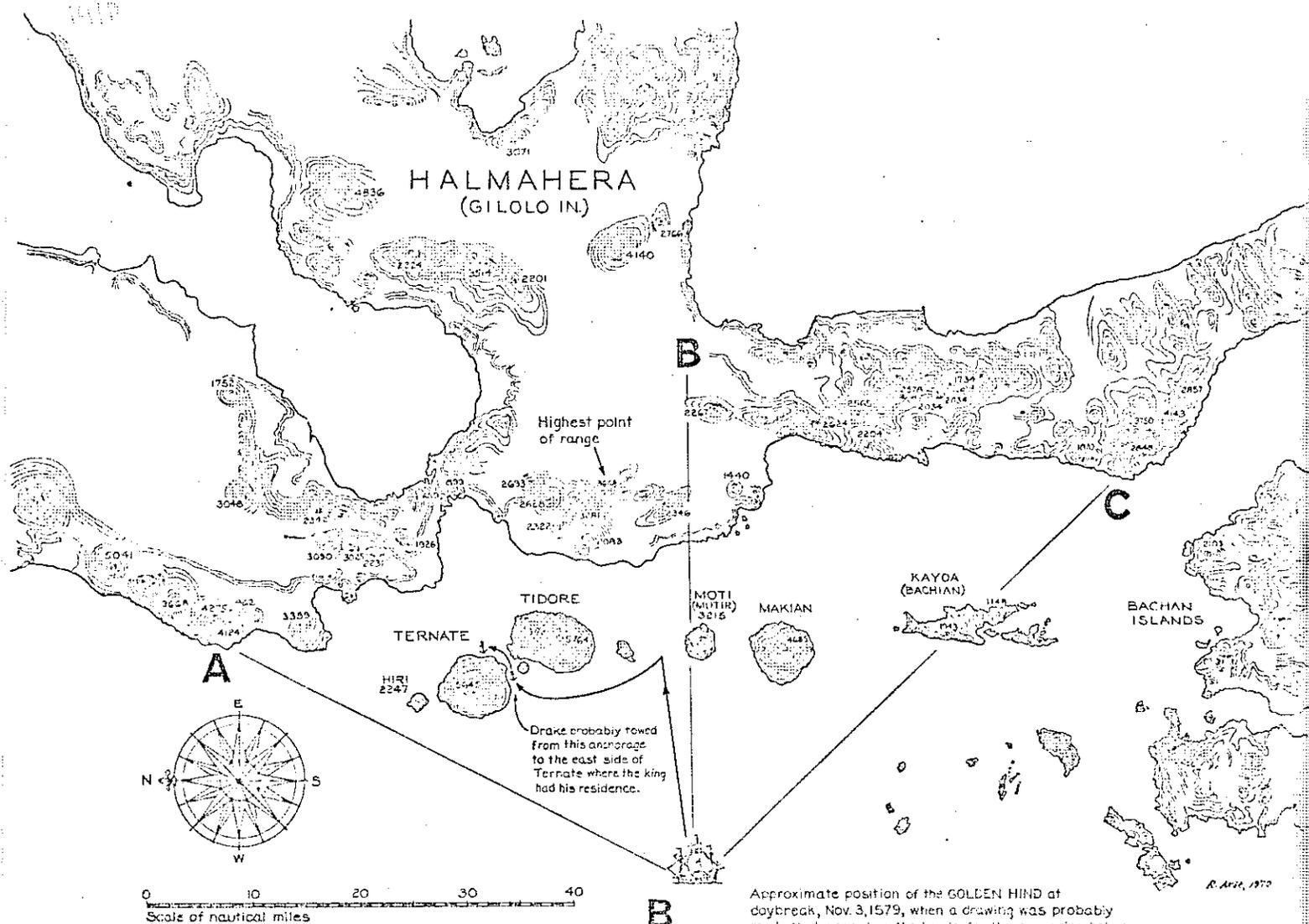
in leagues from which the islands or coasts were viewed.

World Encompassed states that the islands of the Moluccas were first sighted on November 3rd, 1579. From that account and Famous Voyage it is apparent that in the evening of the 4th Drake was coasting the small island of Moti that Famous Voyage names Mutyrr, his intention being to go to the Portuguese held island of Tidore. (1) At that time, he would have been proceeding from the position in which the inset view was made and possibly intended to reach the east side of Tidore. (2) While off the coast of Mutyrr, he was intercepted by the viceroy of the King of Ternate and induced to go to Ternate instead of Tidore. Accordingly, he came to anchor off the island of Ternate early the next morning while the viceroy went on ahead to inform his king of Drake's desire for trade. Reconstruction indicates that this anchorage was on the western side of Gamme Lamo Channel between Ternate and Tidore. The principal town of Ternate, the King's residence, was located on the southeastern side of the island. (3) Later on in the morning, Drake was probably towed a distance of 3 or 4 miles through the channel, which is about 1 mile wide.

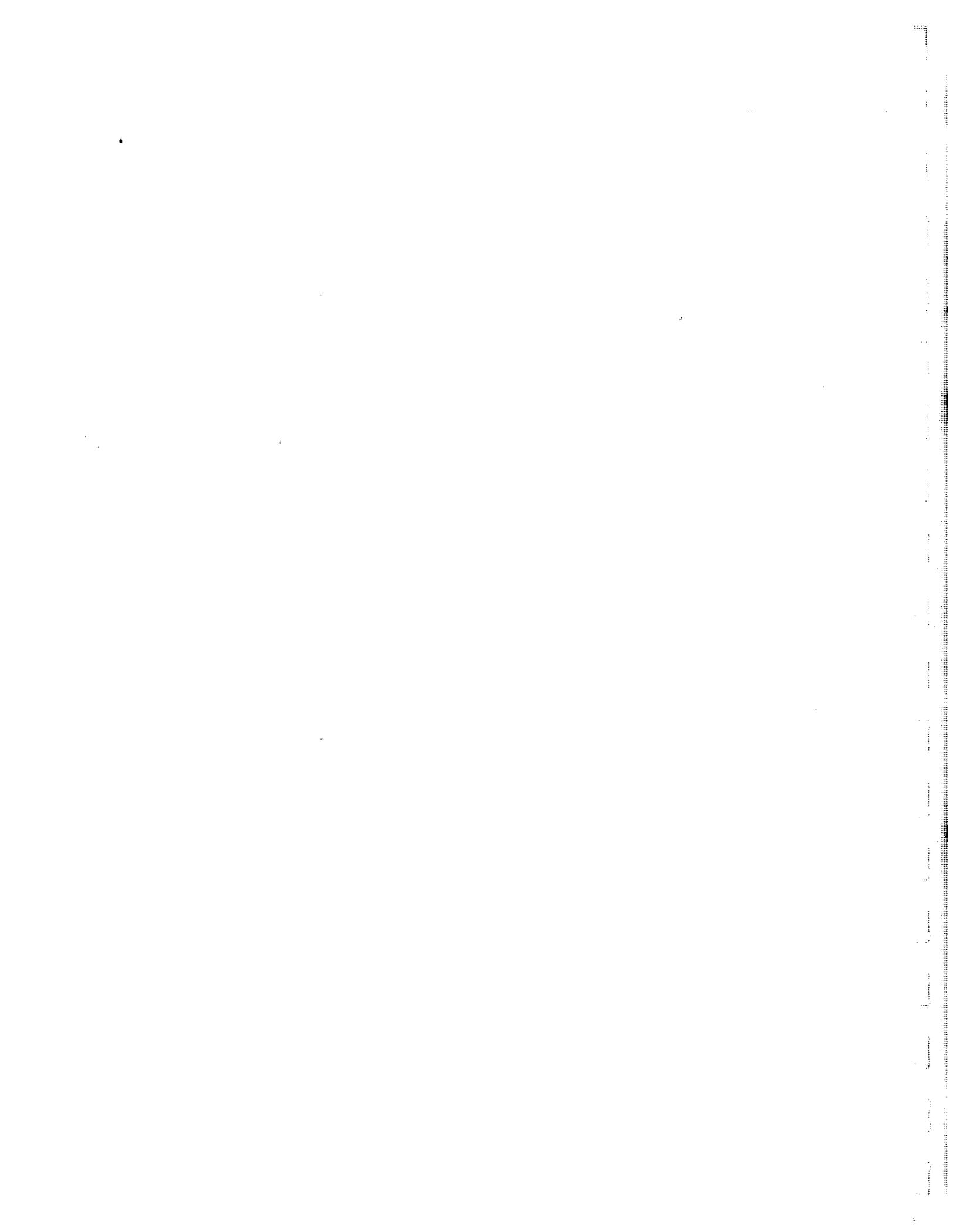
Reviewing the sequence of these events, the inset view must have been made in the morning after lying-to overnight on the open sea from the evening of the 3rd. With sunrise, Drake would have been in an excellent position to see a panorama of the entire island group silhouetted in the sunrise with the skyline and extremities of Halmahera showing beyond them.

There is a parallel between the Moluccas inset and the one shown on the French Drake Map that points once more to a common source as well as to some improvising on the part of Hondius. Important differences in detail make it very unlikely that he copied from the French

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1. See N. M. Penzer, ed., The World Encompassed, p. 66, and reprint of Famous Voyage in H. R. Wagner, Sir Francis Drake's Voyage, p. 278.
 2. H. O. No. 164, Sailing Directions for New Guinea, p. 65. The Sailing Directions state that the principal village of Tidore is Soa Side on the southeast coast.
 3. H. O. No. 164, Sailing Directions for New Guinea, p. 65. The historical location for the town, then called Gammelamme, is confirmed in the footnotes by Sir William Foster, The Voyage of Sir Henry Middleton to the Moluccas, 1604-1606, p. 30



CORRELATION OF HONDIUS'S MOLUCCAS INSET WITH HALMAHERA AND ADJACENT ISLANDS IN THE NORTHERN MOLUCCAS



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Drake Map. In points of similarity, however, although the islands in the French Map are crudely represented and all alike, they diminish in size from left to right as they do in Hondius's inset. On the French Map there is no definite horizon, and yet one might conclude that the base of the cloud formation is a misinterpretation of the mainland shown by Hondius. Each island on the French Map shows a symbol for a fort or palace with slender, tapering minarets; the inhabitants of the islands were described as Moslems. (1) By comparison to these finely detailed structures in the French Map, Hondius's are crude and the minarets resemble chimneys. He shows a structure only on Ternate. On both maps these are symbolic and do not represent the actual site of the towns. The Golden Hind is shown in exactly the same position in each inset but otherwise differs greatly in detail; notably in that Hondius shows her under sail whereas the French Map shows the sails furled.

There is another source, showing this towing scene, that has an important bearing on both insets. This one is engraved on a coconut which Drake presented to the Queen on his return to England and which she in turn had made into a silver-mounted cup, engraved as a memorial for him. (2) In this the Golden Hind is shown drawn by four canoes as in the two insets, but with the islands arranged in plan view in a vertical line on the right side of the picture and the procession moving toward them. That much is symbolic. Beyond the Golden Hind there is apparently a shoreline which has no relation to any real land area in the vicinity of the Moluccas, but is in all probability an authentic detail from Drake's records showing the Golden Hind in this situation with the southwest side of the island of Ternate behind her. There should have been little need to improvise the scene as it is known that Drake had given the Queen a long letter describing the voyage, and also his diary or log; (3) the incident was a logical subject for an illustration in either of event pertaining to the voyage.

1. H. O. No. 164, Sailing Directions for New Guinea, p. 65. Even in modern times the mosques provide a distinctive landmark for the principal towns as illustrated by these two examples from the above sailing directions: "THE TOWN OF TERNATE stretches along the southeastern coast of the island and has a conspicuous mosque at its southern end." Describing the principal town of Tidore, Soa sioe, on the southeast side of the island: "It may be recognized by

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The Golden Hind is well delineated, correct in its rigging details. It is very likely a good miniature portrait of the ship, aside from the fact that she is shown with too many gunports in her broadside; 9 to be exact, which is one-half of the total of 18 guns that she was said to carry. It should be particularly noted that she has her sails furled. They probably were, inasmuch as she was taken in tow from anchor.

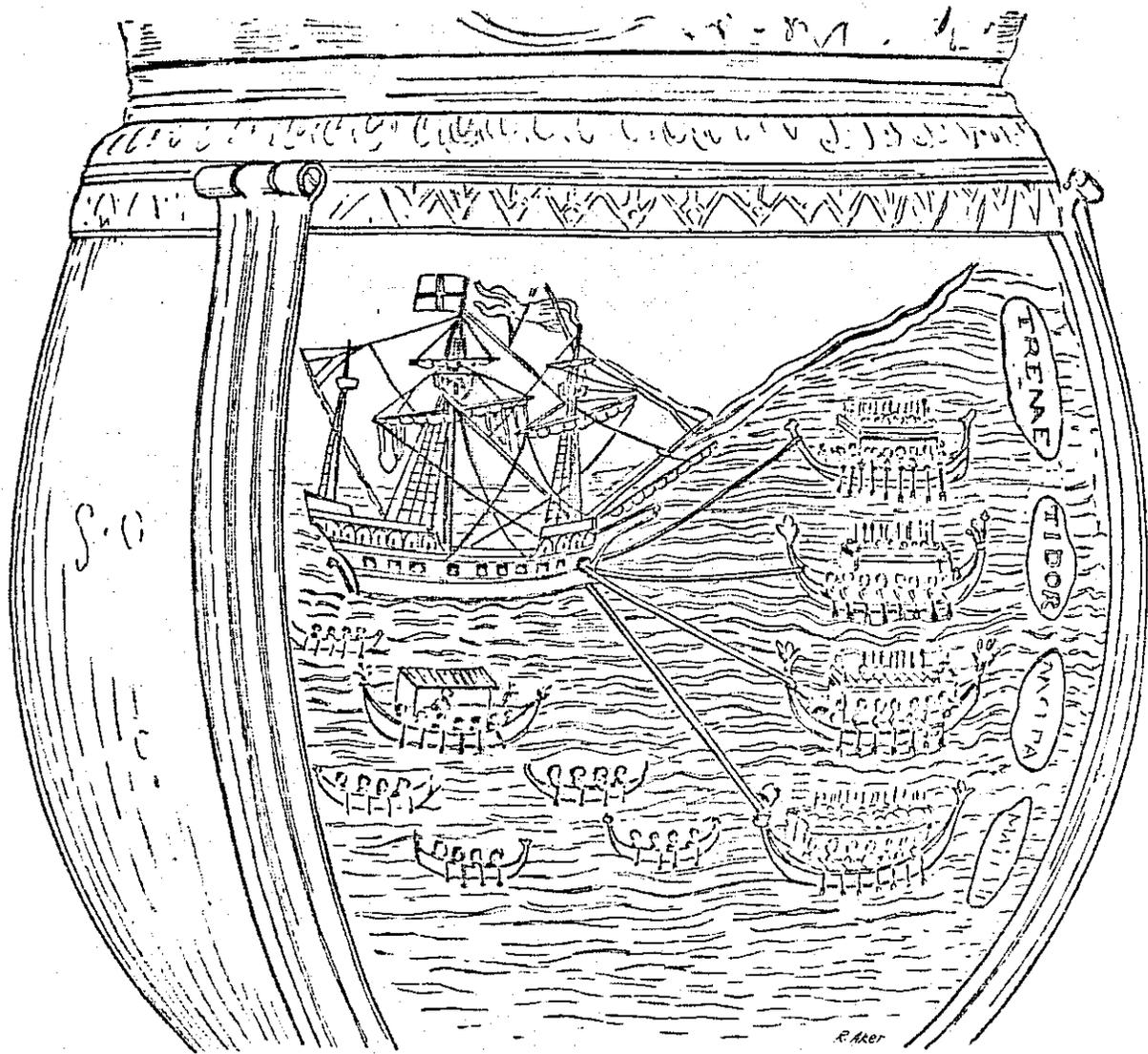
Using the cup engraving as a basis, it would be but a simple step to place the towing scene in a symbolic view with an authentic panorama of the entire group of islands.

The ship and the canoes offer an interesting sidelight on the manner in which Hondius produced his view and perhaps something also on his source. The difference between his ship and that on the French Drake Map has been briefly touched on, but there is also a major difference between his canoes and those shown on either the French Map or Drake's Cup. If his canoes are compared with the descriptions in the accounts, it becomes immediately apparent that he has drawn them incorrectly, and a closer study of them shows that they are a product of his invention.

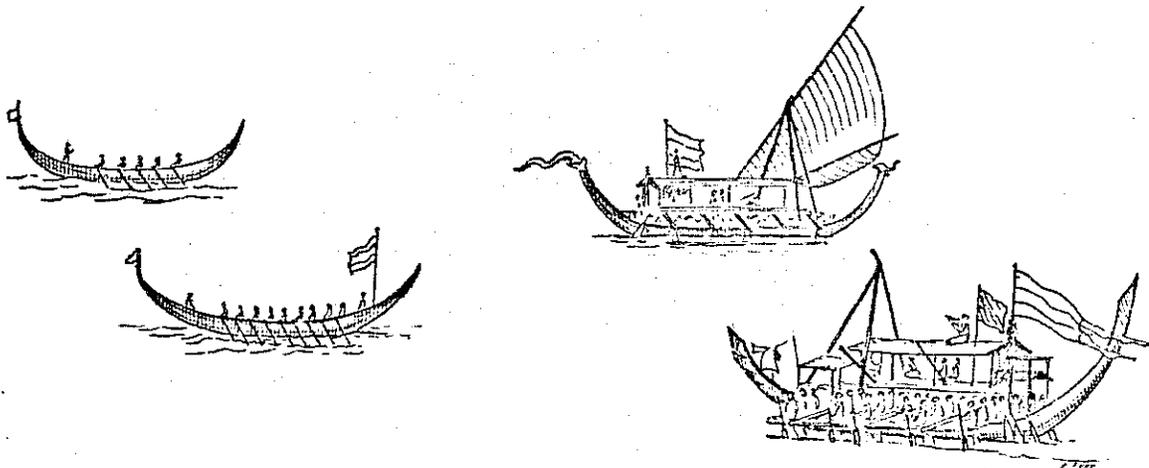
Both World Encompassed and Famous Voyage make it quite clear that in these canoes the rowers were distributed all along the side of the craft in three complete banks on each side. The French Drake Map and the cup, though showing only one bank, nevertheless show them along the whole length. Hondius places them at each end of the craft with a cabin between. From the descriptions, the canoes are recognizable as the caracor, the Malay trireme, (1) a large multibanked craft then used in

(cont'd.) its white houses and a mosque."

2. See Lady Elliott Drake, The Family and Heirs of Sir Francis Drake, plate between pp. 50-51.
3. Recorded in a letter to Philip II from Bernardino de Mendoza, Spanish Ambassador to England, preserved in the Archives of Simancas. See H. R. Wagner, Sir Francis Drake's Voyage, pp. 196 & 229. Wagner suggests that the diary was probably the book in which Nuno da Silva said Drake was always writing and painting pictures.
1. See illustration of Malay rowing system, Lionel Casson, Illustrated History of Ships & Boats, p. 131. See also Björn Landström, The Ship, p. 224.



ENGRAVED VIEW ON DRAKE'S COCONUT CUP SHOWING THE "GOLDEN HIND" IN TOW BY THE KING OF TERNATE



At left, canoes at Ternate from an engraving by Francois Valentijn in "Oud en Nieuw Oost Indien," 1724, and at right, caracors shown in an engraving of the capture of Loki, east coast of Ceram, 1652, from van der Hem's "Secret Atlas of the East India Company."

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the waters around the Celebes and New Guinea. When Sir Henry Middleton visited Ternate in 1605 he referred to them as "these galleys or caracolles"; also "carricole." (1) The Drake accounts merely identify them as "great and large Canowes", (2) whose rowers were seated in three banks all along each side of a gallery which extended 3 or 4 yards out-board of the hull, the banks being stepped. The number of rowers totaled four score. Sir William Foster in The Voyage of Sir Henry Middleton to the Moluccas 1604-1606, states in a footnote that many of these craft are very large; about a hundred feet long and ten feet wide and that the rowers might number as many as ninety. (3)

Neither the Drake nor Middleton accounts describe the shape of the canoes, but the high, thin, curving stem and stern with devices of some kind as shown on the Drake Cup seems to have been characteristic of the region. An engraving of Ternate dated 1724 (4) shows several large canoes of the same shape, and in a 1652 view of the capture of Loki, on the east coast of Ceram, a multi-banked canoe is shown with the same thin, curving ends, standing very tall and with decorative devices at the bow and stern. (5) Drake's Cup seems to have captured the correct impression of these craft. The French Drake Map caught the general feeling, but Hondius missed it entirely.

Consider the number and disposition of the canoes shown in the

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1. See Sir. Wm. Foster, The Voyage of Sir Henry Middleton, p. 28.
 2. See N. M. Penzer, ed., The World Encompassed, p. 67. See also reprint of Famous Voyage in Wagner, Sir Francis Drake's Voyage, p. 279.
 3. See Sir Wm. Foster, The Voyage of Sir Henry Middleton, p. 28. Foster refers to these craft as "Kora-Kora", the Malay galley still in use in the Moluccas.
 4. Francois Valentijn, Oud en Nieuw Oost Indien, 1724, Vol I, pt. 1, p. 4. For reproduction, see Foster, The Voyage of Sir Henry Middleton, frontispiece.
 5. From Laurens van der Hem, Secret Atlas of the East India Company, c. 1670. The view appears as plate 118 in Dr. F. C. Wieders, Monumenta Cartographica, The Hague, M. Nijhoff, 1925. See reproduction in H. I. Chapelle, The National Watercraft Collection, U. S. National Museum, bul. 219, 1960. See also Alexander Laing, American Sail, p. 197.

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scenes. All show four large canoes towing; World Encompassed states that there were three; Famous Voyage, four. However, both the Drake Cup and the French Drake Map show one slightly smaller, covered canoe alongside the Golden Hind, and from the accounts, it is evident that this represents the King's personal canoe which did not participate in the towing. Since the King's brother also joined the entourage, there were altogether five large canoes present. It is not clear whether he assisted with the towing, but he may have done so for a time, thus making the number engaged in this a total of four. Hondius fails to show the King's canoe in his scene and was possibly unaware of the part he played in the pageant.

There is a bit of seamanship displayed in the manner of towing as shown in the Drake Cup and the French Drake Map, though it may not have meant much to the artists who were perhaps content to copy literally from their sources. In these, the towlines are correctly shown leading from, or near, the Golden Hind's hawse holes; the only point from which the ship could be towed properly. From the hawse, the towing cables could be taken to the heavy cable bitts directly inboard. The French engraver was vague about the matter, however, and merely terminated the lines at the stem near the hawse, but the cup clearly shows them led to the hawse. Hondius, apparently not knowing better, improvised by leading the towlines to the beakhead where there could have been no adequate means of securing them.

Summing up Hondius's representation of the canoes, it is fairly evident that he invented many details and based his thinking on the European type of State Barge in which the rowers were situated in the ends of the boat. Two other variations in detail not found in the other Moluccas views are that the canopies of his canoes are peaked, where the others are flat, and he shows a steering oar whereas the others show none. In the Loki print, the craft have steering oars but they are not conspicuous when viewed from the side; they too show a covered structure over the center section of the craft, but the covering has a very flat peak.

Not by any means to Hondius's discredit, we see two conflicting patterns in the inset -- on one hand a credible view of the Moluccas and on the other, a shallow fabrication of an incident concurrent with Drake's arrival at Ternate, but which nonetheless bears a close parallel with the

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other two sources mentioned, and possibly to a common, unknown source. The conclusion is hard to overlook that Hondius had seen this view somewhere, but did not bother to copy it because he had the basic ingredient already in his possession; the view of the Moluccas.

In his inset view, the Golden Hind tends to confirm the existence of a voyage record as his source. As previously pointed out, the other views show her with sails furled -- Drake's Cup is an important reference for this point. Hondius shows her with her main course and main topsail set, and these are braced up sharply, and except for the fact that he shows her in tow, it would be indicative of a heave-to situation. There is a very good probability, dictated by simple prudence, that Drake did heave-to overnight on the day he first sighted the islands, which he would have seen at a great distance because of their height. We know that he did not reach them until the next day. November is the transitional period between the east and west monsoons, and the wind is light and variable in that season. When heaving-to, all sail was usually taken in except the main course, which was braced up sharp, and the ship then placed beam to wind with the helm lashed a-lee to keep her heading up into the wind as soon as the sail generated steerageway. Thus she remained in comfortable balance with very little headway and yet with enough sail set that the pressure of the wind on it helped to counteract the rolling caused by the seas coming on her beam. Books on seamanship recommend that if the wind is light, the main topsail should also be set to further decrease the rolling. (1)

The fact that Hondius shows the sails set in this manner adds to the probability that he had access to an original record, or a good copy, showing Drake's first impression of the Moluccas. In this, it would have been most logical for him to have placed the Golden Hind in the situation that she happened to be in when the view was made, as was in fact done on the illustrations for Drake's 1595 voyage. In the Bibliothèque Nationale's drawings from that voyage, the ship, or sometimes more than one, is shown in each case sailing on the course and with sails set as she was

1. See Darcey Lever, The Young Sea Officers Sheet Anchor, 1808, p. 89. See also William Brady, The Kedge-Anchor; or, Young Sailors' Assistant, 1847, "HEAVING-TO", p. 173, and "LYING OFF, AND ON, TO ENTER A PORT", p. 223.

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at the time the view was made. Hondius probably shows the Golden Hind in the situation she was in when dawn revealed the island panorama; hove-to under main course and main topsail set to reduce an otherwise violent rolling period resulting from her heavy ballast of treasure. The mizzen yard appears oddly set, but is possibly triced up in that manner to restrict its motion as it has no vang. This practice is somewhat confirmed by at least one source of 1595 which shows a ship hove-to with mizzen yard similarly triced. (1)

To this authentic, basic view of the Moluccas Hondius needed only to add the canoes, a relatively insignificant detail, to obtain a graphic, factual illustration of an important event of the voyage.

THE PORTUS IAVAE MAJORIS INSET

The Portus Iavae Majoris inset measures 2 x 2-1/2 inches and depicts a small port within the mouth of a river. The land on each side of the river is under cultivation, planted with rice paddies, and is apparently low with no noticeable elevations. The small cluster of houses near the top of the inset may represent a town, maybe the one mentioned in World Encompassed. Since no ships but the Golden Hind are mentioned in the accounts as being here, it may be taken that she is both the ship under sail outside the river and the one moored within.

The caption under the inset is translated from the Latin as follows: "Weighing anchor from this harbour of Java-Major, he returned to England with one ship through a vast expanse of sea, touching only at a single port."

The accounts and maps clearly indicate that after passing through the Lesser Sunda Islands east of Java February 22, 1580, Drake found the Portus Iavae Majoris on the south coast of Java, but otherwise, there are few details by which to specifically locate it. Hondius's map indicates a port in West Java; however, both the French Drake Map and the Silver Map indicate a large bay only slightly west of the center of Java, which accords with the statement in World Encompassed to the effect

1. See D. W. Waters, The Art of Navigation, Plate LXII, p. 248.

A NEW EVALUATION OF THE EVIDENCE

that the middle of the island was found to be in 7° 30' South Latitude.

The only account that gives details of the approach to the port is World Encompassed, here quoted in part from the day on which the Lesser Sunda Islands were cleared to the final anchorage in Java: (1)

After this, we past on to the Westward without stay or anything to be taken notice of till the 9 of March, when in the morning wee espied land, some part thereof very high, in 8 deg. 20 min. South latitude; here we anchored that night, and the next day weighed againe, and bearing farther North, and neerer shoare, we came to anchor the second time.

The eleventh of March we first tooke in water, and after sent our boate again to shoare, where we had traffique with the people of the country; whereupon, the same day, we brought our ship more neere the towne, and hauing settled ourselues there that night, the next day our Generall sent his man ashoare to present the king with certaine cloth, both linnen and woollen, besides some silkes, which hee gladly and thankfully receiued, and returned rice, cocoes, hennes, and other victualls in way of recompense. This Iland we found to be the Iland Jaua, the middle whereof stands in 7 deg. and 30 min. beyond the equator.

Farther along in the account we find a detail of great importance in identifying the "Portus" as it involved either careening or grounding to clean and re-tallow the bottom of the ship, that is, to "wash" and "trim" her. (2)

... the matter of the greatest importance which we did (besides victualling) was the new trimming and washing of our ship, which by reason of our long voyage was so ouergrowne with a kind of shell-fish sticking fast vnto her, that it hindered her exceedingly, and was a great trouble to her sayling.

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1. See N. M. Penzer, ed., The World Encompassed, pp. 82-84.
 2. See Mainwaring's definition of "to Wash a Ship" and the use of "trim" in careening or grounding, Appendix II.

A NEW EVALUATION OF THE EVIDENCE

The names of several chiefs, or "Raias" (1) are given, which in themselves would probably give positive identification of the port if local records go back to the sixteenth century. However, the name of one, Raia Donan, (2) who is identified in the account as "the chief king of the whole land", survives on maps and charts of the south coast of Java to the present time. The foregoing constitutes the total body of evidence by which to identify the Portus Iavae Majoris.

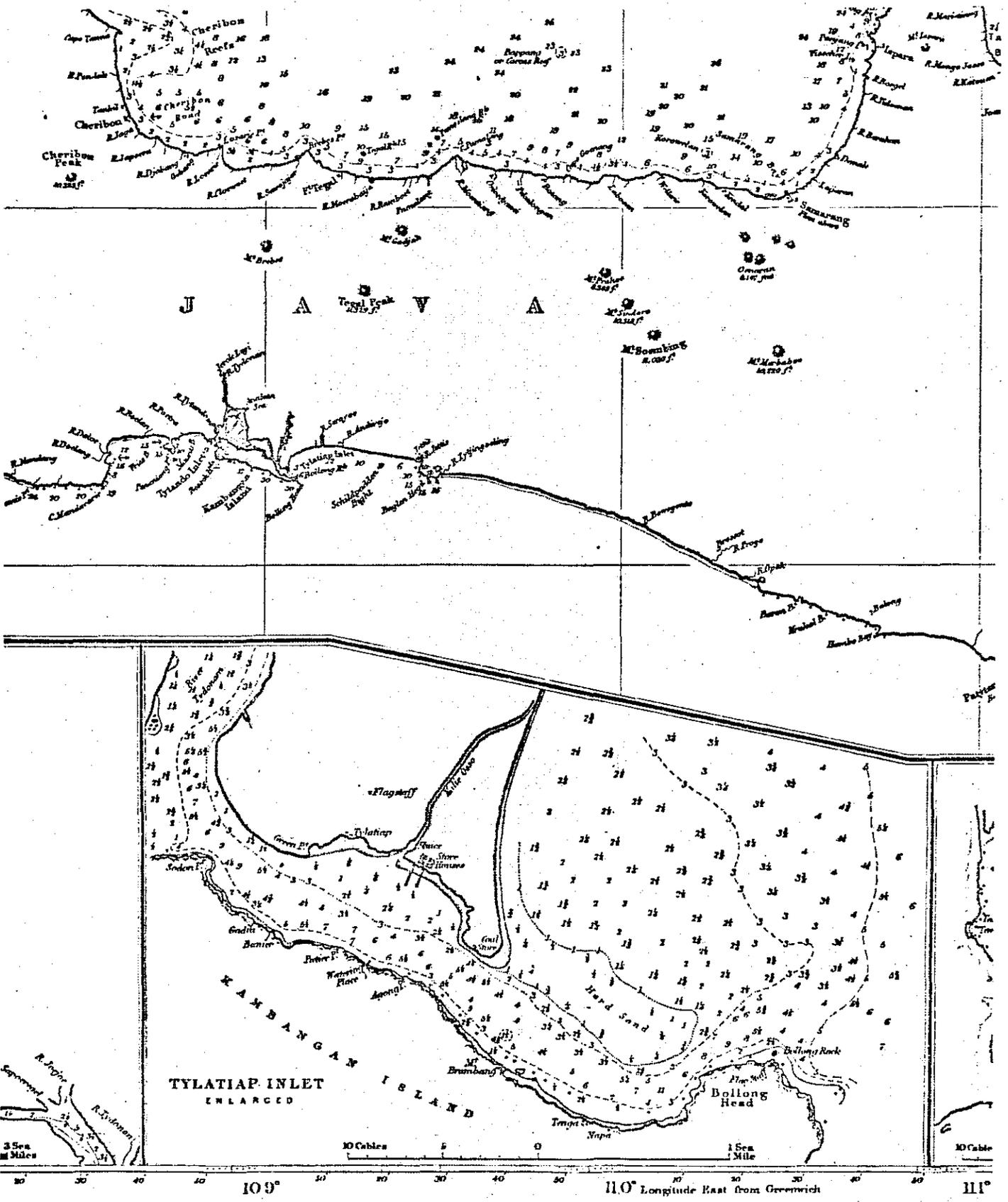
The statement that some part of the land was very high might ordinarily be a good clue, but most of the south coast of Java is very high from one end to the other, with many volcanic peaks reaching or exceeding 10,000 feet. The most significant clues are that the port was located in the middle of the island and that the Golden Hind was moored in a river where she was careened or grounded -- either operation requiring a sheltered cove or basin.

Fortunately, there are few choices of ports on the south coast that fulfill the requirements of the shelter needed. Sailing Directions (3) describe the coast as being bold and precipitous and exposed to a heavy and dangerous surf at all seasons. There are no safe harbors but Tjilatjap and Segoro Wedi Bay (Teluk Prigi). The latter is located in the eastern end of the island; Tjilatjap slightly west of the middle. Several fair sized rivers run into the sea near the middle of the island, and these, in many respects, bear a resemblance to the inset, but because their entrances are completely exposed to the wind and sea from the south, must be discounted. Most of these also show a bar, or spits, which are not in evidence in the inset.

The evidence necessarily favors the vicinity of Tjilatjap, situated

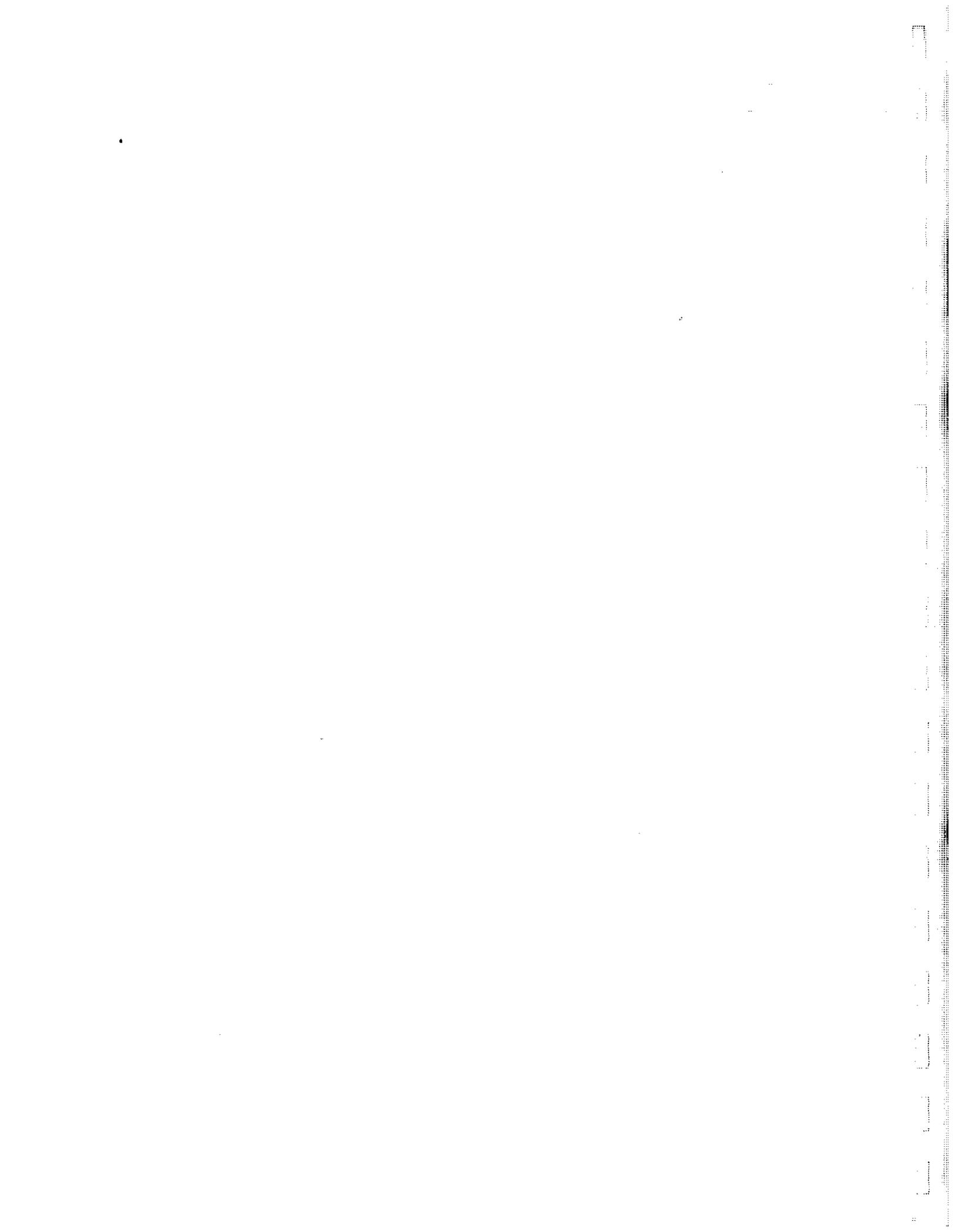
1. See N. M. Penzer, ed., The World Encompassed, p. 83, and also Hakluyt's Famous Voyage, reprint by Wagner, Sir Francis Drake's Voyage, p. 283.
2. The principal river at Tjilatjap bears the name Kali Donan and bears this name on early charts. Also, a town or village near Tjilatjap bore the name, Donan.
3. H. O. No. 163, Sailing Directions for Celebes, Southeast Borneo, Java (Except from Java Head to Batavia), and Islands East of Java, 1935, U. S. Navy Hydrographic Office, p. 20.

1728



Courtesy of the State Archives, The Hague London Published according to an Act of Parliament at the Hydrographic Office of the Admiralty June 2^d 1851.

**CENTRAL JAVA AND TJALATJAP INLET FROM THE SURVEYS OF
BARON MELVILL OF CARNBÉE AND OTHER OFFICERS
OF THE NETHERLANDS ROYAL NAVY, 1848**



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near the sea on a tongue of low, level land at the eastern side of a large marsh and lagoon -- the Segara Anakan -- all but closed from the sea by the narrow, breakwater-like 15 mile long island of Kambangan. The island is separated from the mainland by a narrow channel with inlets at each end of the island. Both inlets are located in bays formed by the island and the mainland.

Of the two inlets, probability favors Tjilatjap, but any parallel between Tjilatjap Inlet and Hondius's inset is ruled out by the fact that there is no agreement in topographic features; Kambangan Island is a mass of rugged hills, with elevations rising to 660 feet and is covered with a forest of large trees. The Portus must be sought in the low, flat shores along the inner waterways.

Before continuing, a brief note on the prevailing weather conditions is of some importance to correlating Drake's landfall and, again the Sailing Directions give invaluable assistance. (1) The south coast of central Java is within the range of the northwest and southeast monsoon winds which change with the seasons. The season of the southeast monsoon is from April to October, and the northwest monsoon from November to March. During the southeast monsoon, the air is laden with particles of dust from the hot, sandy plains of Australia, and distant objects may be entirely obscured. During the northwest monsoon, the sky may be often overcast and cloudy, but after a rain it will be bright and clear; this is also the season of heaviest rainfall.

Prevailing winds are southerly but are influenced by the monsoon seasons, blowing mainly between east and south during the southeast monsoon. In November and December the mean direction shifts to south-southwest and finally to west-northwest and northwest in January. Beginning in February, the prevailing wind begins to shift back to the south, and in March, when Drake arrived, southwest winds are general, but occasionally shifting to northwest and southeast.

Land and sea breezes occur at all times of the year. A fresh sea wind blows all day and is succeeded at night by a light land breeze. In

1. H. O. No. 163, Sailing Directions for Celebes, Southeast Borneo, Java (Except from Java Head to Batavia), and Islands East of Java, 1935. U. S. Navy Hydrographic Office, p. 30, 131, and 143.

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the vicinity of Tjilatjap there is generally a gentle land breeze from the west or west-northwest, but during both monsoons it is calm until 11 a. m., which allows ships to warp or tow during this period.

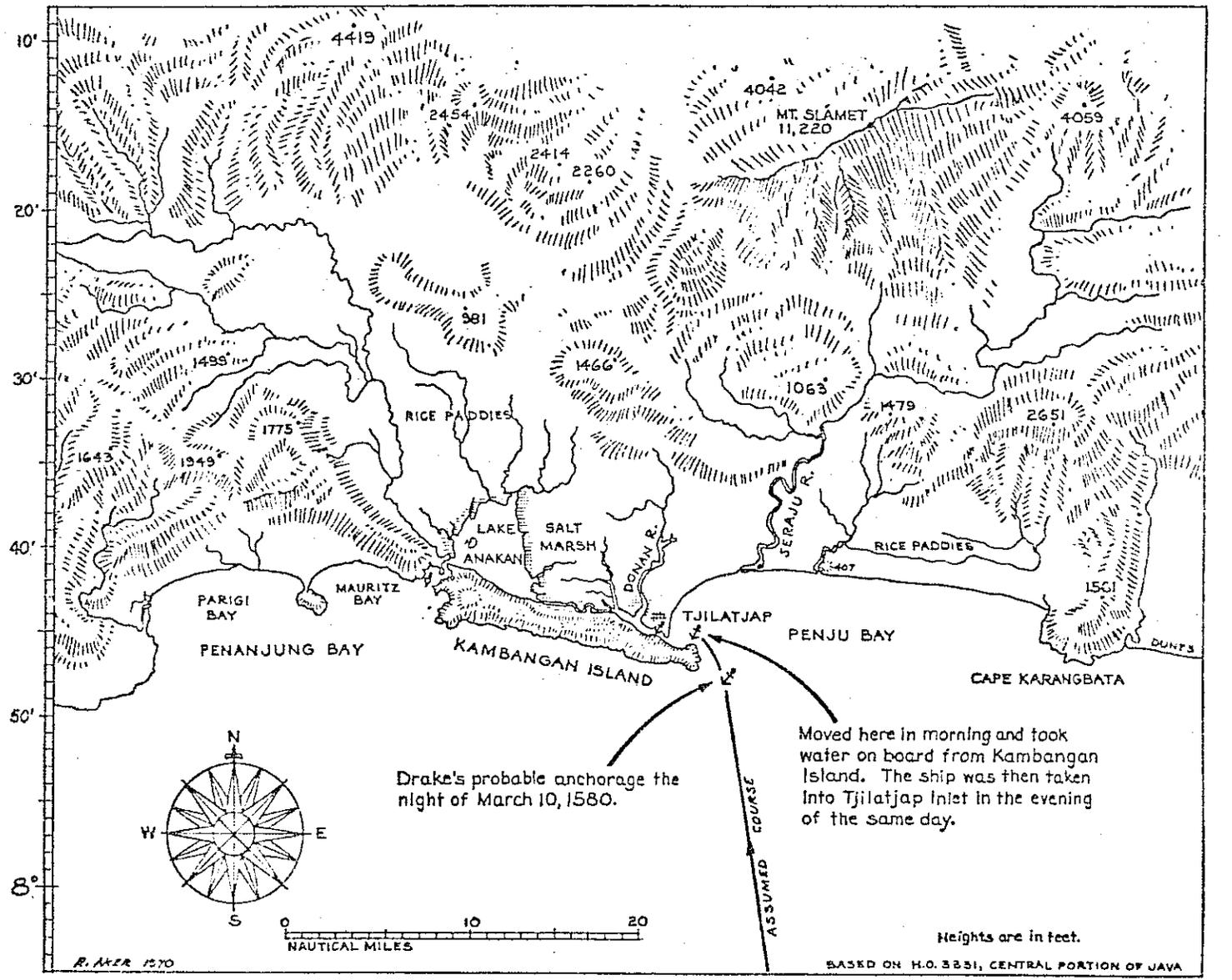
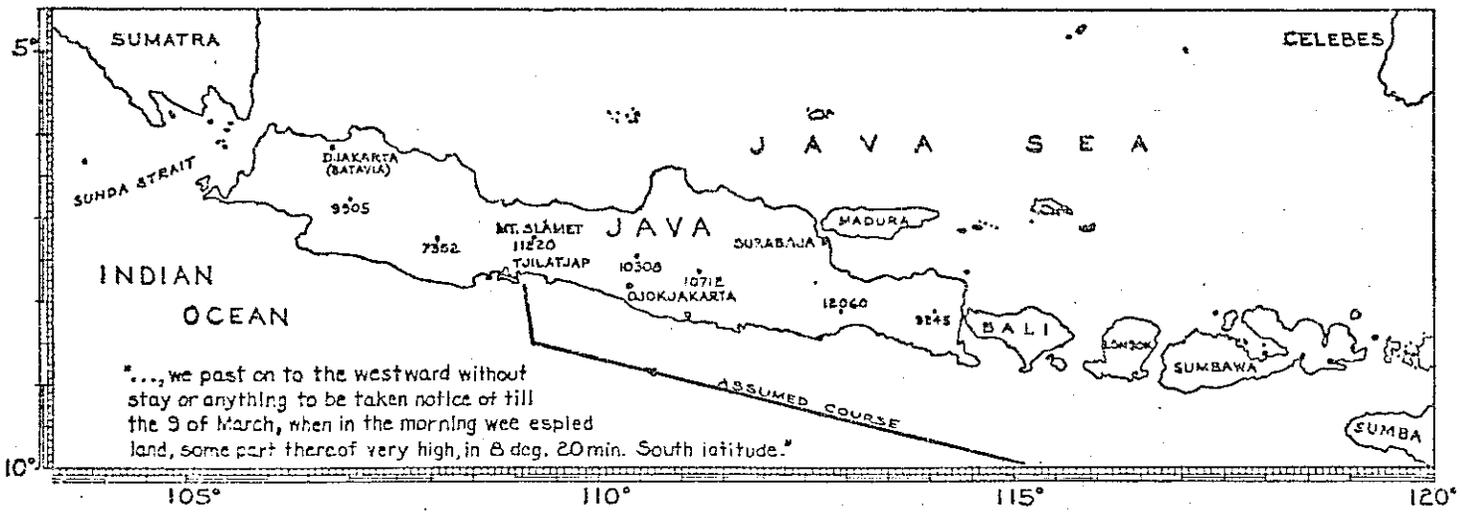
With this geographical and meteorological background we can reconstruct Drake's landfall. Thus, on the morning of March 9th, he was apparently favored with a clear day and sighted the high, volcanic peaks near Tjilatjap. Slamet, the highest of these, has an elevation of 11,247 feet and lies to the north of Tjilatjap. It is described in the Sailing Directions as an excellent mark for vessels bound to that port. During the northwest monsoon, the mountains may be sighted from a distance of 45 to 75 miles at sea. Comparison between the latitude which the account states Drake was in when land was sighted ($8^{\circ} 20'S.$) and the latitude of the land ($7^{\circ} 30'S.$) indicates that he was some 50 miles offshore that morning. This distance could easily have required the rest of the day for the Golden Hind to cover, particularly in her fouled condition.

Seen from the south, the eastern end of Kambangan is conspicuous with a prominent, bluff head, and viewed from a distance at sea, it appears to stand off the coast from the west side as a point of land potentially enclosing a large bay because of the low land and marsh that intervenes between it and the mainland. As a consequence, it has a logical attraction to any seaman unfamiliar with the region who is seeking shelter, and there can be little question that Drake closed with this prominent landmark as he neared the land.

The brief statement, "here we anchored that night", may be taken to mean that Drake anchored for the time being outside the eastern end of Kambangan -- the use of "neerer" in the statement that followed indicates that he was not far from the land, and the advent of darkness would have precluded his passing behind the island. Within two miles of the island there is a shoal on which he could have found anchorage, and the night land breeze would have made his position tenable. With the seasons in transition at this time of year, ground swells should have been negligible.

In the morning, anchor was weighed and the Golden Hind was moved "bearing farther North, and neerer shoare", where she came to anchor a second time. There is only one way to justify this direction, and that is that she was moved from outside to within the headland of Kambangan

2008



DRAKE'S LANDFALL ON THE SOUTH COAST OF JAVA

A NEW EVALUATION OF THE EVIDENCE

to a position opposite the channel leading into Tjilatjap Inlet. The boat was then sent in to sound the channel, and in the course of doing this, fresh water was evidently found nearby on Kamabangan. An old MS chart of this area significantly marks the headland as "Water Placis". (1)

At this point events become confused in the World Encompassed account because of the apparent omission of a date -- the 10th. If the nautical style of dating is considered to have been in effect, however, the ship was moved Thursday, the morning of the 10th. During the afternoon of Thursday, the 11th, fresh water was first brought on board, and then the boat was sent ashore again to traffic with the people. Finally, "The same day we brought our ship more neere the towne" where it was anchored or moored for the night. The next morning, Drake sent his representative ashore with gifts to the local king or chieftain, and presumably, to obtain permission to use the port.

This takes Drake into Tjilatjap Inlet and to the subject of the inset. At first the drawing was compared to the Donan River (Kali Donan) on the assumption that the waterway in the foreground of the inset was Tjilatjap Inlet and the side branch the river. Later, it was decided that the Donan River, about a half mile wide, was too large to represent the side branch and attention was shifted to a small slough off of the Donan, the Buaja Ngavel, which has a configuration similar to the inset. Both identifications were proven impossible, however, through correspondence with Mr. E. W. Petrejus, Curator of Prince Hendrik Maritime Museum, Rotterdam, Holland, who kindly submitted the problem to Mr. and Mrs.

Becker of Nieu Loosdrecht, Holland, residents of Tjilatjap for many years.

The Beckers' conclusion makes it clear that the west bank of the Kali Donan can not be considered as a part of the Portus Iavae Majoris. In a letter to Mr. Petrejus, Mrs. Becker said the following:

On reflection we doubt very much whether the Kali Buaja

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1. This chart is not dated, but the drafting techniques employed make it likely a product of the late sixteenth or the seventeenth century. MS Map, The S. Coast of the Isle of Java, Turtle Bay, Inv.: Marine 4538, State Archives, The Hague.

A NEW EVALUATION OF THE EVIDENCE

Ngavel can be the place where Drake's ship careened. The inset on the Hondius chart shows rice paddies on either side of the side branch of the Kali Donan, the creek Kali Buaja Ngavel. As a matter of fact this creek is surrounded on all sides by marshy land, grown over with mangrove trees. When the water is low the region is dry and as the water is brackish no cultivation of rice is possible here.

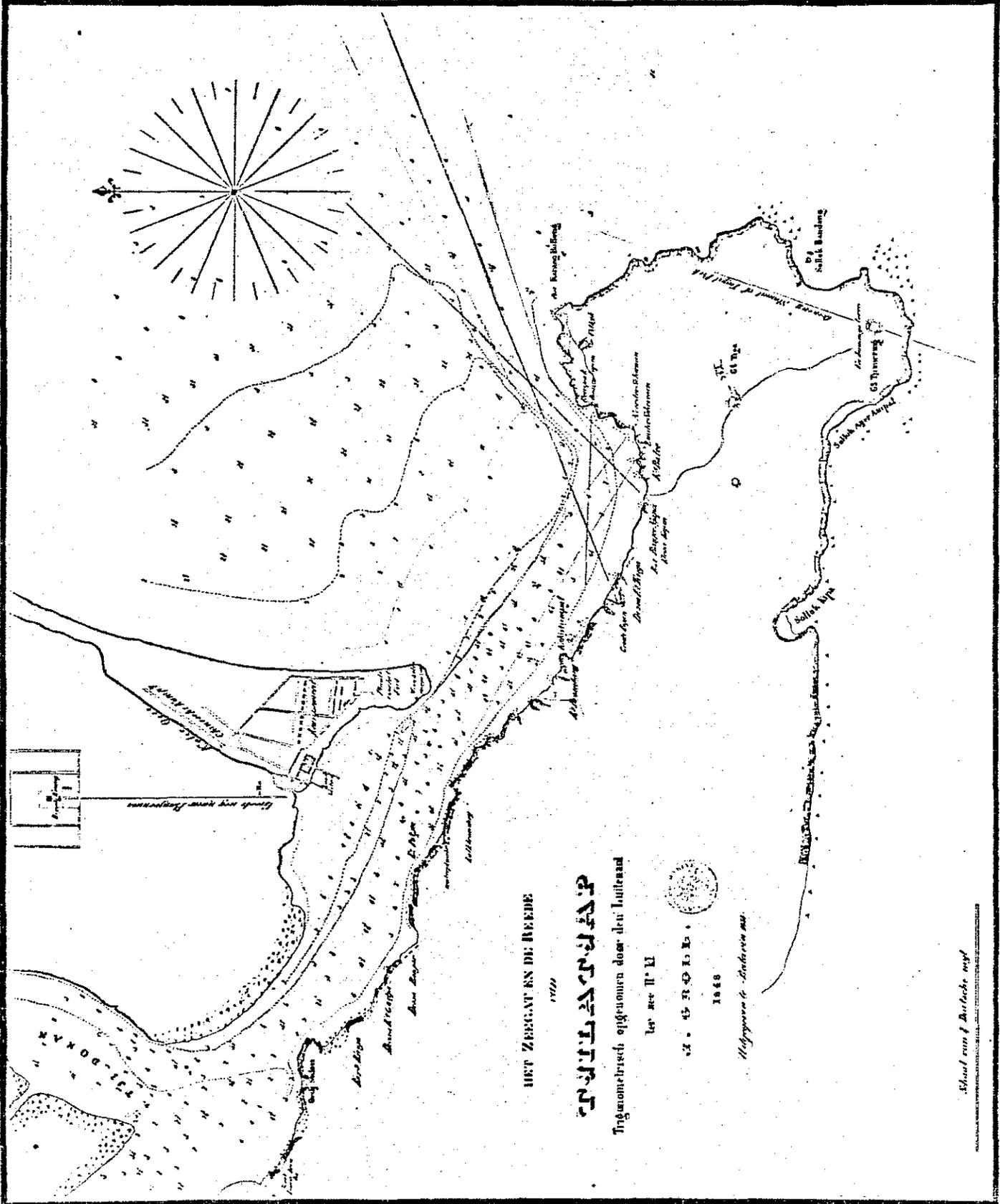
It is, however, quite possible that Drake sailed into the Kali Donan and up the Kali Djeroek Legi. He may have found a good place to careen in one of the creeks on the eastern bank. The ground there is high and there may be sawa's, but this we do not remember.

The whole region from Tjilatjap to Moentian (which is a pile-village in the Kinderzee) is marshland grown over with mangrove trees....⁽¹⁾

Despite Mrs. Becker's suggestion to seek the careenage on the East side of the Donan River, charts reveal nothing that resembles the inset. At Mr. Petrejus' suggestion, a request was made to Mr. B. Van't Hoff, General Director of the State Archives (Algemeen Rijkarchief), The Hague, for photographs of all early charts and maps of the Tjilatjap area that might be in the Archives. Through the research of a member of his staff, five excellent examples were located dating from the eighteenth to the late nineteenth century. In addition, Mr. Van't Hoff was kind enough to search the Hydrographic Office of the Royal Dutch Navy and was able to obtain from it photographs of several hydrographic charts dating from the middle of the nineteenth to the turn of this century. All of these added detail to the picture, but the Portus failed to materialize.

It seemed that Drake's Portus Iavae Majoris was destined to remain unidentified had it not been for the discovery of two field charts of the Tjilatjap region made by Captain G. P. Baker of the Bengal Infantry during the brief time British forces occupied Java early in the nineteenth century. Photostats of these were made available to the Guild in 1962 by Rear Admiral E. G. Irving, then in command of the Hydrographic

1. Translation by Mr. E. W. Petrejus.



HET ZEEGAT EN DE BEEDE

1722

TJILATJAP

Tingametriſch opgenomen door den Luitenant

Van der Meer

N. 1. 45 33 43 E. 13

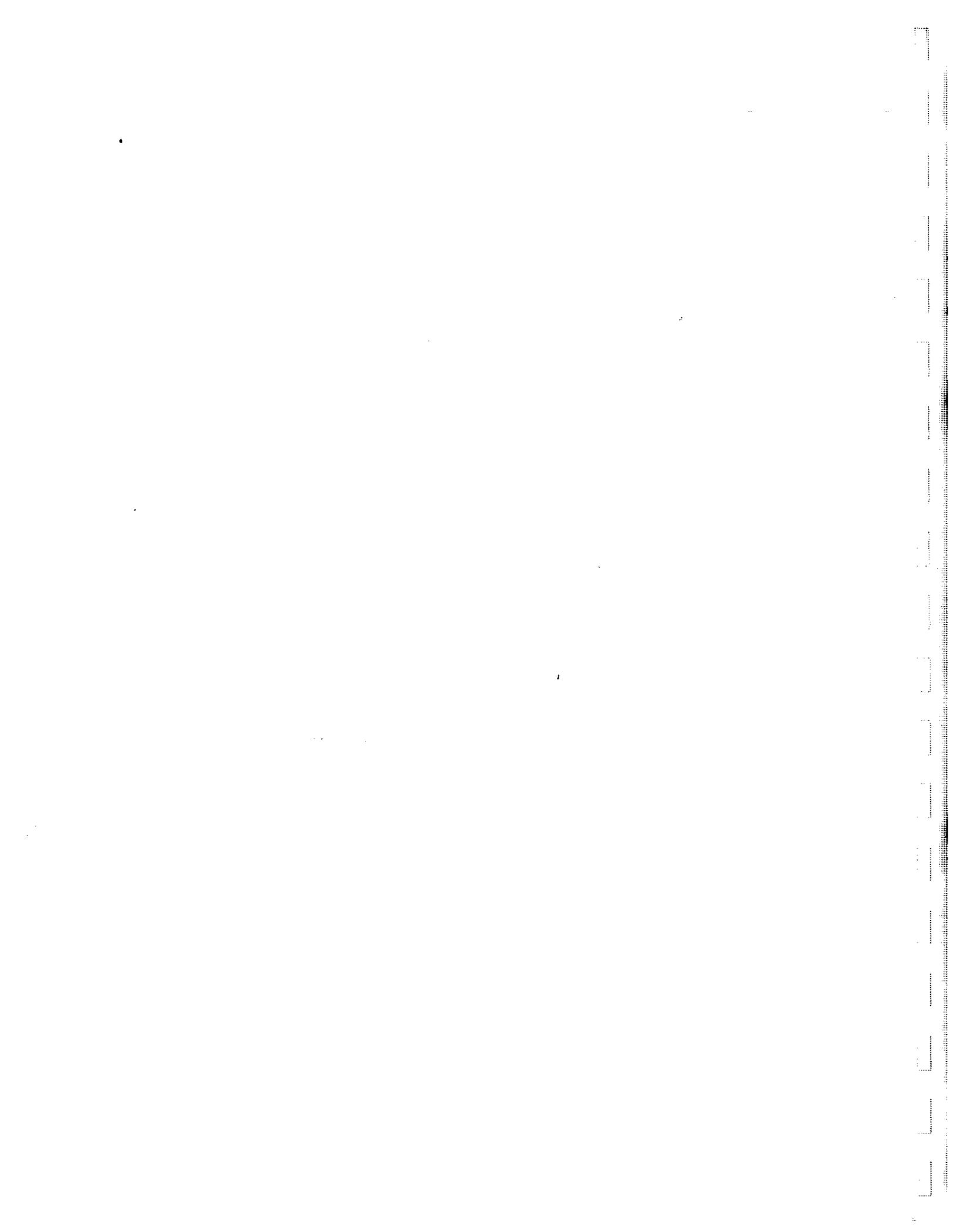
1848

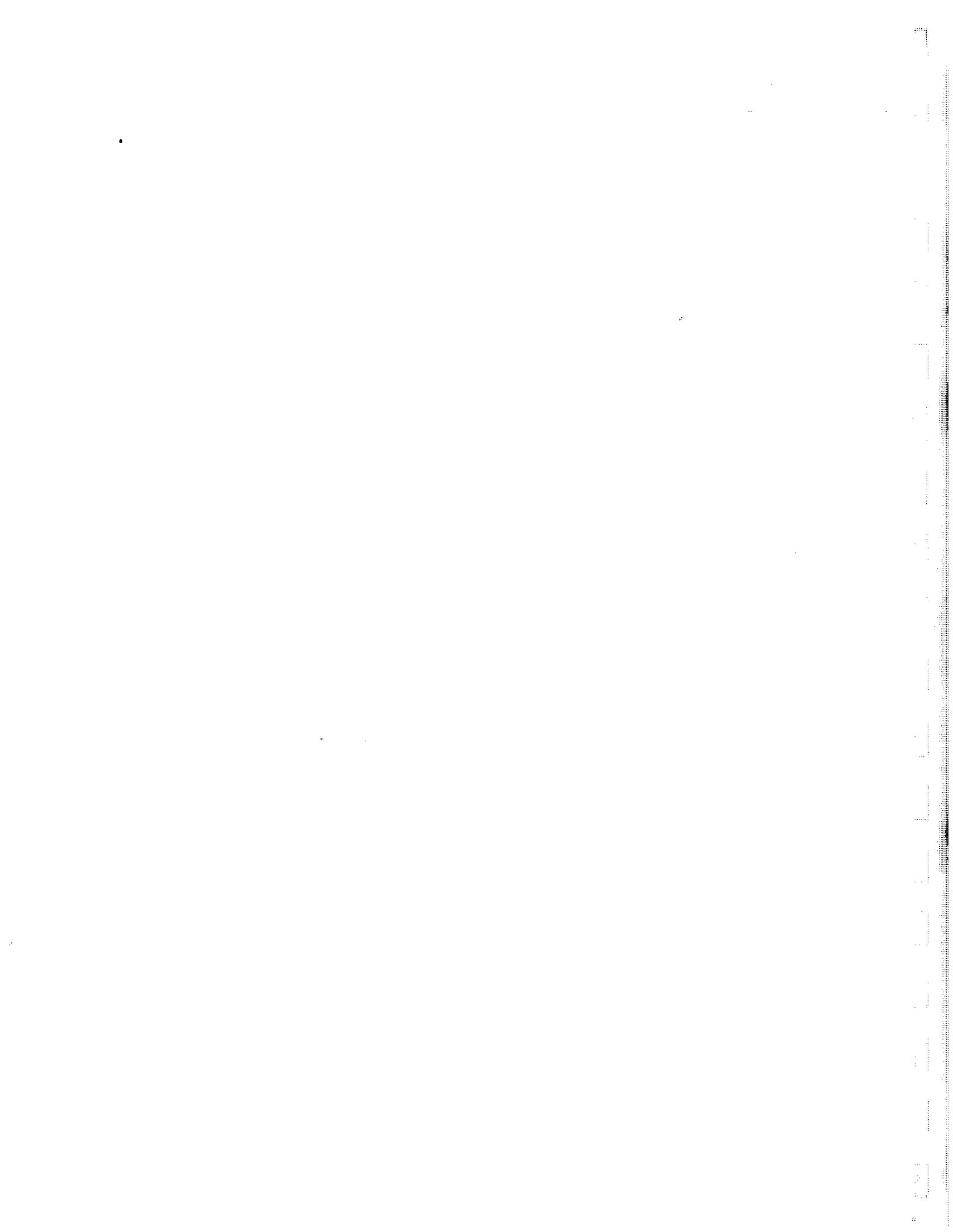
Uitgegeven te Batavia den 10

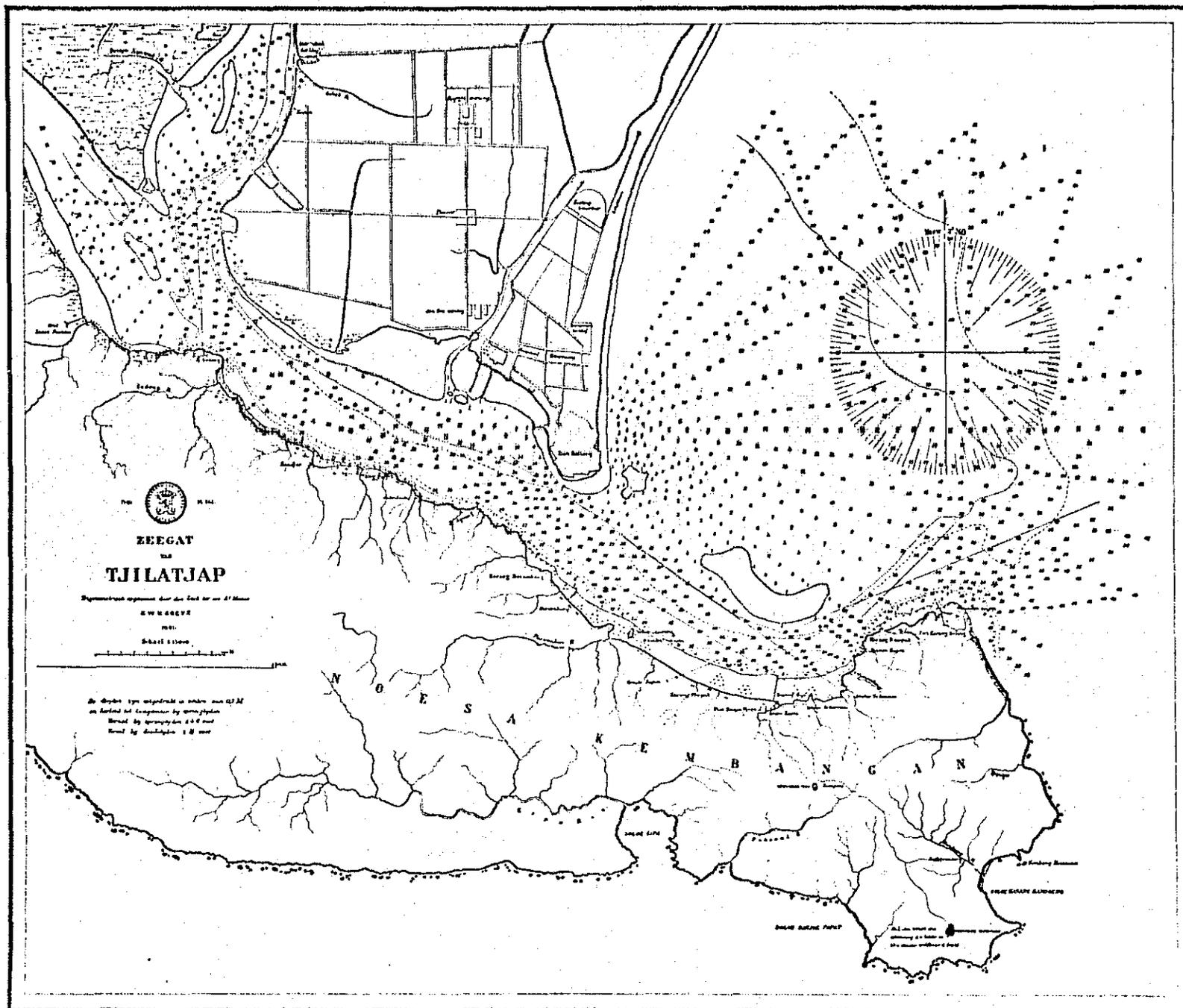
Schaal van 1 Duitsche mijl

Courtesy of the State Archives, The Hague

TJILATJAP INLET FROM SURVEY OF 1848, HYDROGRAPHIC OFFICE,
NETHERLANDS ROYAL NAVY

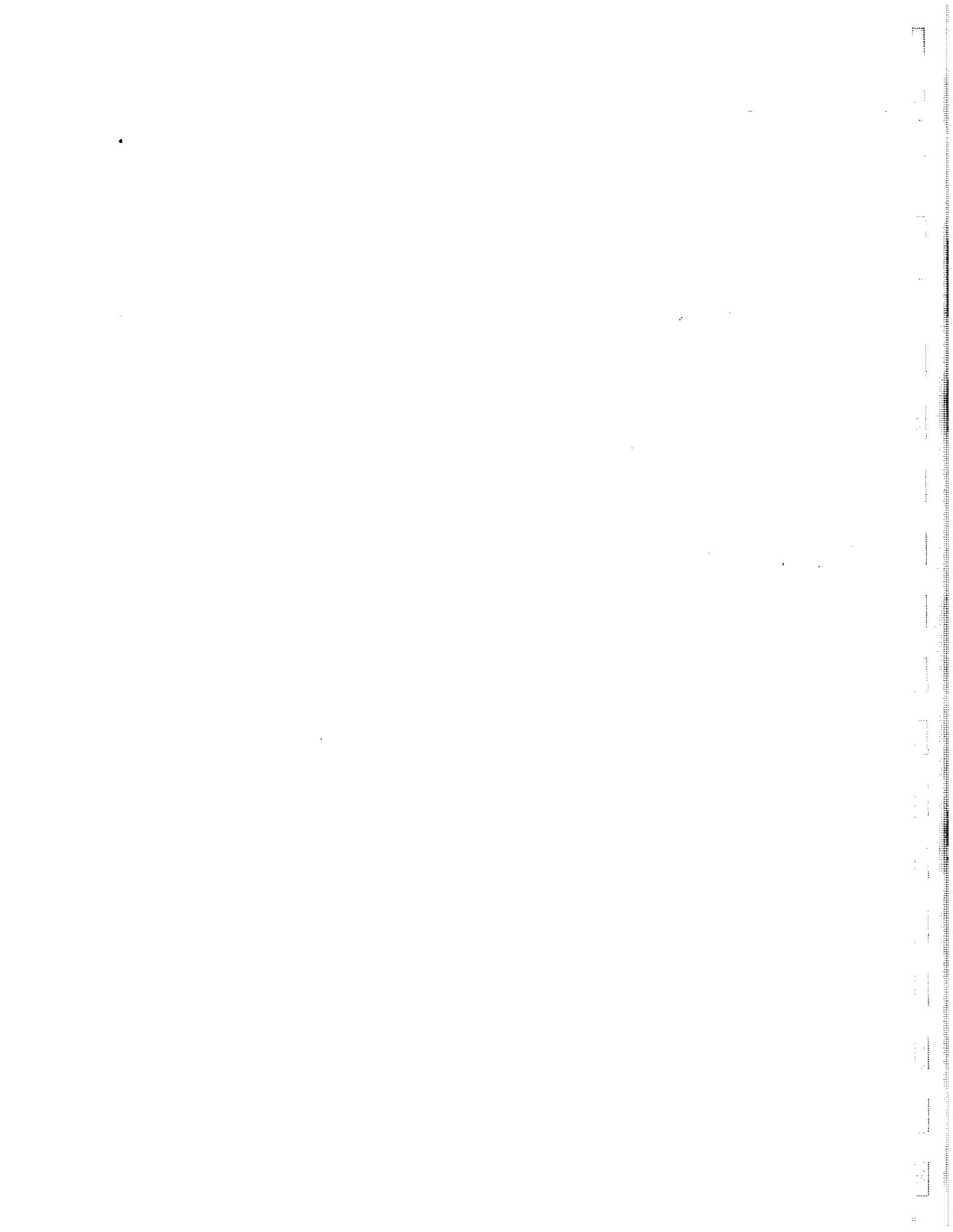






Courtesy of the State Archives, The Hague

TJILATJAP INLET FROM SURVEY OF 1885, HYDROGRAPHIC OFFICE,
NETHERLANDS ROYAL NAVY



A NEW EVALUATION OF THE EVIDENCE

Department of the British Admiralty. One of these charts not only shows Tjilatjap Inlet with remarkable hydrographic accuracy, but also shows topographic features, villages, and trails in great detail. Accuracy of the charts compares with those made in recent times. Particularly valuable to this study is the fact that they accurately portray the Tjilatjap area before it had attained commercial importance with consequent alteration of its natural features. In comparison with Hondius's inset view, it even seems to have suffered decline since Drake's time by lack of the extensive cultivation which Hondius shows -- the whole area of Tjilatjap is covered with trees and brush, and several villages are indicated to be deserted.

One of these charts is titled EYE-SKETCH of the STRAIT connecting the TWO HARBOURS of Noosso Combangan and of the River Donan to Jerook Ligi, N^o 11. G. P. Baker, Capt 19th Reg^t N.I. 1815. This is a small scale chart (1:24,000) defining the inland sea of Segara Anakan and the small, navigable channel behind the island of Kambangan, including Tjilatjap Inlet and the Donan River to its headwaters.

The other chart is titled PLAN of the HARBOUR of CHILACHAP between the South Coast of JAVA and Noosso Combangan, N^o 12 - G. P. Baker Capt: 19^t Reg^t. Bengal Inf^y. 1815. This chart is drawn to a scale of approximately 10 inches to the nautical mile (1:7,200) and gives excellent delineation of Tjilatjap and the inlet, together with sailing directions for entering the port. The directions conclude with the information that "Excellent water is procureable at Many Rivulets on Noosso Combangan, with plenty of wood & fine timber Every where -- Fruit at the deserted Villages if not carried off by the troops of Monkeys, who abound." The "Rivulets" are not defined on the chart, but many can be found on modern charts inside the headland of Kambangan Island and all along the inner shore, (1) thus making it a very easy matter for Drake to have taken on water before going on up to the town.

On the north side of Tjilatjap Inlet, three quarters of a mile from the entrance, the Portus Iavae Majoris shows up in a small, un-named mangrove choked river branching from the inlet. On present charts it

1. H. O. 3008, Anchorage on the South Coast of Java, 1957, U. S. Hydrographic Office.

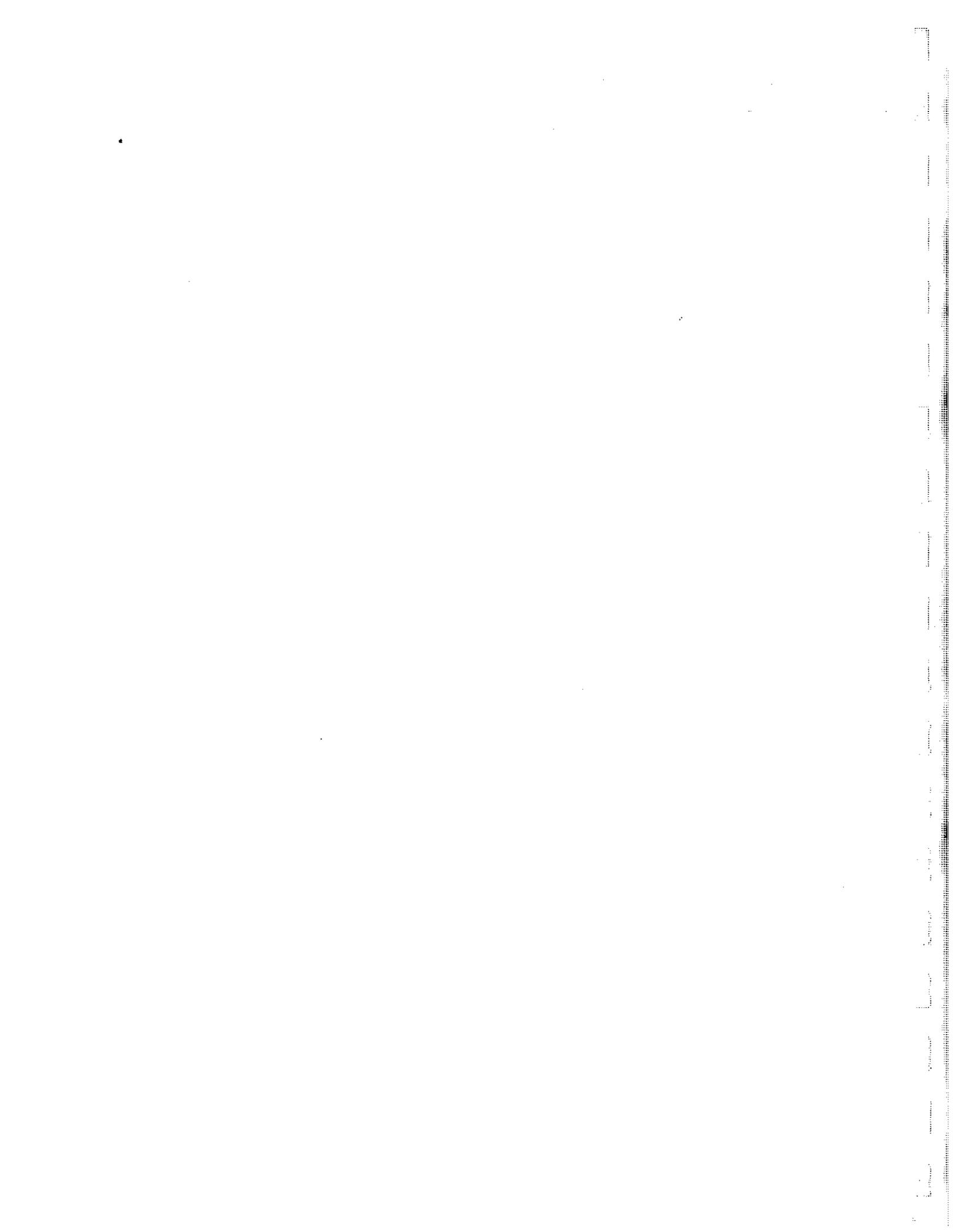
A NEW EVALUATION OF THE EVIDENCE

is identified as Kaji Jasi, or Kali Osso, a fresh water stream that makes its way through large fresh water marshes and rice fields. The fact that it originates at sources of fresh water is an important correlation factor for the rice paddies shown in Hondius's view, as this tongue of land is surrounded on three sides by salt or brackish water.

In 1815, this river appears as an unlikely berth for the Golden Hind, being so silted and sluggish that its mouth barely shows on the early charts. Its headwater is shown to be a swamp, or marsh, not far inland. However, the configuration of the stream shown by Hondius is still reflected in the bends of the river, and its width of a little more than a hundred feet is proportional to the size of the Golden Hind as he pictures her moored in the stream. Small as the river is, both it and the ship have been enlarged in approximately the proportion of 2 to 1 in comparison with the outer shoreline of the inset. This distortion is not without precedent, however, as Waters points out that one of the features of Wagner's charts in the Spiegel der Zeevaerdt (Mariner's Mirrour) was the deliberate distortion of the coastline by the enlargement of the entrances to rivers and harbours, the charts being intended for pilotage rather than navigation.⁽¹⁾

Of great importance is the fact that the shoreline outside of the river on Baker's chart shows a correspondence with the one shown in the inset. This is particularly noticeable on the right side. The left side is not so clearly seen, but the inset's shoreline can be seen reflected in the trail which presumably follows high ground along the bank of the inlet as does the one on the right side. This assumption finds considerable confirmation from the fact that on the outer, or water side, of this trail there is shown the standard symbol for marsh,⁽²⁾ and it apparently is taken over by mangrove trees, some vestiges of which can also be seen along the bank on the right hand side of the river.

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1. See D. W. Waters, The Art of Navigation, pp. 172, 173.
 2. Marsh is denoted by groups of short, horizontal lines indicating water standing in pools, usually in conjunction with a figure representing grass or reed, but in this case this figure is supplanted by clumps, which would be representative of mangrove trees.



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At the extreme left edge of the inset the shoreline shows just the trace of a bend which corresponds to the one on Baker's chart at the village named Dāwun Loomboo. This village is linked by road to another more important village slightly more than a mile inland called Donan Village. There is no trace of the small community shown in the inset, but at the point which approximately corresponds to the upper edge of the inset there is a bridge on the road linking Dawun Loomboo and Chilachap near the mouth of the Inlet. Whether the houses have any connection with a crossing there in Drake's time can only be conjectured; there may have been a ferry service. The number of boats shown in the river by Hondius would indicate a fair sized industry in fishing and local transport of produce and passengers.

As to the capability of the river to accommodate the Golden Hind 235 years before the Baker chart was made, it should be noted that the inset shows a clear waterway. For the sake of the extensive agriculture shown in the inset, it would have been vital to ensure a good supply of fresh water out to this otherwise waterless tongue of land, which is little more than a former sand spit. Drake would likely have found the river to be a well tended waterway leading to inland sources of fresh water. Under these circumstances, a good flow of water, especially during the rainy season, not only assures a well scoured channel in the river bed, but also creates and perpetuates one across the tide flats to the deep water of the Inlet. With a tidal rise and fall ranging from 4 feet at neaps to 6 feet at springs, it is not too much to expect, under these circumstances, that Drake found at least a couple fathoms or more on which to enter into this stream at high water. For careening, it is not to be wondered that he sought anchorage in this tributary, considering the tidal currents of the inlet, which in the Sailing Directions are said to attain a velocity of 2-1/2 to 4-1/2 knots at spring tides and during the rainy season increase to 5 and 5-1/2 knots. There are few places in the Inlet where a vessel can anchor out of these currents.

The view of the Portus Iavae Majoris was probably made from the Golden Hind as she lay outside the small channel leading to the river -- the details were probably noted on a chart showing Tjilatjap Inlet in its entirety. There is a subtle bit of seamanship exhibited in the Golden Hind as she is shown outside the river that makes it unlikely that the scene was contrived by Hondius from a general chart of the inlet. The caption states that anchor is being weighed for departure, but knowing

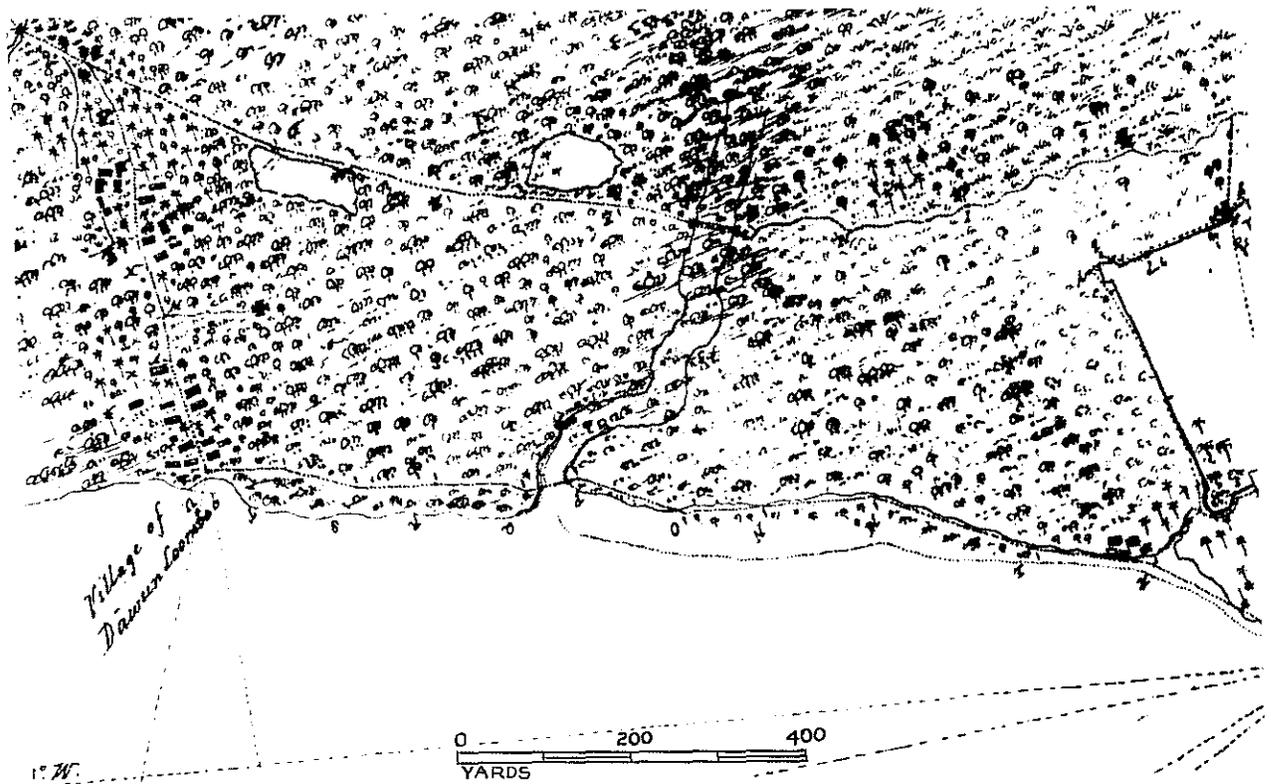
A NEW EVALUATION OF THE EVIDENCE

the setting, one could as easily surmise that the scene depicts Drake's arrival. Yet, probability favors the chance that it is an accurate statement. From the fact that World Encompassed concludes the description of bringing the ship "more neere the towne" with the statement, "hauing settled ourselues there that night," instead of saying that they anchored there for the night, implies that the ship was taken directly into the river, where she settled and docked herself on the mud or sand of the river bottom as the tide dropped. On the same day, the Golden Hind had anchored once before reaching the town, and again the night before; each time it was stated that she came to anchor.

In the circumstance of getting into the river there would not have been nearly as much opportunity, or reason, to draw a view of an unfamiliar river-mouth port as against a more favorable chance when the ship had been moved back into the deep water of the inlet to complete her lading of victuals or fresh water, or await a favorable tide. In the former case, it may be taken as certain that Drake would have no time for making drawings -- in the latter, there would be time to spare for a visual record of the place where he had spent a very pleasant sojourn.

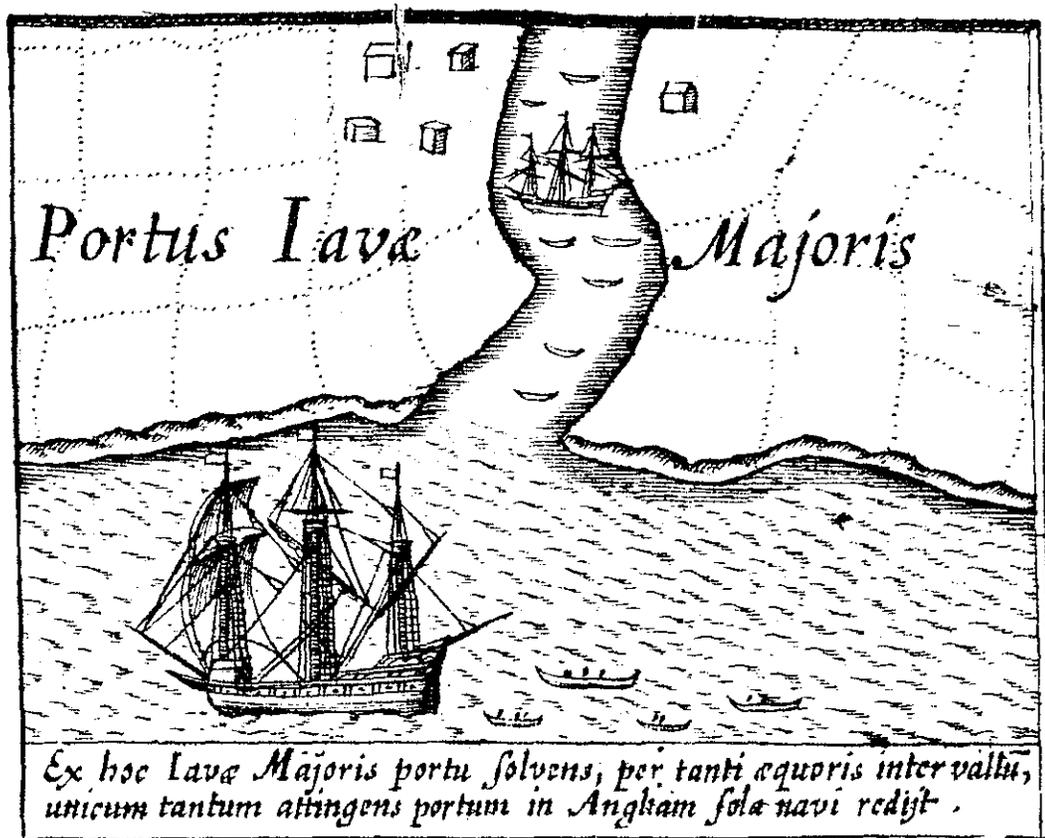
The Baker chart gives a note that sheds further light on the proceedings: "The mouth of this harbor should be approached from the S. E. & during that monsoon, or from April to Sept. inclusive you will have a leading wind, w^{ch} will take you clear up to Chilachap: the other six months at S. W. nearly, when it will be necessary to tow or kedge up with the flood." With the wind in the southwest, Tjilatjap Inlet lies in the lee of Kambangan Island, but when the wind is southeasterly, it blows directly into the channel. The departure date was March 26, but adding ten days for calendar correction makes it April 5th, and thus the beginning of the southeast monsoon season. Therefore, if the caption truly describes the situation, it is a sea breeze which we see filling the Golden Hind's sails, and she is shown at the moment of weighing her anchor, and standing into the ebb tide which will take her out of the inlet. By setting the fore-sails, the ship could be eased up to the anchor to lighten the task of getting in the cable, and as soon as the anchor was aweigh, she would have kedged out with the tide, driving stern foremost, or with her beam, against the wind with foresail and mizzen set to help maneuver in the channel. (1)

1. See Mainwaring's definition for "kedging", Appendix II. By using



Hydrographic Department, Admiralty

DETAIL FROM CAPT. BAKER'S CHART OF TJILATJAP SHOWING THE CREEK AND SHORELINE DEPICTED IN HONDIUS' INSET.



The British Museum

THE HONDIUS PORTUS IAVAE MAJORIS INSET.

A NEW EVALUATION OF THE EVIDENCE

Another factor that points strongly to an original source for the inset is the evident fact that Hondius used the reverse image of the ship shown in the Portus Iavae Majoris as his model of the view for Drake's ship at the bottom of his Broadside Map. His use of this image for a portrait of the Golden Hind is an indication of confidence in his source.

THE INSET OF THE GOLDEN HIND AGROUND

This inset, like the Moluccas inset, is drawn within an ellipse measuring 2-13/16 x 2-1/16 inches and shows the Golden Hind aground on a reef somewhere east of the Celebes. It was a miracle that the ship got off without serious damage and remained seaworthy enough to carry Drake's expedition home another third of the way around the world.

The caption beneath the inset translates literally as follows: "The ship, for the space of twenty hours, cast upon a reef, finally with great loss of goods was lifted by the divine aid. A sorry sight."

Although this inset does not involve the geographical verification with which we are concerned at Nova Albion, it is worthy of attention to determine if it was also derived from original records of the expedition. The incident was of sufficient importance to have been included as an illustration in Drake's diary, or log.

An outstanding feature of this inset is that it shows a knowledge of seamanship in contrast to Hondius's evident lack of such knowledge, which is understandable for one who is not a seaman or student of the art. In the other insets, we can see that Hondius engraved details of rigging that must have been present in his source drawings, but because of his ignorance of their function he failed to complete their leads in some cases or terminated them in the wrong places in others. In some instances, major rigging features were omitted. To point out a few errors, we find that in the Moluccas inset the Golden Hind has no main stay. We see part of the fore-topmast yard brace but no fore-topmast

(cont'd.) the sails and stemming the tide, a vessel is able to maintain the use of her rudder by the tide flowing past it, much the same as when she is underway with sail alone.

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yard. In the Portus Iavae Majoris inset we see the mizzen yard's lift terminating at the head of the mizzen topmast, whereas it should continue to the head of the main topmast; Hondius shows the upper part of the lift leading to the main topmast but treats it as a separate piece of rigging originating at the mizzen topmast.

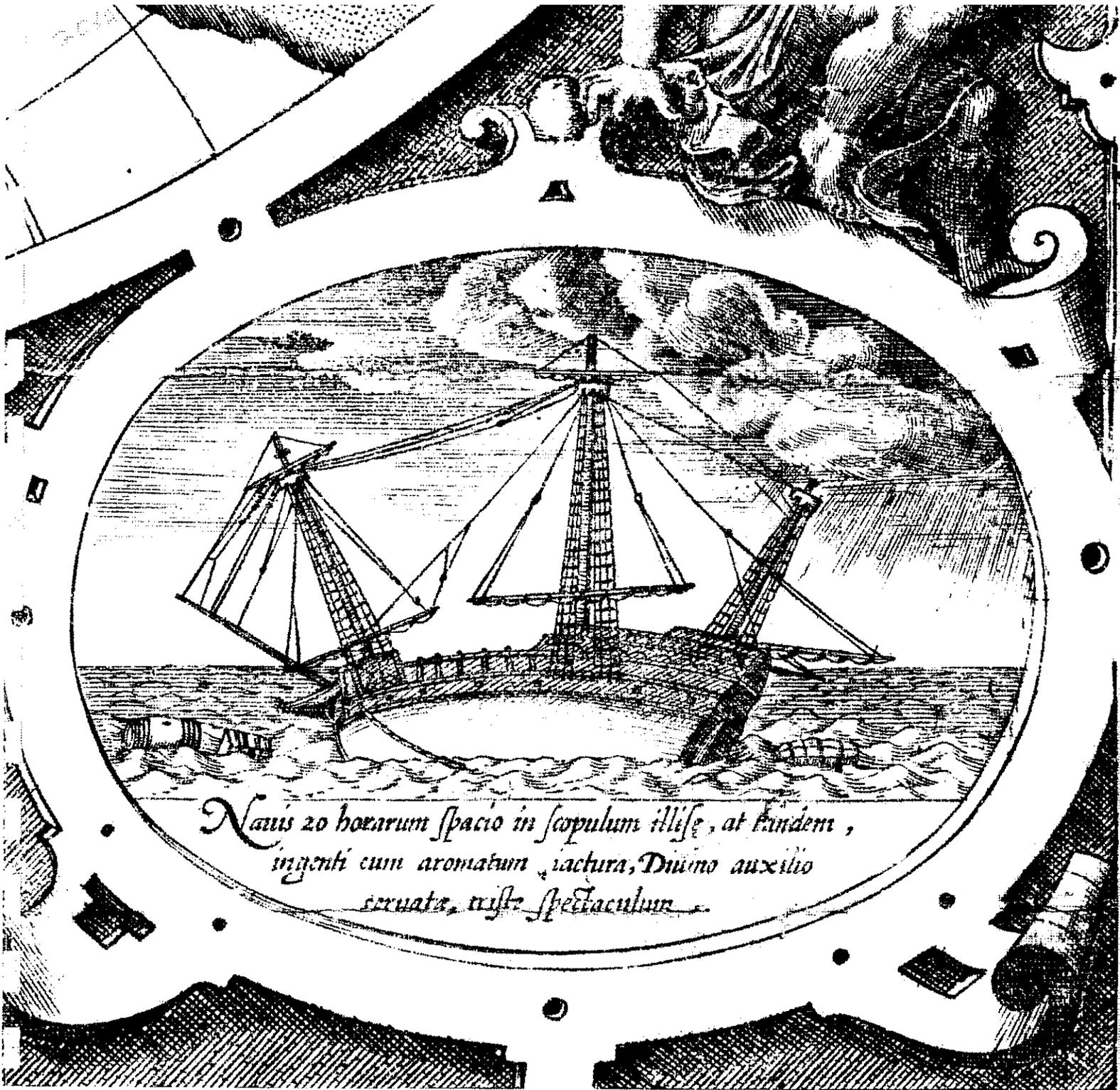
The composition of the inset is in accord with the description given in World Encompassed, in which it is clear that the Golden Hind struck the reef on her port side at the beginning of the first watch, or about eight o'clock in the evening, January 9th. She was held fast throughout the night, and everything possible was done to save her, including jettisoning a part of her armament, stores and goods, but all to no avail.

The situation and eventual salvation is well summed up in World Encompassed: (1)

The manner of our deliuey (for the relation of it will especially be expected) was onely this. The place whereon we sate so fast was a firme rocke in a cleft, whereof it was we stucke on the larbord [port] side. At low water there was not aboue sixe foote depth in all on the starbord, within litle distance as you haue heard no bottome to be found; the brize during the whole time that we thus were stayed, blew somewhat stiffe directly against our broadside, and so perforce kept the ship vpright. It pleased God in the beginning of the tyde, while the water was yet almost at lowest, to slacke the stiffenesse of the wind; and now our ship, who required thirteene foot water to make her fleet, and had not at that time on the one side aboue seuen at most, wanting her prop on the other side, which had too long alreadie kept her vp, fell a heeling towards the deepe water, and by that meanes freed her keele and made vs glad men.

The inset portrays the moment of deliverance when the Golden Hind unexpectedly "fell a heeling" over on her starboard side, freeing her keel, and slipped into deep water from the ledge which was holding her. Close inspection reveals the evidence of the seamanship that one might expect

1. See N. M. Penzer, ed., The World Encompassed, pp. 76-80.



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THE HONDIUS INSET OF THE GOLDEN HIND
AGROUND ON A REEF IN THE CELEBES.

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under the circumstances of a grounding by the fact that all sail has been taken off and everything snugged down aloft.⁽¹⁾ The yards have been lowered and the topmasts housed to reduce weight aloft while the ship pounds and works on the reef, and also to reduce the effect of the wind to drive her farther on to it. The rigging for this situation is basically correct, and the fact that there are few errors can be credited to the likelihood that the original drawing of the ship was large enough to forestall misinterpretation of details.

Though an attempt to get an anchor out to windward failed because of the depth of water there, as described in World Encompassed, one needn't suppose that none were out. When a ship goes aground, one of the first acts is to let go anchors to prevent the ship from driving farther onto the shoal, and in the inset a cable is seen leading astern on the port side to an anchor that most certainly was let go on the reef at the earliest moment.

Significantly, too, the general arrangement of the ship compares satisfactorily with the engraved view of the Golden Hind on the coconut cup which was given to Drake by the Queen. In the inset, however, the correct number of gun-ports is shown. The open waist was usual for ships of that period, and its absence in other versions was probably due to canvas waist-cloths or fights spread to temporarily close this open space in the rails. The goods shown in the water correspond to those described by John Drake in his First Declaration: (2) "... one-half of the ten tons of spices, cloves, ginger and pepper that they had obtained by exchange, in the Moluccas; also two pipes of flour and a quantity of clothing."

In conclusion, a knowledge of the situation is exhibited in this inset which cannot be reasonably expected from Hondius's imagination or from his limited technical understanding, and it is evident that he had copied an authoritative illustration.

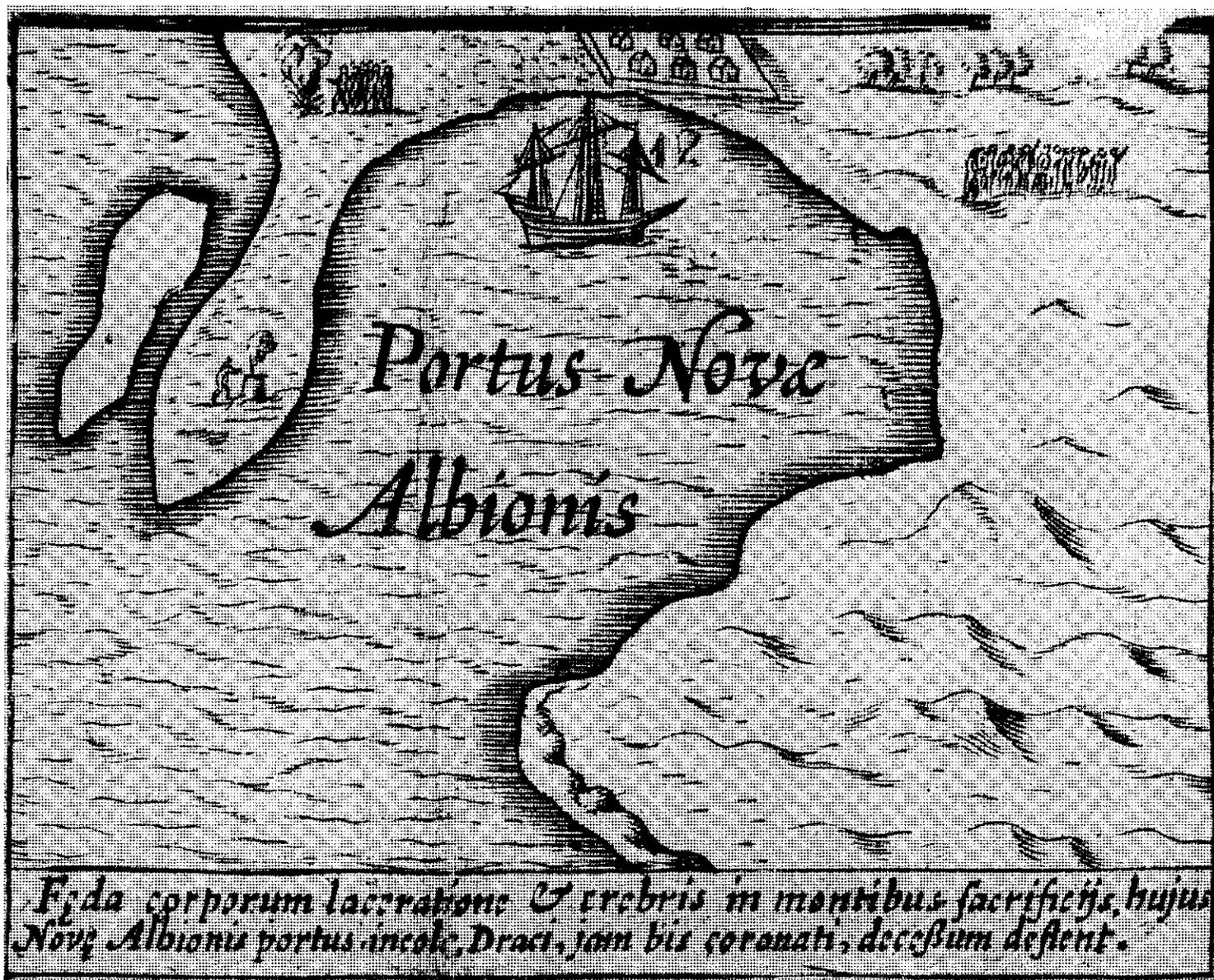
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1. See instructions for a sailing vessel getting aground, William Brady, The Kedge-Anchor, p. 220.
 2. See Zelia Nuttall, New Light on Drake, p. 34.

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THE PORTUS NOVAE ALBIONIS INSET

Previous interpretations of the Portus Novae Albionis inset view ranged from the opinions that it was imaginary,⁽¹⁾ or diagramatic,⁽²⁾ to the opinion expressed by Henry R. Wagner that it is the most important piece of evidence known to us and unquestionably taken from some record of the expedition.⁽³⁾ The assumption that it was an authentic, though imprecise rendering of the scene, could justify some details being overlooked, or glossed over as poor draftsmanship. To cite an outstanding example, it can readily be seen that the inset bears a general resemblance to Drakes Bay -- Point Reyes is prominent as the point in the inset though it does not correspond in shape. George Davidson, who believed conclusively that Drake landed at Drakes Bay, correlated the inset with the northwest side of the bay as follows: "The Portus Novae Albionis of Hondius shows the entrance to the Laguna Limantour and the Indian rancheria on the west shore thereof, and the eastern promontory of Point Reyes Head (which forms the harbor); and the two elevations

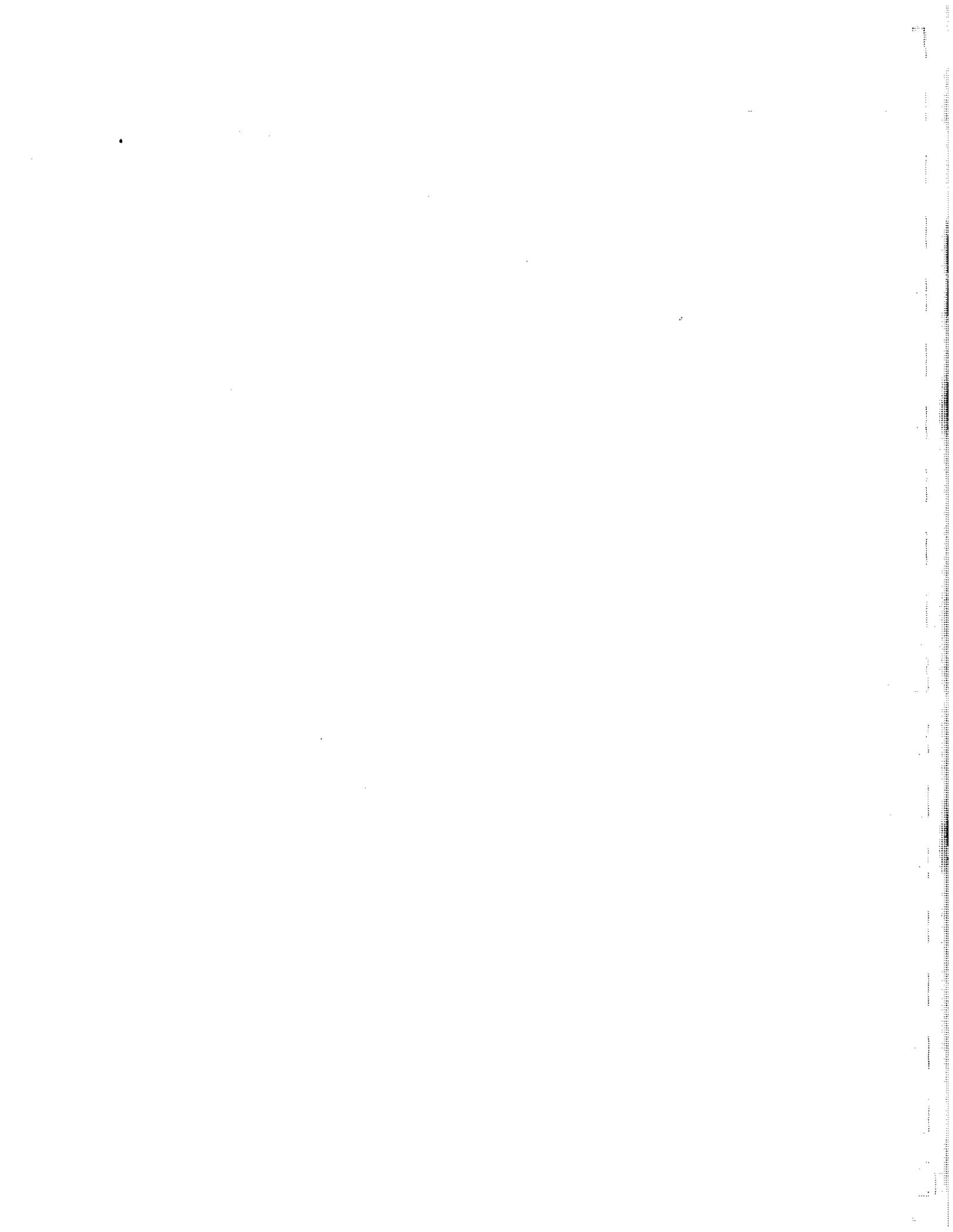
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1. See J. W. Robertson, The Harbor of St. Francis, pp. 42-45. Robertson comments: "Not recognizing the tangible resemblance it bears to any known Pacific harbor I regard the Hondius sketch, not as a serious attempt to carry out a description given by Drake or by any member of the crew; merely an illustrator's design to accompany the verbiage of The World Encompassed, published in 1628, the only account of the voyage narrating these incidents." An earlier opinion that the inset was imaginary was stated by Hubert Howe Bancroft, also on the basis that it did not match any known harbor. See Hubert Howe Bancroft, History of California, Vol. 1, p. 88.
 2. See Edward Everett Hale, in Justin Windson, Narrative and Critical History of the United States, Vol. III, pp. 74, 78. Hale originally published and discussed the Portus Novae Albionis inset, but believed it to be diagramatic. His opinion was that Drake's port was the present San Francisco Bay.
 3. See H. R. Wagner, Sir Francis Drake's Voyage, pp. 154-169. Wagner compared the inset to Trinidad Bay in 41° 03', and assumed that the island represented an excrescence existing on the outer side, but not clearly shown attached to it in the original sketch from which the engraving was made.



*Ex da corporum laceratione & crebris in montibus sacrificijs, hujus
Novae Albionis portus incolae, Draci, jam bis coronati, decessum desierunt.*

The British Museum

THE HONDIUS INSET OF PORTUS NOVAE ALBIONIS



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where the Indians built their fires upon the departure of the ships." (1) He conceded that no island existed as depicted but concluded that Chimney Rock at the eastern tip of Point Reyes was "synonymous with the islet on the Portus Map, where it is much exaggerated." If we knew that the inset was merely diagrammatic, this interpretation might be acceptable in the absence of contradictory evidence, but it could apply equally to other sites and can not possibly be accepted without strong substantiating evidence.

The Portus Novae Albionis inset measures 1-15/16 x 2-1/2 inches and shows a view of a small bay or cove, in which the Golden Hind is berthed, and a camp set up on shore. The caption in the view is translated literally as: "With appalling lacerations of their bodies and with numerous sacrifices in the mountains the inhabitants of this port of New Albion lament the departure of Drake, whom they have already twice crowned."

Two of the geographical insets out of the three have been found to be faithful views of the places depicted, and the fourth inset showing the Golden Hind hung up on a reef has been determined to be an accurate representation of the incident. Allowing that Hondius could have found sources other than Drake's records for creating the Moluccas inset, it is highly improbable that he could have found any for the Portus Javae Majoris inset, which shows only a small part of a very large harbor complex. The grounding inset revealed details that were seemingly beyond the scope of Hondius's technical ability in nautical matters. There can be little question that all three of those insets were derived from Drake's records. On the basis of what they reveal, there is more than a probability that the Portus Novae Albionis is also derived from Drake's records and correctly portrays the site of his landing in California with the same meticulous draftsmanship displayed by the other insets.

At the outset, an indication of original source is shown by the fact that the caption for the inset does not accurately describe the scene. It seems evident that either Hondius or someone else merely elaborated on the single fact that the scene related to Drake's departure from Nova Albion. The use of the word "mountains" (montibus) in connection with the

1. See George Davidson, Francis Drake on the Northwest Coast of America, p. 102

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Indian's lamentations and sacrifices is nowhere supported by the accounts, nor is there any confirmation that they lacerated themselves on the occasion of departure. World Encompassed uses the words, "tormenting themselves," but only in the sense of mental anguish resulting from excessive emotions of grief as they perceived Drake's departure to be drawing near. (1) Hondius's description probably stems from one similar to that in World Encompassed; "The 23 of July they tooke a sorrowfull farewell of vs, but being loath to leaue vs, they presently ranne to the top of the hills to keepe vs in their sight as long as they could, making fires before and behind, and on each side of them, burning therein (as is to be supposed) sacrifices at our departure." It could be conceded that "mountains" is a relative term and a free translation might permit the substitution of hills, but nevertheless, the inset doesn't show recognizable sacrifices in the areas marked with the topographic symbols for hills or mountains.

Of the four areas in which human figures are shown, the group standing in the hill or mountain area in the upper right corner of the inset are clearly taking their farewell of Drake as described above in World Encompassed. One, apparently a European, has his back to the ship and stands in a gesture of farewell; two in the group have their left arms raised in a reciprocal gesture. In the remaining three areas, the two single figures and the group can be associated with some form of sacrificial rite. The group is standing on a clearly defined beach, and their act is very probably the one described in World Encompassed; "Howbeit, seeing they could not still enjoy our presence, they (supposing vs to be gods indeed) thought it their duties to intreate vs that, being absent, we would yet be mindfull of them, and making signes of their desires that in time to come wee would see them againe, they stole vpon vs a sacrifice, and set it on fire erre we were aware, burning therein a chaine and a bunch of feathers. We laboured by all meanes possible to withhold or withdraw them, but could not preuaile,..." (2)

Of the other two sacrifices, the one with the figure on the point tending a fire in a tree stump resembles the classical impression of sacrifice by burning, this one also clearly on flat, beach terrain, but it is difficult to conceive what stretch of imagination led Hondius to put a

1. See p. 169, supra.

2. Ibid.

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figure on the water tending a small fire between the Golden Hind and the fort. This one detail alone gives an almost positive indication of the original source. Logically, it would have been unlikely for Hondius to conceive this unusual situation if he merely created the inset as an illustration. It is much more probable that he copied this from his source.

The inset view is probably a composite that spans more than one day rather than the actual moment of departure. Drake's tents are still standing in the camp, and the Golden Hind is not ready for sea, inasmuch as her topmasts are housed, if not sent down altogether -- there is no sign of her topsail yards or the circular tops. Her bowsprit is missing, though this may be an oversight by Hondius.

The point to be made by the above is that Hondius did not really understand what he had engraved -- if he had created the inset he would have drawn it according to how he understood it by the caption. Conversely, if it had been described to him by a member of Drake's expedition, his caption would have been in context. The likelihood is very good, therefore, that this inset, like the other three, is based on an original Drake source, and as such, it must be strictly interpreted as a faithful view of his landing place as it appeared in 1579. The inset presents the following conditions for correlation:

THE COVE

In line with the intent of the other two insets showing reasonably faithful geographical views, the scale of the ship and the fort indicates a small body of water more appropriately termed a cove than a bay. Although the ship and fort are undoubtedly enlarged, the cove would probably be not more than a few hundred yards across. Only out of context with that intent could this body of water be considered a bay of a couple of miles or more across. Inasmuch as no other cove or inlet is shown within this body of water, it must be concluded that this cove alone was found to be so perfectly sheltered from the open sea that it was suitable for careening or grounding the Golden Hind; the "convenient and fit harbor" mentioned in World Encompassed.⁽¹⁾ The requirement of suitable shelter for those operations necessarily rules out any large bay or

1. See p. 155, supra.

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even a small cove exposed to surge from the sea.

BLUFFS AT BOTTOM CENTER

Coastal charts of the latter part of the 16th century commonly show a profile of the shore drawn inside the shoreline configuration as it was seen from seaward. (1) The base of the shore profile coincided with the shoreline and thus provided a quick and ready means of identifying that section. If the inset was a small area chart, or a portion of a larger chart without modification, the forms at the bottom center might have to be considered in that light, but since there are no other indications of this practice where hills are also shown on the land, the inset must be interpreted as an oblique view, in which case a sharp drop-off, or bluffs are indicated outside the cove.

TOPOGRAPHICAL SYMBOLS

The physical features of the entire land portion of the inset are clearly defined by the use of appropriate symbols and texture. On the entire right-hand side of the inset, from bottom to top, symbols indicate a terrain of rolling hills. Since trees are indicated only in the upper part of the inset, it must be assumed that the rest of the hills are bare, covered only with grass and, possibly, brush. Beginning at the left edge of the fort, the land has a totally different quality as denoted by dots or short, horizontal dashes and horizontal line work. This is clearly a beach area of sand and the usual beach rubble. Since there is no evident sign of elevation to the fort, it must be assumed to have been located on the beach. The absence of bluffs or any indication of drop-off or elevation in the shoreline in this area supports the assumption that it is beach. Curiously, the island has no texture at all, and it must be presumed to be clean and relatively flat, as it would be shown if it was a tide washed sand bar.

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1. See reproductions of coastal charts from The Mariner's Mirrour, in D. W. Waters, The Art of Navigation, plates XLII and LXIV, and also a reproduction in color of the coastal charts, Gervis Frere-Cook, ed., The Decorative Arts of the Mariner, p. 158. Many other examples exist.

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SHIP

This is the Golden Hind. She has been brought far into the cove, bow headed inland. Her topmasts are absent and would have been taken down or housed for careening the ship.

STRUCTURE ADJACENT TO THE SHIP

Square or rectangular peaked-roof structures are shown laid out geometrically and surrounded by a wall. Indian villages on this part of the California coast were laid out in random pattern, and the structures described in World Encompassed and Famous Voyage were conical shaped. No known villages here were surrounded by walls forming a rectangular enclosure. There can be no question that the structures shown represent Drake's tents enclosed within an entrenchment with walls of stone as described in World Encompassed. The close proximity of this fortified encampment to the ship is in accord with the statement in that account which describes it as being so situated "that wee might vnder the shelter of it with more safety (what euer should befall) end our businesse."

PEOPLE AT UPPER RIGHT

These appear to be departing inland -- two are waving farewell and one with back to the ship stands in a gesture of farewell. The former are probably Indians, and the latter one of the Englishmen.

PEOPLE AT UPPER LEFT

These are probably Indians burning a sacrifice. The figures seem to be generally falling back, and we may have an illustration of the incident described in World Encompassed in which the English attempted to withhold or withdraw them to no avail until they fell to prayers and singing of Psalms. The figure on the extreme right has the appearance of a European with his elbow at his side as though his hands were together in prayer.

LONE FIGURE AT END OF POINT

This figure has the appearance of being naked, probably an Indian burning a sacrifice in a drift-wood tree stump.

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LONE FIGURE BETWEEN SHIP AND FORT

This figure does not appear to have any relationship to work on or about the Golden Hind, and again, is probably an Indian burning a sacrifice. In this case, the sacrifice appears to be burning on a log in the water, and the figure is standing in the water. For want of positive evidence that he is afloat on something, it must be assumed that the incident took place in shallow water, perhaps on a submerged rock or tide flat.

POINT WITH AN ADJACENT ISLAND

The smooth, almost symmetrical spatulate form of this point is particularly significant. Granted that it could have been a flat, rocky terrain, the shape is characteristic of certain sandspits. It would be highly unlikely for a rocky point to have this smooth form, but sand shaped by the sea and tide often takes a smooth, flowing form. The dots and short dashes in this area are indicative of sand. Conventionally, a spit is formed by a littoral current which carries beach material past an exposed headland into deeper water where it settles as a submarine embankment. When the embankment has built up enough to come under the influence of the beach building effect of waves, it becomes raised above sea-level as a gravelly or sandy promontory extending from the beach. A secondary spit, called a hook, may form at the end of the promontory if there is a current flow around it, as at the mouth of an inlet.

The Portus Novae Albionis type spit is not uncommon, but its sharply pointed form suggests a situation that is not commonly met. Ordinarily, a spit terminates in a blunt, rounded form, often hooked. The form of this one indicates that there is a double flow of water present -- one inside the spit and the other outside. (1) The direction of

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1. A local example of this feature at Drakes Bay is Limantour Spit, whose hook often shows this characteristic because of the indraft of flood tides in the mouth of Drakes Estero and the ebb tides moving out of Limantour Estero. Another example of a spit formed by an inner and outer flow is found at the mouth of the Río Saltés on the Atlantic Coast of Spain where a longshore littoral current shapes the outer side of the spit and the river flow shapes the inner side. See illustration in Samuel Eliot Morison, Admiral of the Ocean Sea, p. 81.

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the outer flow is from the top of the inset to the bottom, as also must be the direction of the inner one. To have a flow inside the spit, geologic and hydraulic features outside the scope of the inset are necessarily required to cause a flow of water to enter the cove and reverse itself in a counter-clockwise direction as an eddy, part of which must flow out again and around the end of the spit.

The unseen land formations near the cove can only be guessed at, but some faint hint of what lies beyond the frame of the inset can be seen in the upper left corner where a shoulder of land shows. This may be a promontory from which the spit originates, though from the texture, this must be assumed to be part of the beach. As part of a beach, the shoulder could well mark the corner of an outer spit, of which the one showing in the inset is only a hook. To carry the analogy a step farther, there would then be a fair indication that what is really shown is a hooked spit at the mouth of an inlet having an ebb and flood tidal flow. The island adjacent to the spit lends considerable weight to this conclusion, since its presence under that circumstance is far more favorable than one where it lies in conjunction with a single spit produced at the end of an exposed headland. Sand bars and sand islands often occur in the mouths of estuaries, lagoons and rivers, and the tidal flow in and out of such waterways readily accounts for the shaping of both sides of a spit such as this one.

By assuming that the Portus Novae Albionis is a small cove inside a sand spit at the mouth of an estuary, some of the mystery surrounding the inset is removed. The fact that Golden Hind faces the mouth of an open cove for careening or grounding would have been of little concern in this instance since she would be exposed only to an inner waterway and protected from the sea by the spit. It may not be mere chance either that Golden Hind is shown in a heading that would naturally be taken at her moorings if she were to stem the eddy current just described.

THE PORTUS

The use of "Portus" in the Nova Albion and the Java insets provides a clue that in itself tends to narrow the field of search. It is possible that Hondius Latinized the titles from the English "port", but it seems more likely that the titles had already been applied in the original source. Drake had already used a Latin name for this part of California when he took possession of it, and for reasons which will become apparent later,

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it is very likely that he used one to designate this port. In a broad sense, "Portus" could be used to denote an entrance, such as the mouth of a river or an estuary, but it also had the meaning of a harbor or haven, thus the entry port for goods coming into the country. It is evident in this case that the intent is limited to denoting the protected haven where the unloading and loading, and careening, could be accomplished with safety and convenience.

THE LATITUDE

Nearly all of the sources referred to give a latitude for Drake's landfall and his port on the Northwest Coast of America, but unfortunately, all are not in agreement on this primary geographical co-ordinate which alone would leave no doubt of the true location of these sites. For more than a decade after Drake's return to England, his landfall was placed at 48° and his port placed also in that latitude according to some accounts, or a few degrees lower in some others, but still far north of its true location. The only contradiction to this is shown in the French and Dutch Drake Maps published on the Continent. These show a ship standing in toward the shore in 44° latitude at the highest point of Drake's track on the Northwest Coast, and his landing and departure point is shown at about $38-1/2^{\circ}$. In the 1590's the latitudes of landfall and port were reduced greatly from the earlier figures by such eminent geographers, cartographers and historians as Stow, Hakluyt, Camden and Hondius.

From the number of sources giving the higher incorrect latitudes, it is evident that policy had been set very soon after Drake's return to deliberately obscure the true latitudes of Drake's landfall and port. The French Drake Map probably reflects the original English claim to territory on the American Continent as it may have been shown on the Queen's map at Whitehall, but as Wagner pointed out, the Spanish ambassador, Bernardino de Mendoza, undoubtedly objected to the claim on the basis that the Cabrillo discoveries reached 43° or even to 44° and higher. (1) Had Drake landed and taken possession when he reached this part of the coast, his claim for land beyond the Spanish discoveries might have rested on a reasonable foundation, but as it was, his act of taking pos-

1. See H. R. Wagner, Sir Francis Drake's Voyage, p. 138.

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session was performed with the Plate of Brass, far inside the Spanish claim, at his haven, Portus Novae Albionis. Drake appears to have justified his claim on a conclusion that the Spaniards had not made prior physical contact with that part of the country and had only taken possession ashore many degrees south of his landing place. (1) This was essentially correct since the Cabrillo expedition was not able to make a landing north of the Santa Barbara Channel, and it is probable that Drake had the fact from his captured Spanish pilots. Nevertheless, the Spanish most certainly regarded the whole range of Cabrillo's expedition as being legally within their claim, probably up to or beyond Cape Mendocino, which they placed in about 42° or 43°. The Queen's answer to the objection apparently raised by Mendoza, as recorded by Camden, (2) seems to deny recognition of Spanish claims made by virtue of "those descents and landing here and there of his Subjects, who built there small cottages to inhabit, and named the Promontorie," and lawfully in her eyes, such claims could not prevent the planting of colonies in regions not inhabited by the Spaniards.

The details of Drake's activity on this coast were probably never made known publicly, and to protect his tenuous claim long enough to reinforce it by other expeditions, the logical solution was to report the landfall farther north so that a return course would place the Portus Novae Albionis in a more defensible latitude. The course and distance run to the south along the coast were known to every seaman who had been with Drake at Nova Albion, and that much information could easily fall into the hands of Mendoza's agents, but few, if any, of the crew would have been sure about such things as latitudes.

The Anonymous Narrative probably reflects the official information given out. This account states that Drake came to 48° and then turned back to 44°, and is backed in some measure by John Drake's testimony in two depositions made to his Spanish captors in 1584 and 1587. Both 48° and 44° are cited, but in both depositions he indicates that the English claim to possession rested with 48° on the basis of landing there. Whether or not he reversed the situation because of his awkward position in the hands of his captors we can only guess, but in his second deposition

1. See pp. 131, 169, supra.

2. See William Camden in Wagner, Sir Francis Drake's Voyage, p. 323.

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it is interesting that he verifies the landfall in 44° by stating that there the wind changed and in that latitude they made for the Californias. That the English were not risking their claim on 44° , however, is demonstrated by the fact that their early maps show Nova Albion near 48° or 50° North latitude.

There was good reason for trying to keep Drake's claim open -- his voyage was only the beginning of a long range plan for commercial expansion in the Far East, and Nova Albion was an important element in the planning, inasmuch as it insured English control of the Northwest Passage from the Atlantic Ocean into the Pacific. Frobisher's voyages for discovery of the passage were begun before Drake sailed in 1577, and the pursuit of it was continued long afterwards. Waters, in The Art of Navigation in England, points out that John Davis's voyages for discovery of the Northwest Passage in the 1580's were encouraged wholeheartedly by the government in the person of Francis Walsingham, (1) who was one of the chief backers of Drake's voyage. After three unsuccessful attempts to locate the passage from the Atlantic side, Davis, as late as 1591, attempted to find it from the Pacific side when he sailed with Cavendish on an ill fated expedition for the South Sea and China, the intention being for Davis to part company at California and make an independent search to the north on the Northwest Coast. (2)

One would expect that Molyneux's famous terrestrial globe, engraved by Hondius in 1592, would have accurately shown Drake's discoveries on the Northwest Coast as its construction was described by Hakluyt in his preface to the 1589 edition of the Principall Navigations as a "... very large and most exact terrestrial Globe, collected and reformed according to the newest, secretest, and latest discoveries, both Spanish, Portugall, and English." As previously mentioned, the globe shows Drake's track going to a bay in 48° and then coming back to a river at about 42° . That it accords with the higher latitudes officially credited to Drake's discoveries is probably due to the fact that it was commissioned by the same man who chiefly financed Davis's voyages, William Sanderson, and Molyneux had been recommended to Sanderson by Davis. (3)

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1. See D. W. Waters, The Art of Navigation, p. 197.
 2. See J. A. Williamson, The Age of Drake, p. 341
 3. See D. W. Waters, The Art of Navigation, p. 190. See also J. A. Williamson, The Age of Drake, pp. 249-250.

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Even though Davis gave 48° as Drake's highest latitude in his very brief account published in 1595, ⁽¹⁾ it is incomprehensible that he or Sanderson were ignorant of the true facts of Drake's landfall and landing place so soon after the voyage, particularly in view of Walsingham's patronage. Davis made his first north-bound voyage for the Passage in 1585 and two more in 1586 and 1587. The probability is very good that Molyneux was instructed to show Drake's discovery erroneously, and he may not even have been aware of the true situation.

The first dated account of Drake's voyage that differs substantially from the previously published high latitudes is that of John Stow, whose very brief description was published in his 1592 reprint of Chronicles of England and states that Drake "... passed forth northward till he came to the latitude of forty seauen, ... and stayed in the latitude of thirty-eight to graue and trim his ship." ⁽²⁾ For the last part of his account, it is evident that Stow used portions of the Anonymous Narrative, and was therefore aware of the high latitude assigned to Nova Albion. Wagner pointed out that Stow's account is noteworthy for differing from any other account of Drake's movements on the Northwest Coast -- his is the only one to give a date for turning back from the Northwest; the 10th of June. His highest latitude oddly appears as 47° , still too high, but for the first time the latitude of Drake's port is given as 38° . Although there was still reason for protecting the claim to Nova Albion, there was little need, any longer, to conceal the location of the Portus Novae Albionis. The Spanish rights there never seem to have been contested beyond the objections implied by Elizabeth's comments to Mendoza. At the time of publication of Stow's account, John Davis was presumably on his way to the Northwest Coast to resolve the questions of sovereignty and the Passage for all time.

Stow could have used the Anonymous Narrative version of the discovery of Nova Albion, but he very likely learned through his fellow historians and chroniclers in London that something was amiss with the official statements promulgated by this narrative. There is no evidence that he ever consulted Drake, but he could easily have done so on occasions when Drake came to London.

1. See p. 122, supra.

2. See p. 99, supra.

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Two years after Stow's publication, Thomas Blundeville's brief account of Drake's voyage appeared in his scientific treatise on cosmography, etc., including the art of navigation, M. Blundeville His Exercises, and he describes the voyage according to the track land down on Molyneux's globe. (1) Wagner pointed out that a notable difference from Molyneux's track occurs on the Northwest Coast. Although the route in this region, as described by Blundeville, follows the track shown on the globe, the highest latitude reached was reduced to 46° and the point of return on the coast at Cape Mendocino was reduced to 40°. It was Wagner's opinion that Blundeville made a mistake in reading the globe, but aside from the fact that the globe unmistakably shows Cape Mendocino a considerable distance north of the 40° parallel line, such a mistake by a man of Blundeville's attainments is most improbable.

It is unusual for Cape Mendocino to be placed in 40° during this period as it is usually found in 42° or 43° or even much higher on maps made at this time. From Blundeville's statement, "this Cape hauing in North Latitude 40. degrees," and that Drake was willing to sail still further northward but was constrained to come back by his mariners because of the cold, as Blundeville says he had heard, makes it evident that he learned something about this phase of the voyage either directly or indirectly from Drake, who was frequently in residence in London prior to Blundeville's publication of this document. The statement about Cape Mendocino has a strong tie with one made by Robert Dudley many years later that Drake and the Spanish pilots had found the Cape to lie in 40° latitude. (2) It is of interest here also that when Rodriguez Cermeño set out in 1595 to explore the California coast south from 42° latitude, he did not hesitate to identify Cape Mendocino with the present Cape so named lying in 40° 26'. (3) The Cape has characteristics that set it apart from others farther north, and its description was probably known

1. See H. R. Wagner, Sir Francis Drake's Voyage, pp. 310-313.
2. This appears on Robert Dudley's Chart No. 13, "Carta particolare dello Stretto di Iezo fra l'America e l'Isola Iezo," in Arcano Del Mare, 1647. Described and translated by G. Davidson, The Identification of Francis Drake's Anchorage, pp. 48-51. See also p. 184, supra.
3. See translation of Cermeño's account, H. R. Wagner, "The Voyage to California of Sebastian Rodriguez Cermeño in 1595," California Historical Society Quarterly, Vol. III, 1924, See also p. 263, infra.

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to the pilots of the Manila-Acapulco galleons.

Drake obviously did not land at Cape Mendocino, and Blundeville was undoubtedly interpreting heresy and relating it to the globe as best he could. Drake probably had every intention of sailing as far north as the Cape when he left Guatulco, Mexico, as it was probably shown on his captured Spanish charts. When he reached that latitude he continued on to be well above the Cape before turning east to find the trend of coast that would supposedly take him to a passage across the top of the continent into the Atlantic Ocean. According to John Drake, he was then on a north-north-east course. It was true that he was forced to double back toward Cape Mendocino because of weather, but Blundeville evidently failed to note, or did not bother to mention that the port was found and landing made some distance below the Cape.

This brings us to the most significant account relating to this study of the latitudes; that of Richard Hakluyt's Famous Voyage, which was included as a separate insert of six leaves in his Principall Voyages of 1589 but not printed until some time after the publication of this book. Unfortunately, the publication date of the insert is unknown, but because of the previous dated accounts, it seems unlikely that it was issued before 1594, and from certain errors of text, it is also unlikely it was issued while Drake was living, or at least not until he left on his last voyage.

One of the significant features of Hakluyt's account is that for the first time the highest latitude appears as 42°, although as it turns out, this was an error in interpretation, and Hakluyt later revised it to 43°. More significant, however, is that we again find the latitude of 38° for Drake's port at Nova Albion, and this is accompanied by a description of its discovery far different from that given in any other account, particularly World Encompassed, which was published many years later using the same source material. Hakluyt would have been well aware of the higher latitudes assigned previously, if for no other reason than the fact that he also used the Anonymous Narrative for portions of his account. (1)

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1. The Anonymous Narrative was determined to be a source account for Hakluyt's Famous Voyage by H. R. Wagner, Sir Francis Drake's Voyage, pp. 238-285.

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After Famous Voyage there are no significant accounts until that of William Camden in Annales Rerum Anglicarum published in 1615 but begun about 1596 or 1597. Wagner noted that Camden had used Anonymous Narrative with a few facts from the first edition of Famous Voyage and a few from unknown sources. (1) Camden indicates that he obtained the story of Drake's early life from Drake himself, but it is not clear if he also obtained an account of the voyage from him. It would be unreasonable, however, to suppose that the subject was not mentioned. Although his account of Nova Albion bears a resemblance to Hakluyt's, there are so many differences not found in Hakluyt's or other accounts that it is evident he rounded it out from a source of his own with some details possibly coming from Drake. "Dark and thicke cloudes" mentioned in his account, for example, are an extremely apt and intimate description of the low ceiling and thick overcast of California coastal fog in the summer months, and "open Cliffes couered thicke with snow", though a peculiar description for a landfall on the Northwest Coast, will be seen to have been an honest, first hand description.

Like Hakluyt, Camden gives the latitude of 42°, but he uses it in an entirely different manner, stating that "Drake then tooke his way toward the North, at the latitude of 42. Degrees, to discover in that part if there were any straight, by which he might find a neerer way to return." Hakluyt made the mistake of saying that Drake made his landfall in that latitude, which he later corrected, but there is nothing in Camden's statement to preclude that Drake did not go beyond 42°. As pointed out in the Introduction, it was undoubtedly Drake's intention to sail directly to that latitude for the purpose stated, and this is probably the way the information was given to Camden.

For Drake's port, translated from the Latin as a "commodious Rode" (anchorage), Camden gave a latitude of 38°, and although he could have obtained this from either Stow's or Hakluyt's accounts, the fact that his contains significant differences raises some doubt that he did. Camden was surely aware of the higher latitudes published in Anonymous Narrative, if not other sources, and deemed it proper to use the lower value.

1. See H. R. Wagner, Sir Francis Drake's Voyage, p. 316.

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In 1628 Drake's nephew, Sir Francis Drake, published World Encompassed, an account that is particularly important because of the author's claim that it was compiled from the notes of Francis Fletcher and others who had been on the voyage. From this account we can discern that Hakluyt also used Fletcher's notes and perhaps some of the others, but more important, we can assess his editing. World Encompassed states that on June 3rd Drake came into 42° of latitude, but in the next paragraph it is stated that he went "2 deg. farther to the Northward in our course," a detail not perceived by Hakluyt except to say that from there the cold increased "the further we went." This two degrees of latitude brings the height in which Drake found his northernmost landfall back to 44°, the highest latitude reached, since it is said that the extremity of cold and adverse winds prevented Drake from going farther.

In World Encompassed we find the 48° latitude once more, but this as well as an even 38° for the coasting appears to have been crudely edited into the account. The 48° is made doubtful by the fact that we are told that on June 5th Drake ran into a bad bay from which he could go no farther north, and between June 3rd and that date he could not reasonably have sailed much more than the two degrees stated; yet on turning south he is suddenly placed in 48°. By 1628 there were probably few living who could prove or disprove the point by their own experience, and Drake's nephew, who was 40 years of age when the account was printed, probably was unaware of the truth.

About 1640 or 1641, a distinguished naval officer and contemporary of Drake, Sir William Monson, wrote a short account of Drake's voyage which he states was "a brief Repetition I have made by way of Journal, with some Addition of Sir Francis Drake himself." (1) It is not improbable that Monson did consult Drake -- he was about 26 years old when Drake sailed on his last and fatal voyage and as early as 1585 he was an officer in the navy. His account, which is very brief, states that at Nova Albion, Drake arrived in "48 degrees, thinking to find a Passage into our Seas." No latitude is given for the port in the south, however, and lest the student jump at Monson's statement as evidence that Drake did reach 48°, it should be borne in mind that even if Drake had given that figure, it would undoubtedly have been given in the interest of protecting

1. See p. 172, supra.

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the claim to Nova Albion. Monson was no more entitled to know the truth of the matter than say Stow, Molyneux or Blundeville.

The final statements to consider in connection with latitudes are those of Robert Dudley published mainly in his Arcano Del Mare, issued in Florence in 1646-1647 after his death. Dudley, too, was a contemporary of Drake and a young man of about 22 when Drake sailed on his last voyage. Although it cannot be positively determined that he obtained his information from Drake, as son of the Earl of Leicester, who was most certainly one of Drake's sponsors of the voyage, young Dudley was in a unique position to learn intimate details of Nova Albion when Drake was in London. (1) His account differs from the others which makes it unlikely that he extracted his facts from the published sources, and the tone of his account suggests that it was drawn from memory. In this and on his charts we find $43-1/2^{\circ}$ and 44° for Drake's highest latitude and 38° for his port.

Summarizing the evidence for the latitude of Drake's landfall on the Northwest Coast, the weight of evidence favors a latitude between 43° and 44° . The key to the problem lies in World Encompassed giving 42° plus two degrees more in sailing to the north in two day's time. This is reinforced by the evidence of the French Drake Map, John Drake's second deposition, Anonymous Narrative, Hakluyt's revised 1600 edition of Famous Voyage, and the testimony of Dudley's statements and charts in the Arcano del Mare. The trend toward favoring a lower latitude is shown also by Stow and Blundeville.

Of all the sources which give Drake's port the latitude of 38° , only World Encompassed differs markedly by giving "38 deg. 30 min." This would appear to be a serious contradiction since it is stated in the title that it was carefully collected out of the notes of Francis Fletcher and other members of the expedition and the given position was thus likely to be contemporaneous with the voyage. The account gives a latitude for nearly every place visited on the voyage, many too obscure to have been inserted from other sources by the compiler in 1628. It follows logically that at least one of the collections of notes at his disposal, perhaps Fletcher's, or some equally important account, prefaced the description of

1. See pp. 16, 173, supra.

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Nova Albion with this latitude, and since it was contemporary, it was accepted at face value.

The status of this latitude is almost conclusively resolved in favor of 38° , however, by the evident fact that Hakluyt who had access to the same source as the compiler of World Encompassed, chose to use a totally different description of the discovery of Drake's haven and rejected "38 deg. 30." in favor of "38. degrees towards the line." In this, Hakluyt is supported by Stow, Camden and Dudley -- each of whose accounts are unique and suggest intimate, first-hand sources.

The discrepancy in the latitude of Drake's port can be accounted for by the probability that "38 deg. 30 min." represents latitude advanced from observations taken at sea, that is, by dead-reckoning. Drake's sea latitudes, obtained by means of the cross-staff, are invariably 20 to 30 minutes too high, an error that was probably due to parallax between the staff and his eye, a nearly constant error in the observed altitudes of sun or star. (1) Whenever possible, the latitude of any place of navigational importance was always established by celestial observations taken on shore using the astrolabe or quadrant to eliminate the inherent errors of the cross-staff and those occasioned by ship's motion. An analysis of Drake's latitudes that were likely to have been taken from observations on shore reveals errors of only a few minutes of the true latitude. Some of these come quite close to the true latitude of the place, as for example, at Guatulco the true latitude of the port is $15^{\circ} 44-1/2'$ North, whereas World Encompassed gives "15 deg., 40 min."

The chance that the World Encompassed latitude of Portus Novae Albionis is in fact a dead-reckoning latitude is increased by the fact that in the opening paragraph concerning activities ashore there is a clear statement that no observation for latitude was obtained for at least two weeks after arrival; "neither could we at any time, in the whole fourteene dayes together, find the aire so cleare as to be able to take the height of sunne or starre." It is very probable therefore that the latitude given by the compiler's source notes was based on a latitude determined at sea which had been entered in one of the voyage journals to begin a discourse on Nova Albion. An examination of Madox' official

1. See Appendix XI, p.436.

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journal, or notes, kept on the Fenton expedition and the numerous examples of places visited as recorded in World Encompassed show a logical precedent for entering the date of arrival, the name of the place and its latitude. The fact that the difficulties of obtaining an observation is mentioned affords clear evidence that Drake attempted to obtain his latitude on shore at Nova Albion, and in the 36 days of his sojourn he undoubtedly succeeded. The latitude thus obtained would have been entered into his own journal or log which was ultimately given to the Queen but probably was not entered in Fletcher's or other journals and diaries, and was therefore not available to the compiler of World Encompassed.

Drake's observations for latitude at Nova Albion should be credited with minimum error. The sun was at optimum altitude, about 74° above the horizon; high enough to show clearly above or through cloud layers and yet not so high that it would be difficult to follow at transit. At this altitude, the combined corrections for atmospheric refraction and parallax that are normally applied to modern observations amount to only one quarter of one minute of arc. The largest error that could have occurred, aside from personal and instrumental errors, would have been caused by faulty interpolation for the daily rate of change in the sun's declination. Declination, or the angular location of the sun's path north or south of the equator, according to the seasons, is added or subtracted directly to the sun's observed altitude in computations for latitude. At the time of year under consideration, the daily rate of change is small, amounting to only ten or eleven minutes of arc, and as a consequence, a very large error in determining the time difference from Greenwich, England, for extracting the proper declination from the tables would have only a small effect on the latitude, or less than one-half of a minute of arc per hour. As for personal error, Drake's skill in the art of navigation was proclaimed by him and his contemporaries alike. His instrument, the astrolabe, was likely to have been the best available.

A further point to consider is that this latitude marked the location of the only port discovered on the Northwest Coast in well over 300 miles of coasting and was also Drake's point of departure for the navigation across the Pacific. It was of vital importance that this latitude be determined with the greatest possible accuracy.

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GEOGRAPHICAL FEATURES

The geographical descriptions in the accounts are relatively few, in some cases they are subtle, and by themselves they can only indicate the general area of the landing site. Some of them could apply to several sites, but it is essential that all be considered in evidence to narrow the search to a particular area.

ISLANDS

A significant landmark is given by World Encompassed, which states "Not farre without this harborough did lye certaine Islands (we called them the Ilands of Saint James), hauing on them plentifull and great store of Seales and birds." The statement makes several stipulations that must be met before positive identification can be made:

1. There were several islands.
2. They lay outside the harbor at no great distance.
3. They provided a rookery for large numbers of sea birds and seals.

WHITE CLIFFS

Both World Encompassed and Famous Voyage state that Drake named the land Nova Albion with respect to the "white bancks and cliffs, which lie toward the sea." From the description, these features bear no direct relationship to the landing site, but to have inspired the name, they were likely to have been relatively close by, as well as to have some likeness to the cliffs bordering the English Channel, from which the name Albion derived. The California coast has no white cliffs that show prominently from the sea, and though there are white cliffs at Drakes Bay, they are not significant to ships passing offshore. It should be noted that the description includes banks as well as cliffs, and some orientation may exist in the words "which lie toward the sea."

A BAY

Famous Voyage notes a "faire and good Baye" in which Drake came to anchor June 17. A bay is also mentioned by Blundeville and De Bry. Robert Dudley's charts show a rounded bay which he associates

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with Drake, and on his MS Chart No. 85 it is protected on the west by a north-south point bearing the label "la Punta," and on the south by an east-west point named "c di nuoua Albion." A line of soundings begins at the end of "la Punta" and runs northeast to the mouth of a river or estuary labeled "Il Port^{to}: boniss.^{mo}." Famous Voyage also gives the information that the people of the country had their houses close by the shore of the bay, and on the shore of Dudley's bay there is a symbol of a circular stockade which on other maps he has used to represent Indian settlements.

A HARBOR

World Encompassed states that Drake "fell with a conuenient and fit harborow," the existence of which is affirmed in Anonymous Narrative by "a harborow for his ship where he grounded his ship to trim her." World Encompassed makes it clear also that the ship was repaired in the harbor, and this required a well protected haven suitable for the relatively hazardous operation of careening or grounding.

HILLS

Hills are referred to several times in World Encompassed and Famous Voyage, and the Portus Novae Albionis inset confirms their presence by symbols denoting rounded hills. Drake's fort was situated close to the foot of a hill, and Indians are always referred to as coming down to the fort, probably because some geographical feature necessitated their approach from high ground, or by a route over the hills. World Encompassed states that the Indian men could easily carry a heavy load on their backs "vp hill and downe hill an English mile together," and also that at departure the Indians "presently ranne to the top of the hills to keep vs in their sight as long as they could."

ASPECT OF THE SHORE

The general aspect of the land at the encampment is described in World Encompassed as inhospitable, the more so because the weather continued to be cold, cloudy and foggy. It is stated "how vnhandsome and deformed appeared the face of the earth itselfe! shewing trees without leaues, and the ground without greenes in those moneths of June and July." Ground without greenness suggests grassy or brushy country,

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typically brown and dry in California's rainless summers. Trees without leaves may be a feature peculiar to the area or may be due to a seasonal or periodic condition. Open, windswept country is implied in the description of Indians "sheltering themselves vnder a lee banke, if it were possible."

THE INLAND

The inland country is described in World Encompassed as being found "farre different from the shoare, a goodly country, and fruitful soyle, stored with many blessings fit for the use of man" Riches and treasures are also spoken of as "wherewith in the vpland countries it abounds." It is important to note that this comparison was not made until the work at the encampment had been nearly completed, and thus near the end of Drake's stay, when he made a journey inland. The goodly aspect was apparently not discernable from the camp on the shore. It may be significant also that the account states that the journey was "made vp into the land," thus implying intervening high country. The journey should be assumed to have taken no more than one day, therefore little more than ten miles one way; possibly less.

ETHNOLOGICAL EVIDENCE

The basic accounts, principally World Encompassed, describe many of the customs and usages of the California Coast Indians who met Drake and include fragments of their language. It was the opinion of Professor Robert F. Heizer, Francis Drake and the California Indians, 1579, ⁽¹⁾ that if these descriptions and language could be clearly related to one of the coastal Indian tribes, there would then be definite and unequivocal reason to believe that Drake landed in a part of the coast inhabited by the tribe. From an anthropological viewpoint, Heizer admirably reviews this approach to solving the problem, and his article should be consulted for particulars.

The area of search for Drake's Portus Novae Albionis was thus

1. See R. F. Heizer, Francis Drake and the California Indians, pp. 251-302.

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positively narrowed to the vicinity of 38°, initially by the greatest authority on California Indians, Professor Alfred L. Kroeber, (1) and finally by Heizer and Professor William W. Elmendorf, (2) who identified the Indians described in the accounts as the Coast Miwok, who inhabited a stretch of coast from the north side of San Francisco Bay to a few miles above Bodega Bay. Dr. Kroeber analysed the voyage accounts with particular reference to descriptions of the Indians in World Encompassed, especially with reference to the words of their language, as for example: Hióh, Petáh, Tobáh, and Gnaáh. Although Tobáh was assumed to be a word applied by the English to an herb they assumed to be tobacco, and Patah could not be positively identified, Hióh, meaning king, or chief, and Gnaáh, meaning sing, were defined as most probably Coast Miwok. He concluded:

The ethnologist thus can only conclude that Drake summered on some piece of the coast not many miles north of San Francisco, and probably in the lagoon to which his name now attaches. He is assured that the recent culture in this stretch existed in substantially the same form more than 300 years ago, and he has tolerable reason to believe that the Indians with whom the great explorer mingled were direct ancestors of the Coast Miwok.

Since Dr. Kroeber's analysis was published in 1925, additional evidence came to light in a diary kept by Richard Madox and found by Miss E. G. R. Taylor in 1923. Madox, who was Chaplain with Edward Fenton's expedition sent out from England to implement Drake's trade agreements in the Moluccas, recorded some details of Nova Albion and a few fragments of Indian speech and song, which he either overheard or were given to him by some of Drake's former crew who were with Fenton.

Heizer points out that the culture of the Pomo Indians, who inhabited an area north of Bodega Bay, and the Coast Miwok Indians was so

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1. See A. L. Kroeber, Handbook of the Indians of California, Bureau of American Ethnology, Bulletin 78.
 2. See R. F. Heizer and Wm. W. Elmendorf, "Francis Drake's California Anchorage in the Light of the Indian Language Spoken There," Pacific Historical Review, XI (1942), pp. 213-217.

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similar that if it were not for the linguistic clues, no solution to the question of Drake's landing could be found on the basis of the people he had contact with. For this reason, the words recorded by Madox are particularly important.

Heizer and Elmendorf found that Madox' linguistic items, Cheepe for "bread," Hutchee kecharo for "sit down," Nocharo mu for "touch me not," and Hioghe for "a king," are conclusively Coast Miwok. Cheepe was equivalent to modern Coast Miwok tcipa, or "acorn bread." Hutchee kecharo, they concluded to be an incorrect translation, the nearest modern Coast Miwok equivalent being atci kotcato, "step into the house," and hoki kotcado, "go into the house," the tc being phenotically equivalent to the English ch, as in chin. The difference of meaning is explained by the fact that according to old custom, people who came to a Coast Miwok house were asked to walk in and were offered a seat in the rear, where food was placed before them, and in this situation, the English may have interpreted the phrase as "sit downe," particularly if they had occasion to visit an Indian village often and frequently heard the invitation. The phrase Nocharo mu is likewise pointed out as a situation phrase rather than a concrete object and therefore also liable to misinterpretation. In modern Coast Miwok, the nearest equivalent was found to be notcato mu, which literally means "stay over there," or "stay away."

Madox' Hioghe is similar to Hióh or Hyóh in World Encompassed, with the exception of the ghe ending, but whether or not there should be a terminal sound e was uncertain. There is apparently no satisfactory modern Coast Miwok equivalent, the only certainty being that the word does not seem to be of Pomo derivation. Also, no equivalent was found for the song recorded by Madox, Hodeli oh heigh oh heigh ho hodali oh, though similar, repetitive examples of a Coast Miwok and Pomo songs were found.

From the fragments of Indian speech recorded in Madox' diary, Heizer and Elmendorf were thus able to support Kroeber's opinion. In the words of Heizer; "The ethnographic evidence indicates strongly, indeed, almost conclusively, that Drake landed in territory occupied by Coast Miwok Indians." It was his conclusion that with this evidence and the descriptions of the white cliffs in World Encompassed and Famous Voyage, Drake probably landed at what is now known as Drakes Bay. (1)

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FLORA AND FAUNA

There are a number of references in the accounts, particularly in World Encompassed, to the animal and plant life encountered at, or near, the landing site. These should presumably add further clues to the specific site visited by Drake, and, yet, each in itself proves little because counterparts can be found over most of Northern California. This does not alter the fact, however, that the descriptions must be applicable to any site identified with Drake's landing and must be applied in their entirety.

Under "Geographical Features," ground without greenness and trees without leaves were mentioned with their possible significance to the appearance of the surrounding terrain. World Encompassed and Famous Voyage mention rushes for floor covering in the Indian houses and bul-rushes for Indian women's skirts, both of which plants presumably grew in the vicinity.

World Encompassed mentions pricking bushes and stocks of wood on which Indian women threw themselves in sacrificial torment on a hill in view of the English camp. What was the nature and identity of the particular plant life involved in this incident?

According to World Encompassed, up in the country a "certain downe" grew upon an herb much like the English lettuce, which was laid on the caps of the Indian chief, or king, and his guards, and it is said that it "exceeds any other downe in the World for finenesse."

There was a root called Petáh that was used by the Indians to make a kind of meal and baked into bread, or was eaten raw. They also made a gift of an herb that they called Tabáh, brought in a small basket and another time in a bag. (1)

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1. (from p. 233) See R. F. Heizer, Francis Drake and the California Indians, pp. 278-279.
 1. Another gift with similar name was Tobâh, the substance of which is not identified. Famous Voyage changed the word to "TABACCO". World Encompassed mentions Tabáh twice, and each time identifies it as an herb. Tobâh is also mentioned twice but is only referred to as being in bags.

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Of the animal life, the most impressive were surely the herds of "very large and fat Deere which there we sawe by thousands, as we supposed, in a heard." In contrast to these were a "multitude of a strange kinde of Conies," which seemed to far exceed the number of deer. Dudley wrote that "with the greatest wonder they saw many native horses, which the Spaniards had never seen before in America." (1)

"Muscles, Seales and such like" were evidently found in such quantity that, in addition to sustaining Drake's camp, there was enough to spare to feed the Indians, who were frequent visitors. Mussels and seals for victuals, mentioned in World Encompassed, are confirmed by John Drake's second deposition. Fish are mentioned in World Encompassed, one of which, "like a pilchard," the Indians brought to the camp broiled as a special gift, but they are otherwise not described.

"Birds and foules" are described in World Encompassed as "not daring so much as once to arise from their nests after the first egge layed, till it with all the rest, be hatched and brought to some strength of nature, able to helpe itselfe."

Much of the foregoing description of Nova Albion is slim and more often than not indistinct, but with discovery of the exact site of Drake's landing, their counterparts should become identifiable if they still exist.

1. See p. 181, supra.

CHAPTER IV

THE VOYAGE NORTH

When day broke at Guatulco on the morning of Good Friday, April 17th, The Golden Hind and her small consort were under sail on the open sea. Within the harbor, Nuño da Silva, the Portuguese pilot whom Drake had left in an empty ship in the harbor, was shouting out repeatedly to those on shore to take him off the ship. ⁽¹⁾ In his own account of the incident, made sometime afterward, he stated that Drake was holding a course to the west, ⁽²⁾ a statement confirmed by World Encompassed, which states that he set his course directly into the sea.

It was logical for Drake to get well out to sea, as his own experience thus far on the coast, as well as that of his Spanish prisoners, would long since have convinced him that inshore he would encounter frequent calms and light airs. Aside from any natural desire to quickly conclude the voyage, another factor which made it urgent to reach the Northwest Coast as soon as possible, was the knowledge that if a strait was found leading to Frobisher's supposed entrance to the Northwest Passage near the Arctic Circle, it was imperative to pass through it during the summer months.

Unfortunately, none of the accounts clearly defines the route taken to the Northwest, and all known contemporary maps which trace it, show it as closely paralleling the coast, which seems out of agreement with the few details given in the accounts. However, by inspecting these details in the light of present day knowledge of the hydrography and meteorology of the North Pacific and the practices of the sixteenth century navigator, the course made good can be determined with a fair degree of certainty.

There is little doubt that Drake's navigation to the Californias was based on a knowledge of the Manila-Acapulco trade route, so a brief examination of the latter is necessary for understanding his approach to the problem. By the time of Drake's appearance on the west coast of America, 15 years had elapsed since the Manila trade was opened and Sarmiento makes it clear that the winds and weather prevailing on the coast were then thoroughly known by practice and experience to those who

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1. See deposition of Juan Pascual, Nuttall, New Light on Drake, p. 377.
 2. See Nuño da Silva's second relation, Nuttall, New Light on Drake, p. 269