



**JOURNAL  
OF THE  
VIRGIN ISLANDS  
ARCHAEOLOGICAL  
SOCIETY**

***NUMBER 3***

***1976***

## THE VIRGIN ISLANDS ARCHAEOLOGICAL SOCIETY

Founded and incorporated, January 1974, at St. Thomas, U.S. Virgin Islands as a non-profit, scientific organization.

The object for which this corporate society is formed is to bring together those persons having a serious interest in archaeology, history and related studies; to explore, excavate (under the aegis and direction of the Territorial Archaeologist of the government of the U.S. Virgin Islands), chart and study the cultures of primitive peoples who once inhabited our Islands; to publish the Society's findings; to communicate with other archaeological and historical societies and disseminate knowledge acquired through such activities.

Membership in the Society is open to all persons having an abiding interest in the objectives of the Society and who adhere to the Society's Code of Ethics.

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All Members are entitled to cast a vote and to receive one copy of the Journal as issued.

Applications for Membership to the Society, and Subscription to the Journal, and all general correspondence: Katherine B. Kay, Executive Secretary, P.O. Box 4986, St. Thomas, U.S. Virgin Islands 00801.

Manuscripts, (drawings, charts, maps, photographs) submitted to the Society's Journal shall be in the English language, typewritten and doubled spaced; and shall become the property of the Society unless return is requested and accompanied by a self-addressed, stamped envelope. All correspondence deemed suitable for publication should be sent via air, certified mail: Kenneth C. Dick, Editor, High Road, Star Route, Vessup Bay Estates, St. Thomas, U.S. Virgin Islands, 00801. The Society cannot guarantee publication of unsolicited articles and reserves the right to reject and/or edit all articles, in the best interests of the Society.

Copies of the Society's Journal or Journals will be sent, free of charge, to all members not in arrears. (One copy per Membership).

SOCIETY MEETING DATES: the 3rd Thursday of each month, 8 p.m. at the Society's headquarters, Havensight Road, St. Thomas.

**VIRGIN ISLANDS ARCHAEOLOGICAL SOCIETY**



**Number Three  
1976**

**Journal**

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# **VIRGIN ISLANDS ARCHAEOLOGICAL SOCIETY**

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**Mrs. Hortense M. Rowe**

The Society voted its first Honorary Membership to Mrs. Hortense M. Rowe, former V.I. Commissioner of Conservation & Cultural Affairs.

Mrs. Rowe was not only a first-rate Commissioner, able to foresee needs and trends, and to aid the Society on a firm basis; but her courtesy and dedication beyond the accepted requirements of her post greatly helped the atmosphere of friendly cooperation. She faced the situation energetically, standing up against all opposition to the advancement of Virgin Islands archaeology at a time when it was not popular to do so.

We owe her our gratitude and are pleased to dedicate this issue of our Journal to Mrs. Rowe who never failed to appreciate the value of our endeavors.

The Society awarded its second Honorary Membership to Mrs. Warren H. Corning.

Editor's Note: The Society bestows Honorary Membership only upon those who have already rendered unusual and dedicated service to the advancement of Virgin Islands archaeology.

\* \* \*

Photo credits:

|                  |                     |
|------------------|---------------------|
| N. Willock ..... | pg. 16              |
| K. Kay .....     | Pgs. 14, 24, 25, 26 |
| J.L. Angel ..... | Pgs. 12, 13         |



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#### **EDITOR'S NOTE**

The Society welcomes correspondence from archaeologists, museums and institutions who wish to offer comments and suggestions concerning articles which appear in our Journals.

## BIOGRAPHICAL NOTES

Hortense Cecilia Milligan Rowe was born in Frederiksted, St. Croix, V.I. She received her BA at the Inter-American University of Puerto Rico, San German, Puerto Rico, majoring in Business Administration and Accounting. Aside from operating various enterprises on St. Croix and acting as consultant to numerous firms, she finds time for civic involvement, serving either as a member, officer or Director of business and professional women's clubs, as well as on Virgin Islands Government Boards and Commissions. Mrs. Rowe has been listed in *Who's Who in the West Indies, Central America, Bahamas and Bermuda*; in *Personalities of the South, U.S.A.*; and *Who's Who in American Politics*.

Norman A. Willock was born in Syosset, N.Y. He attended the School of Art & Design at Carnegie Institute of Technology. He serves as Vice Chairman of the Executive Committee and is on the Board of Trustees of our Society.

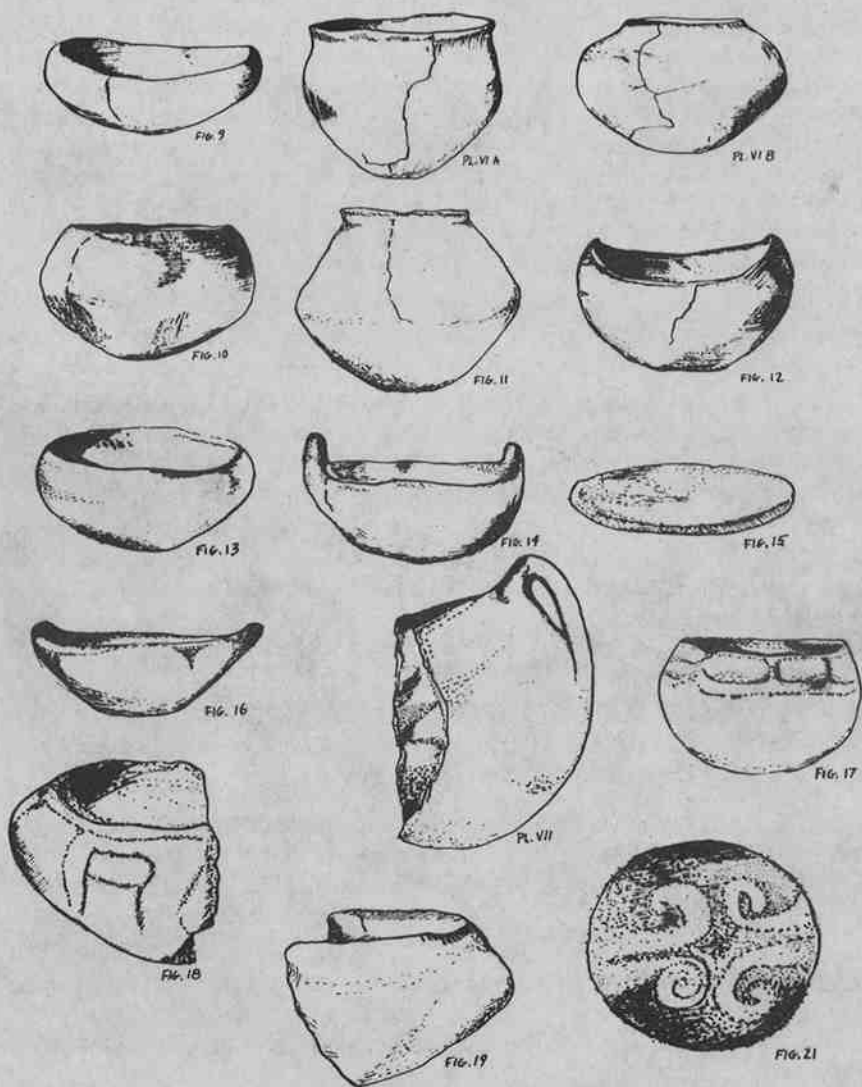
Katheryne Kay, Assistant Territorial Archaeologist of the Virgin Islands, was born in Portland, Oregon. She took her BS degree at Arizona State University. She has been trained in archaeology, anthropology, and museum techniques. Her field experience in archaeology ranges from the southwest U.S. to the far reaches of the Caribbean.

Dr. Douglas H. Ubelaker was born in Horton, Kansas. He received his BA with honors in anthropology and his Phd. at the University of Kansas. He has excavated extensively in Ecuador and the eastern United States. Presently he is Associate Curator of Physical Anthropology, National Museum of Natural History, Smithsonian Institution.

Dr. J. Lawrence Angel, co-author of the article *ANALYSIS OF THE HULL BAY SKELETONS, ST. THOMAS*, is Curator of Physical Anthropology, National Museum of Natural History, Smithsonian Institution.

Desmond V. Nicholson is President of the Antigua Archaeological Society. He has been active in archaeology in Antigua since the middle sixties when he excavated with Dr. Irving Rouse of Yale and with Dr. Fred Olsen (author of *ON THE TRAIL OF THE ARAWAKS*).

Thomas A. Hannon, born in Scranton, Pa., received his BS from St. Bonaventure, Olean, N.Y. and his MS from Siena College, Albany, N.Y. He has been an antique bottle collector for the past five years. Along with his co-author wife, Andrea, he is writing a definitive textbook on antique bottles discovered in the West Indies.



# MAGENS BAY CERAMICS

Drawings by Norman A. Willock from photographs in Theodoor DeBooy's "Archaeology of the Virgin Islands". *Indian Notes and Monographs of the Heye Museum*, Vol. 1, No. 1, pp. 1-100. New York. 1919.

# **BOTTLES FOUND IN ST. THOMAS, VIRGIN ISLANDS WATERS**

by  
Tom and Andrea Hannon

## **INTRODUCTION**

St. Thomas was the crossroads of the trade centers when the main source of transport of cargo was shipping. The stories of great hurricanes, uncharted reefs and pirateering are the consensus held by many historians and archaeologists why many shipwrecks are found in the waters off the British and U.S. Virgin Islands. Ships carrying different cargoes often fell prey to one of the nautical hazards and were condemned to the ocean floor in water depths of between 70 and 200 feet. Lacking any means of retrieving the cargo, or their ship, the shippers acquiesced to the inevitable, unaware that almost 200 years later, technology would reveal a way for us to explore these depths. Today, marine biologists, archaeologists and sport divers are able to take advantage of this technology, and discover the past that was once lost to the sea.

Imagine, diving the clear turquoise waters of the Caribbean, 75-85° F. with a visibility of between 100 to 200 feet! Sea fans, anemones, the widest variety of tropical fish, an abundance of coral and other animal life, are all a part of the Caribbean dive. Beyond this, there is always the possibility of discovering something of the sunken past.

During our many pleasure dives, we were fortunate enough to have come upon some of these uncharted wrecks. We spotted broken glass and pieces of pottery, and these were the first indications that there was more treasure to be uncovered. During our repeated dives in these areas, we discovered bottles, ceramics and pottery, silver utensils, copper and brass artifacts and the most exciting find of all — a coral-encrusted brass flintlock pistol.

Our interest was so piqued by the objects we found on the ocean floor that we were determined to find as much information on them as we could. The Virgin Islands, unlike the mainland, have recorded very little of its past. We were unable to obtain information from any local sources. An exception was Oliver Christian, a laboratory technician in the Caribbean Research Institute, who has been identifying and cataloging artifacts from charted wrecks. His resources for identification were limited, but his efforts were very helpful in assisting us to clean and restore our growing collection.

At this point, we contacted publishers in the States and England seeking more information. As books and pamphlets were arriving, we continued to classify, as best we could, the different kinds of bottles we were finding. Through a friend, we learned that the V.I. Archaeological Society was showing interest in bottles found in excavations sites. We contacted the Society and found them to be enthusiastic over our finds. They asked us for permission to photograph our collection and were desirous of our continuing to categorize and identify the collection so as to benefit the Society and St. Thomas.

We returned to the Mainland with our collection for five months and were within reach of research material, bottle clubs and one of the most formidable

sources of glass making and bottle identification, The Corning Glass Museum. The process of identifying our collection was being realized. The major part of our collection is bottles — both glass and ceramic — free blown, mold blown, two and three piece molds, dip molds, turn molds. Bottles for wine, beer, soda, gin, mineral water, perfume, condiments, inks, dyes and pharmaceuticals.

It is at this time we feel knowledgeable enough to begin writing down the results of our research for the Virgin Islands and the V.I. Archaeological Society. It is further our intention to arouse enough curiosity from the research articles to obtain financial assistance either from the Department of Conservation and Cultural Affairs, St. Thomas, Virgin Islands or a grant from the Federal Government.

## Chapter 1

### SODA & MINERAL WATER BOTTLES

In 1772, a scientist, Joseph Priestly, introduced a way to artificially carbonate soda water, at which time it became imperative that someone find a way to bottle the soda water and contain the carbonation. A Swiss, Jacob Schwepes of Bristol, England, in 1794, was one of the earliest manufacturers of mineral water and sold it in earthenware bottles. He subsequently noted that the gas permeated through the sides of the container, resulting in the mineral water losing its carbonation. In the late 1790's, Schwepes began using glass containers. He is the first person known to use the egg-shaped or torpedo bottle. The bottle was designed to lie on its side rather than stand upright. (Plate 1.) Thus, the cork would remain moist. If the cork was allowed to dry out, the carbonation would expel it from the bottle.

The patent for the egg-shaped or torpedo bottle was registered as the Hamilton bottle by William Hamilton, inventor, in 1809. Schwepes never patented the idea. Speculation exists as to the original idea coming from Hamilton or Schwepes.

The Hamilton bottle was not prominent until the 1840's when virtually every manufacturer was using it. Prior to this, the sale of mineral waters was conducted only on a small scale, with each chemist bottling his own soda water in the basement of his shop, and selling it as a medicine to his own shop's private customers. There was no national distribution until much later in the century. Jacob Schwepes had a chemist's shop in Oxford Street, London, in the 1790's and early 1800's and sold his soda water there. He was the founder of Schwepes, Ltd., Britain's largest modern soda water manufacturers.

These early soda water bottles contained many imperfections such as distorted necks, air bubbles and curves in the body of the glass.

### EMBOSSING

The first mold-embossed Hamiltons were used from the 1830's - 1837. These bottles did not contain a blob top. Their necks were very thin and were sheared off at the top with a ring lip on them.

In 1850, the glass of the bottle was much thicker to withstand the pressure of the carbonated contents and an applied blob-top was added.

A blob-top was a large blob of thick glass laid around the lip of the bottle. A wire ran over or through the cork just below the bottom of the lip to hold the cork in place.

Embossed Hamiltons were manufactured by being blown into a full height hinged mold (early wood molds, later metal molds). Wood molds marks are characterized by raised overlapping seams. Embossing was done by means of a slug plate which was removable. This allowed different slug plates to be used in the same mold. The slug plate was designed to meet the manufacturer's needs for advertisement. The earlier ones had little embossment, but as the advantages became obvious, more and more area was used for embossed advertising. Trade marks were first used in 1884.

The term "double soda water" refers to the fact that at first, in order to compete, some manufacturers doubled the amount of carbon dioxide gas they put in the artificial spring water, to give it more effervescence, and this fact was advertised by calling it "double."

The cylinder (Plate 2) was in direct competition to the Hamilton. It was a round bottomed bottle which also could not be stood upright. They were popular in the 1880's. Except for a very early cucumber-type bottle, such as Maugham's Patent, these bottles were very thin and long, unlike the cylinder which we have in our collection.

In 1870, the flat egg (Plate 3), which stood upright or on its side, replaced the Hamilton bottle. In 1870 - 1875, the Hutchinson stopper replaced the blob top. In 1903, the Hutchinson stopper was replaced with a crown top (Plates 4 and 6).

According to Ron Dale, Secretary of the National Bottle Club of England, it is very difficult if not impossible to determine the bottle manufacturer and manufactured date of bottles which do not supply the name of the company or some mark. The small glass houses of England either faded out of existence, giving way to the bigger companies, or sold out to them. Unfortunately, most of the records of these small glass manufacturers were lost or burned. Mr. Dale is in the process of publishing a book "A Dictionary of Collectible British Bottles: 1700-1920," which will be coming out in the fall of 1976. It promises to be the most comprehensive book on bottles ever published in Britain.

The following is a list of Hamilton "Torpedo" bottles which we have in our collection. Most of the bottles fit the following characteristics:

|           |                                                                   |
|-----------|-------------------------------------------------------------------|
| Height:   | 9 - 9½ inches                                                     |
| Color:    | Aqua                                                              |
| Contents: | Soda or Mineral Water                                             |
| Origin:   | English                                                           |
| Date:     | 1850 - 1880                                                       |
| Made:     | Blown into a full height hinged mold<br>with an applied blob top. |

### Plate 1

#### Embossments:

1) Webb's Double Soda  
and other waters  
to Her Majesty  
Islington  
London

2) From J. Schweppes & Co.  
Genuine Superior  
Aerated Waters  
Roughsedge & Summers  
Bristol

- 3) Marylebone Rawlings  
Soda Water  
Nassau Street
- 4) Aerated Waters  
Belfast & Dublin  
Cantrell & Cos
- 5) The Prince of Wales  
(drawing of crown)  
Fleet's & Mineral Waters  
H. R. H.  
Lemonade  
Double Soda  
Walworth
- 6) J. Schweppe & Co.  
51 Berners Street  
Oxford Street  
Genuine Superior  
Aerated Waters
- 7) Genuine Soda Waters  
Prepared by  
W. Culverhouse & Co.  
White Chapel  
Established in 1808  
London, E
- 8) Double  
Carbonated  
Soda Water  
London
- 9) Browne, Taylor  
& Hill  
Belfast
- 10) J & C Webb  
Manufacturers  
Double Soda Water  
to Her Majesty  
Islington  
London
- 11) Soda Water
- 12) Webb's Mineral Waters  
Islington  
London
- 13) Genuine  
Aerated Waters  
Mayo Watson & Co.  
No. 2  
Berners Street  
Oxford Street
- 14) Fleets Double  
Soda Water  
East St.  
Walworth
- 15) Aerated  
Superior  
Water  
Mineral
- 16) Genuine  
Soda Water  
Manufactured by  
D.P. Cotton Co.  
Ice Establishment  
Barbados
- 17) J. Webb  
Manufacturer of  
Double Soda Water  
to Her Majesty  
Islington  
London
- 18) Portsmouth  
Mumby & Co.  
and Gosport  
Front: Trade Mark  
(anchor)  
C M & C  
P & C  
Her Majesty  
the Queen

The following is a list of the "cylinders" we have in our collection. Most of the bottles fit the following characteristics:

Height: 9 - 9½ inches  
 Color: Light Amber; Dark Amber; or Aqua  
 Contents: Soda or Mineral Water  
 Origin: English or Irish  
 Date: 1860 - 1910  
 Made: Blown into a full height hinged mold  
 with an applied blob top.

## Plate 2

### Embossments:

- |                                                                                                           |                                                                                                    |
|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 19) Belfast<br>Medicated<br>Aerated<br>Waters<br>Cantrell & Co                                            | 27) Troncoso<br>Hermanos<br>Vico                                                                   |
| 20) WEBB'S<br>LONDON (light amber)                                                                        | 28) Design of Wheel<br>E. R.<br>& Co<br>Wheeler & Co Cromac Springs<br>Belfast                     |
| 21) WEBB'S<br>LONDON (dark amber)                                                                         |                                                                                                    |
| 22) See that each cork is branded<br>Cantrell & Cochrane<br>(on rounded bottom)<br>Dublin<br>&<br>Belfast | 29) Bottom: 0901                                                                                   |
|                                                                                                           | 30) Bottom: 122                                                                                    |
|                                                                                                           | 31) Bottom: 1473                                                                                   |
| 23) ROSS'S<br>BELFAST<br>(on rounded bottom)<br>R & S<br>1246<br>B                                        | 32) Wheel Design<br>E. R.<br>& Co<br>(shoulder)<br>Belfast 1895 ∞ Gold Medals ∞<br>(FLAT BOTTOM) W |
| 24) ROSS'S BEL<br>BELFAST                                                                                 | 33) The Belfast<br>York Road<br>Mineral Water Co Ltd<br>Barron & Co Makers<br>Newton-le-Willows    |
| 25) (Post Bottom)<br>C.B. & Co Ld<br>6898                                                                 |                                                                                                    |
| 26) (Post Bottom)<br>18                                                                                   |                                                                                                    |

Soda Water Manufacturers — with reference to the embossments found on the bottles in our collection of Hamiltons and Cylinders.

#### **JOHN WEBB, SODA WATER MANUFACTURER, ISLINGTON, LONDON, N.**

This company was founded by John Webb in 1818 and he obtained a Royal Warrant from King William IV (1830-37). Earliest bottles seen are embossed with "J. Webb, Manufacturer/Double Soda Water/To His Majesty/Islington Near London." The reference to Islington being near London is amusing. Even in Victorian times, it was swallowed up in the sprawling city and is now not even on the edges of London. This very early embossed bottle does not have a blob top, as special machinery or tools were not then in use for Hamiltons. It is a thin applied ring, similar to the string-rim on early wine bottles. Blob tops only came into use when national distribution commenced from a few companies around 1850. The bottle manufacturer of John Webb's bottles is not known at this time, but could be uncovered in the research for Mr. Dale's book.

#### **J. SCHWEPPE & CO. (NOW CADBURY SCHWEPPE'S LTD.)**

This firm commenced business in the name of J. Schwebpe & Co. in 1798 after working in Schwebpe's chemist shop on his own for a few years. In 1897, the company became known as Schwebpe's Ltd. They first used mold-embossed Hamiltons around the 1830's, but were using plain Hamiltons in the 1790's. Schwebpe's moved to 51 Berners Street in 1832 and remained there throughout the 19th Century.

#### **ROUGHSEGE & SUMMERS OF BRISTOL**

Bristol was the place where the first mold-embossed bottles were made by the company of Ricketts, probably the earliest of the Schwebpe's bottles. Schwebpe's Hamilton bottles were used for aerated (soda) and for aerated lemonade later in the century when flavoring was added to the soda water.

#### **H. D. RAWLINGS LTD., NASSAU STREET, MARYLEBONE, LONDON**

This company started in 1784 in Colchester, Essex, but moved to Nassau Street, London in the early 1800's. They became part of R. White Ltd. later in the century, but they still used their own name on the bottles. During the last twenty years of the century, Rawlings used an embossed eagle on their bottles as a trademark.

#### **FLEET'S, WALWORTH, LONDON**

No date for the company, but we should have it when Mr. Dale finishes his research. Their trademark was the emblem or crest of the Prince of Wales, later to become King Edward VII. The P. o. W. feathers are seen on Fleets bottles after 1884 when trademarks were first used.

#### **W. CULVERHOUSE & Co., WHITECHAPEL, LONDON E.**

The company was established in 1808.

#### **MAYO WATSON & CO.**

Came from the same street as J. Schwebpe & Co., Berners Street, and Oxford Street.

#### **MUMBY & CO., PORTSMOUTH AND GOSPORT**

Trademark on bottle means it had to be after 1884. No information on company.

## BARNETT & FOSTER

(See Codd Bottle) This firm made many of the round-bottom or cylinders as they were called in the trade.

## CANTRELL & COCHRANE

The rounded base bottles of Cantrell & Cochrane were used from 1869, the year of their amalgamation, until the beginning of the 20th Century. (The Ulster Aerated Water Industry included three well-known firms: Grattan & Co. - 1825; Corry & Co. - 1849; and Cantrell & Cochrane - 1869). The bottles contained either seltzer water or dry ginger ale. Dr. Cantrell is credited with the origin of the latter. To insure that the cork stopper which was wired to the bottle remained moist, the bottle was made with a rounded base so it could not be stood up. This firm, originally Cantrell & Co., was established in 1852.

**Notation:** Numbers on late Victorian or Edwardian bottles, if long, referred to the trademark. The smaller numbers were either the code number of the bottlers, the month or year it was manufactured or even if the bottle had a deposit or not. The number 10755 on bottles is probably the registration number of the trademark. This was first registered in 1884. It merely tells when the patent for the trademark or design of bottles was first registered.

The following is a list of "Flat Hamiltons" which we have in our collection. These bottles have the following characteristics:

|           |                                   |
|-----------|-----------------------------------|
| Height:   | 6¾ to 8½ inches                   |
| Color:    | Aqua                              |
| Contents: | Soda & Mineral Water              |
| Origin:   | English                           |
| Date:     | 1870 - 1900, Machine made: 1900's |
| Made:     | 34) Blown in Mold                 |
|           | 35) Machine Made                  |
|           | 36) Blown in Mold                 |
|           | 37) Machine Made                  |

34) IDRIS  
LONDON  
Bottom: Shield with L in middle  
Plate 3

35) By Appointment  
The King  
and  
Prince of Wales  
Schweppes  
Bottom: J L & Co C  
4  
308  
Plate 4

36) Bottom: B  
10755  
Plate 5

37) Bottom: K B Ld T  
•  
972  
Plate 6

## CODD STOPPER ON MARBLE BOTTLE

The Codd was often referred to as a "pig bottle" as held on its side it resembles a pig's snout. In 1875, Hiram Codd of Kembewell, London introduced a flat-based bottle for soda water that would stand upright because of an ingenious marble stopper. It had a separate chamber in the neck of the bottle which housed a marble. The carbonation would push the marble up against a washer and lodge it there until by use of a wooden dowel or plunger, the marble was pushed down and released the carbonated pressure. These bottles were filled upside down and when turned upright, the carbonated pressure would lock the marble in position. The marbles were generally aqua in color, but we have found blue, black, white, green, brown and clear. Mr. Codd designed fifty different variations of the bottle. He even tried to use an oval marble to discourage children from breaking the bottle for the marble. We have several different types of Codd's in our collection ranging from 1 pinch (dimple) to 2, 3 and 4 pinch (dimples). A pinch is an indentation in the glass made by the blow to lock the marble in the neck region. The Codd's are full height molds with an applied top, unlike the blob top because of the obvious reason that the marble was the sealer and no wire was needed to hold an external stopper. (Plate 7) Many Codd's have the name of the maker embossed on the bottle, and most of these are in the North of England in Yorkshire or Lancashire where the bottle works were situated for the cheapness of labor. The first few early Codd's had no dimples or pinches, being ordinary mineral water bottles with two bulbs sticking out of the neck to hold the marble (very rare).

There is a Hamilton Codd hybrid, which is an egg-shaped marble bottle. We have not found one to date.

The following is a list of "Codd Stopper" or "Marble Bottles" we have in our collection. Of interest to the Virgin Islands is most of them are from bottlers in St. Thomas, St. Croix and Tortola. Most bottles fit the following characteristics:

Height: 6 - 9½ inches  
Color: Aqua  
Marble: Various: Aqua, Green, Brown, etc.  
Origin: English  
Date: 1880's  
How Made: Blown into a mold with an applied top.  
Bottle Manufacturer: *Barnett & Foster*

Niagara Bottles of Barnett & Foster, Niagara Works, London. The registration number quoted for their bottles was 65433, registered in the early months of the year 1887.

*Dan Rylands of Barnsley in Yorkshire.* Made Codd's for many different companies 1890-1895

*H. B. Sleeman, London: no information*

*Nuttall & Co Makers St. Helens England:* made bottles from 1872 to 1913

*Wm. Barnard & Sons, London:* No information

*J. W. Dobson's Patent, Barnsley:* No information

*Dorn & Rylands, Barnsley:* No information

# Plate 7

- 38) Whitfield's  
15 Broad Street  
Barbados  
(1 dimple)
- 39 Front: Theo Estornel  
St. Croix  
Back: H. B. Sleeman  
London  
(2 dimples)
- 40) Front: S.M.S.  
Vineta  
  
Bottom: B T B  
(4 dimples)
- 41) Front: T. Whusse  
  
Back: The Brewery  
Netheravon  
wilt  
(1 dimple)
- 42) Front: E. Schroder  
St. Thomas  
D.W.I.  
(1 dimple)
- 43) Front: E. Schroder  
St. Thomas  
Back: The Niagara Bottle  
Barnett & Foster  
Maker  
London  
Rd 65433  
(2 dimples)
- 44) Front: E. Schroder  
St. Thomas, V.I.  
  
Back: The Niagara Bottle  
Barnett & Foster  
Maker  
London  
Rd 65433  
(2 dimples)
- 45) Front: Lockhart's  
St. Thomas D.W.I.  
(Circle with eagle  
in center)  
  
Bottom: N & Co Ltd.  
(tear drop)  
3420  
(2 dimples)
- 46) Front: J.C. Canegata  
St. Croix  
D.W.I.  
  
Back: Nuttall & Co  
Makers  
St. Helens  
England  
(1 dimple)
- 47) Bottom: 1124  
W  
(1 dimple)
- 48) J K & S  
2964 on Bottom  
(1 dimple)
- 49) Bottom: G.T.B.  
  
(Pontil Scar)  
(1 dimple)
- 50) Bottom: C.S. & Co. Ltd.  
(2 dimples)
- 51) Around: Luis Aischmann  
& Co.  
Importadores  
Buenos Aires  
(1 dimple)
- 52) Bottom: G.T.B.  
(4 dimples)

- 53) Back: The Niagara Bottle  
Barnett & Foster  
Makers  
London  
Rd 65433  
(2 dimples)
- 54) Front: C. Blunch  
Cafe  
International  
St. Thomas
- Back: The Niagara Bottle  
Barnett & Foster  
Makers  
London  
Rd 65433  
(2 dimples)
- 55) Front: (In Circle)  
  
D.H. Jurgensen  
Aerated  
Water Works
- Back: The Niagara Bottle  
Barnett & Foster  
Makers  
London  
(2 dimples)
- 56) Front: M. Brow  
Fred St. Croix
- Back: Wm Barnard  
& Sons  
London  
(2 dimples)
- 57) Front: (In circle)  
Aerated Water Works  
E  
Tortola
- Back: Barnett & Foster  
Makers  
London, N
- 58) Front: E. Fraas  
St. Thomas
- Back: The Niagara  
Bottle  
Barnett &  
Foster  
Makers  
London  
Rd 65433  
(2 dimples)
- 59) Front: P. Thornton  
registered  
Trade (crown w/arm)  
Mark  
South Shields
- Back: Codd's Bottle  
Maker  
Dorn & Rylands  
Barnsley  
(1 dimple)
- 60) R.N. Club (Front)  
Bermuda  
Bottom: YY  
(2 dimples)
- 61) Front: Carl V. Le Beet's  
Grocery  
St. Thomas  
(in circle)  
(star in middle)
- Bottom: N & Co Ltd.  
3420  
(2 dimples)
- 62) Front: MacNish & Son  
Jamaica
- Back: J.W. Dobson's  
Patent  
Barnsley  
(2 dimples)

The local bottling plants and grocery owners brought the bottles in from England and filled them. I have been able to get information on just a few; if there is anyone who can supply us with additional information on the others we would appreciate your getting in contact with us or the V.I. Archaeological Society. Lockharts: 1900-1945; M. Brow: 1903-1976 (still operating). Soda water bottles which are not of the same type we have mentioned.

### Plate 8

63) Front: Congress & Empire Spring Co.  
Hotchkiss Sons  
New York  
Saratoga, N.Y.

Bottom: (four dots)  
• •  
• •

Back: Congress  
Water

Height: 7¾"  
Color: Dark Green  
Content: Mineral Water  
Bot. Mfg. Mt. Pleasant  
Glassworks  
Origin: New York  
Date: 1865  
Made: Mold Blown-  
Applied Top

### Plate 9

64) Front: Congress & Empire  
Spring Co.  
C  
Saratoga, N.Y.

Bottom: I

Back: Congress Water

Height: 8"  
Color: Emerald Green  
Content: Mineral Water  
Bot. Mfg.: Mt. Pleasant  
Glassworks  
Origin: New York  
Date: 1865  
Made: Mold Blown-  
Applied Top

### Plate 10

65) Front: (10 panels)  
W.P.  
Knicker  
Bocker  
Soda Water  
164. 18th St. N.Y. 1848

Height: 7¾"  
Color: Cobalt Blue  
Contents: Soda Water  
Made: Blown in Mold  
Pontil Scar  
Slight Kick-up  
Blob Top

This concludes our first chapter with other articles to follow. Our next article will be devoted to the "Case bottle" or "Gin bottle." For additional information concerning our collection, please contact us at the Royal Mail Inn, Hassel Island. We would be happy to show our collection to interested people and ask only to contact us in advance for a chance to view it.

PLATE 1: HAMILTON Bottle  
Terms: (Torpedo-Egg-Teardrop)

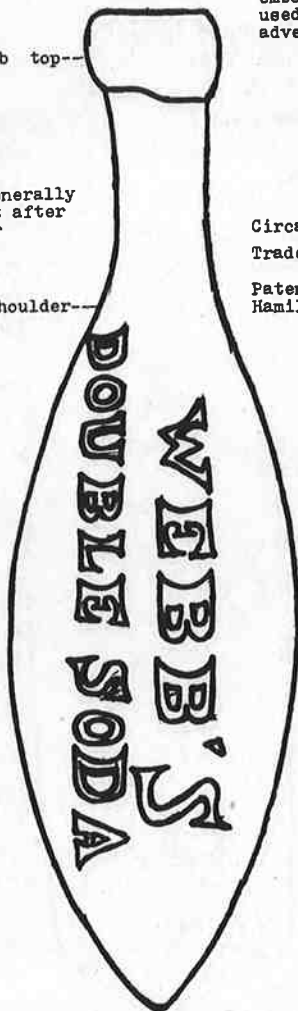
Characteristics

Ht: 9-9½ inches  
Color: Aqua  
Thick Glass  
Air bubbles  
Indentations

Blob top--

Seams generally  
end just after  
shoulder

Shoulder--



Example: Bottles 1 thru 18

Embossments: Varied 1 thru 18  
Slug Plate was used for  
embossments, Dealers  
used embossments for  
advertisement.

Circa: 1850 - 1900

Trade Mark: 1884-1900

Patent registered by William  
Hamilton in 1809.

Notes: J. Scheppe was  
bottling mineral water  
in plain "Hamiltons"  
around 1790  
Blob-tops came into use  
on the event of national  
distribution. 1850

Collection: Tom & Andrea  
Hannon

PLATE 2: "CYLINDERS" or "ROUND BOTTOM" Bottle

Characteristics

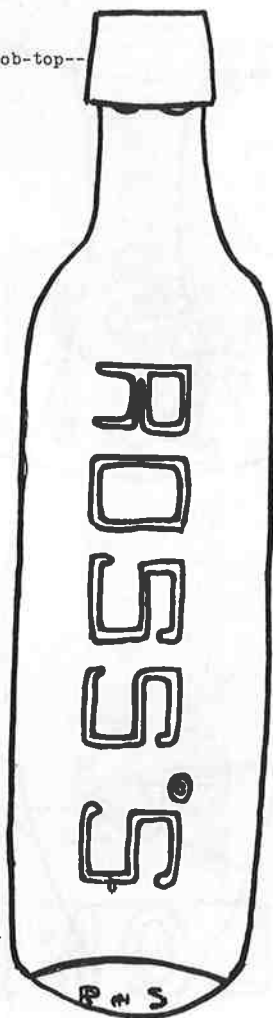
Ht: 9 - 9 3/4 inches    Blob-top--  
Color: Aqua  
      No. 20 Light Amber  
      No. 21 Dark Amber  
Thick Glass  
Air bubbles  
Indentations in glass  
Very uneven seams

Examples:

Bottles 19-23

Embossments: Varied

Circa: 1880 - 1910  
Trade Mark: 1884-1910



Collection: Tom & Andrea  
            Hannon

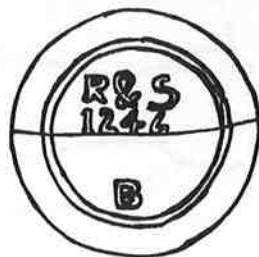


Plate 3

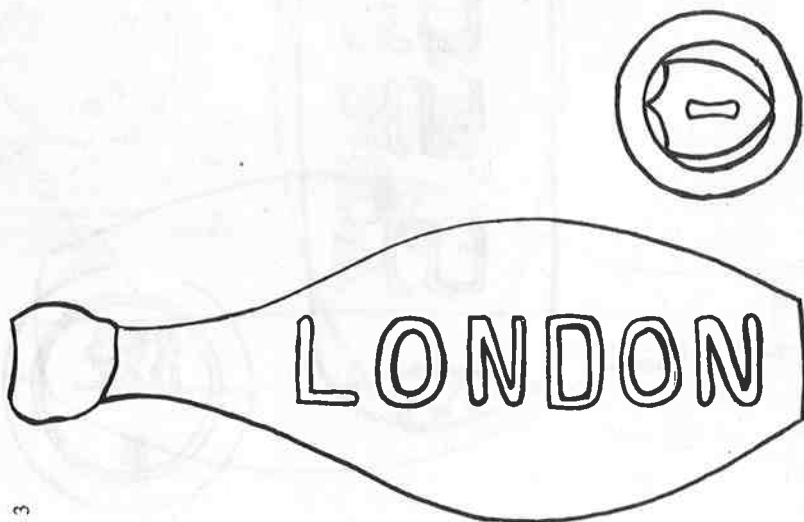


Plate 4



Plate 5



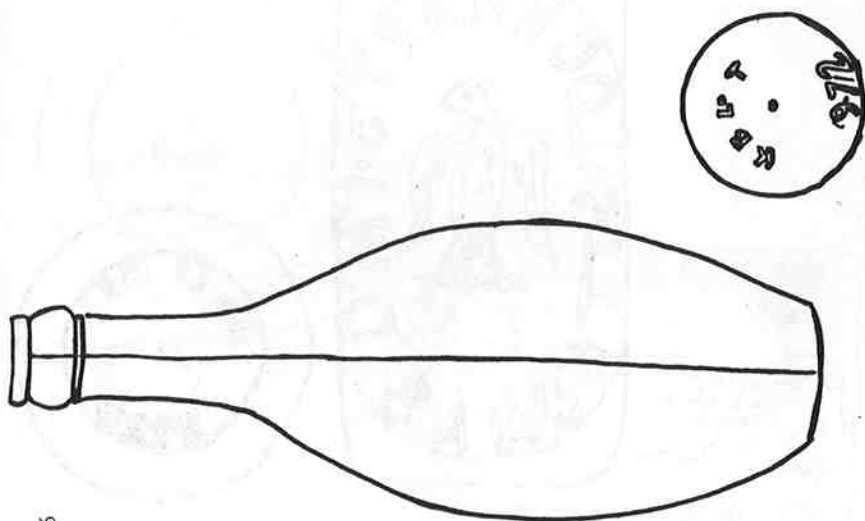


Plate 6

Plate 8

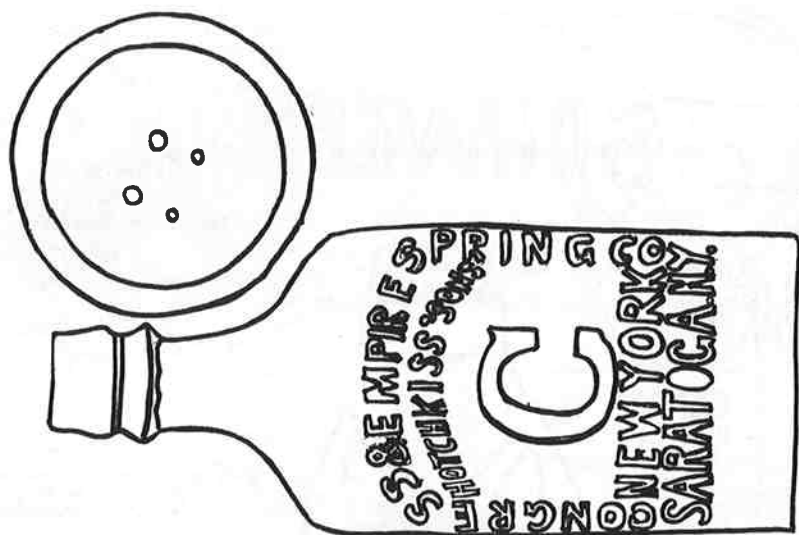


Plate: 7 "Codd Stopper" (Marble or Pig) Bottle

Examples:  
Bottles 40 -64

Characteristics

Ht: 6 - 9½ inches  
Color: Aqua  
Marble Color: Varied  
Number of dimples: Varied  
Thick Glass

Embossments: Varied



Collection:  
Tom & Andrea  
Hannon

Plate 9

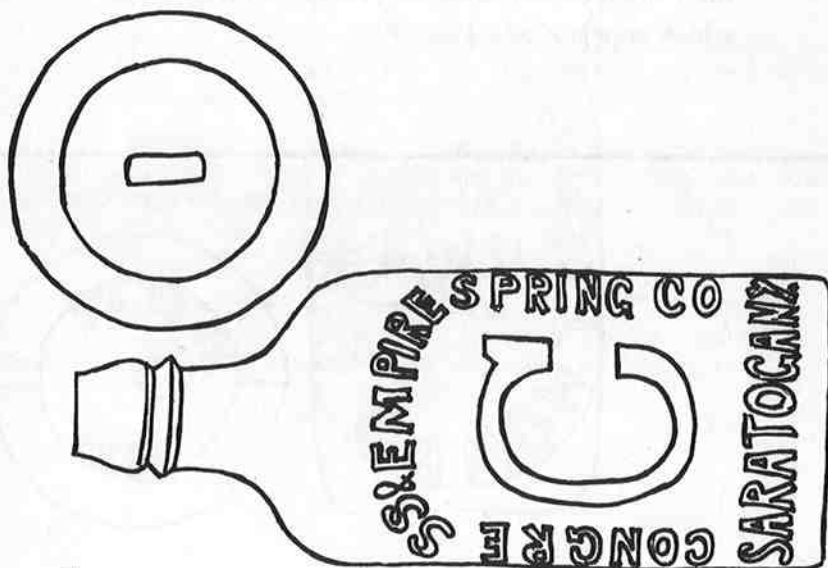
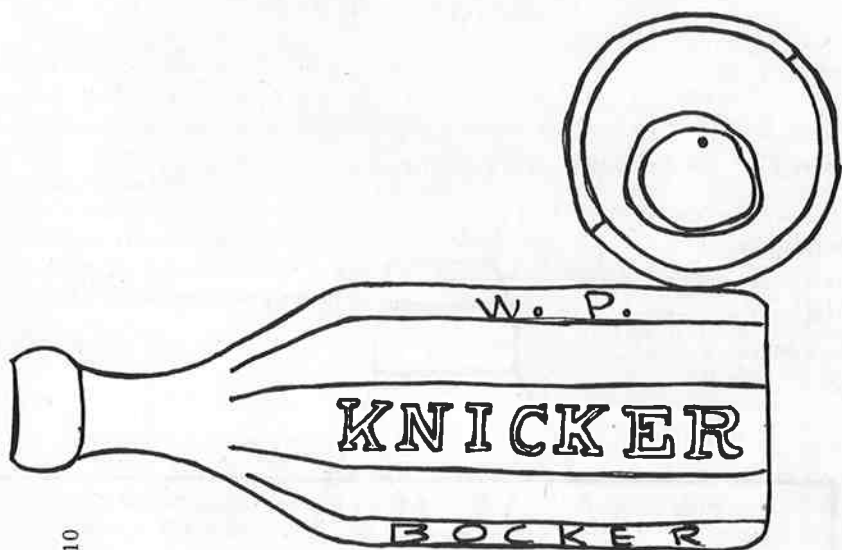


Plate 10



# ANALYSIS OF THE HULL BAY SKELETONS, ST. THOMAS

by

Douglas H. Ubelaker

J. Lawrence Angel

Smithsonian Institution

During the summer of 1974, archeologists in St. Thomas, United States Virgin Islands recovered two extended human skeletons (Fig. 1) from an archeological site (2-AVI-1-Ens-1) at Hull Bay, St. Thomas. The presence of colonial coffin nails indicated that at least one of the skeletons (B) was intrusive into the older Indian archeological site. However, the other skeleton (A) lacked colonial or modern artifacts and was directly associated with Indian pottery. Both skeletons subsequently were sent by the Office of the Territorial Archaeologist, Government of the Virgin Islands, to the Smithsonian Institution, Washington, D.C. for our examination. This report presents the result of our examination and current interpretation of the skeletons.

## Skeleton A

Skeleton "A" represents the relatively complete, well-preserved skeleton of a 33 - 41 year old Negroid adult male, approximately 170 cm (67 in.) in stature. A diagnosis of male is based on the general ruggedness of the skeleton, large mastoid processes on the skull, and the morphology of the pelvis. However, a male diagnosis is complicated by the presence of a slight preauricular sulcus on each ilium and relatively small femoral head diameters (43 mm). The suggested age at death of the beginning of middle age is based predominantly on the appearance of the symphyseal faces of the pubic bones. On both pubic bones the ventral rampart is complete and the rim and bony outgrowths had begun to form, matching Todd's stages VII to early VIII — an age of about 35 - 43 years. Sutures in the pterion region were open, but the sagittal suture was partially closed; the coronal was mostly closed and the lambdoid was completely closed — features compatible with the lower limit of the age suggested above. To verify further the age estimate, a ground thin section was prepared from a midshaft femoral cross-section. The application of Ahlqvist and Damsten's (1969) modification of Kerley's microscopic technique produced an age estimate of 35 years. Debris in the periosteal border of the cortex limited the accuracy of this estimate, but it confirms the estimate based upon the pubis.

Stature calculated from the maximum length of the femora (466 mm) using Trotter and Gleser's (1958) formulae for Negro males, is  $170 \pm 4$  cm (about 5 feet 7 inches).

Most morphological evidence fits a Negroid racial affiliation of the skeleton. Negroid traits include: a linear ellipsoid vault, somewhat flattened in the vertex area with a prominent occiput and relatively very wide forehead; a broad inter-orbital region accompanied by a wide nasal aperture with a small nasal spine and strikingly slight subnasal grooves; considerable facial and especially alveolar prognathism accompanied by a long palate; a receding chin region on the mandible; and rectangular orbits. Although the skull does exhibit a trace of facial flatness, it otherwise shows no characteristically Indian traits. Indian traits *not* present include shovel-shaped incisors, forehead constriction, and large pro-

jecting malars. The skeleton suggests a linear body build more Black than Indian, especially with elongated forearms and shins and relatively straight femora. The presacral part of the vertebral column is relatively short, another Negroid trait.

The only skeletal pathology is a trace of tibia periostitis with accompanying diagonal blood vessel impressions under the muscle of the anterior compartment. No growth arrest lines are apparent on the teeth. Six teeth were lost prior to death and two more are mere carious shells with accompanying alveolar abscesses. In general, the skeleton shows little skeletal pathology but considerable dental disease.

### **Skeleton B**

This skeleton also represents a Negroid male, between 30 and 38 years old with a living stature of about 173 cm (5 feet 8 inches). Morphologically, this skeleton is remarkably similar to skeleton "A". All of the Negroid traits documented for skeleton "A" are also found with skeleton "B". On this basis a Negro, not Indian, racial origin is suggested.

All skeletal traits suggest male sex, especially the large size of the skeleton, morphology of the pelvis, and femoral head diameters of 49 and 55 mm. Living stature of 173 cm was calculated from the maximum length of the tibiae (39.9 cm) using Trotter and Gleser's (1958) formulae for Negro males. An age at death of between 30 and 38 years is suggested by beginning union of cranial sutures and the over-all appearance of the skeleton.

In contrast to skeleton "A", this individual displays considerable skeletal pathology. In particular, the upper portion of the right tibia shaft, upper and lower portions of the right femoral shaft, the lower third of the left humerus display spindle-shaped periostitic tumor-like lesions which increase the shaft diameters about 75% and are accompanied by active cloaca. A partially healed fracture is located on the lower third of the left humerus near the lesion described above. The fracture has produced a 5 - 10 mm shortening of the humerus. An additional healed fracture occurs in the right clavicle shaft, resulting in a 10 mm shortening of that bone. The tumor-like lesions were probably produced from a blood-born infective organism.

Additional pathology includes marked periodontal bone loss with severe dental disease. Eight teeth were lost before death. Of the remaining teeth, twelve are carious and nine of these are mere shells or root stumps with active periapical abscesses.

In summary, both skeletons represent Black adult males of early middle age, remarkably uniform in morphology, health, and burial position. The association of coffin nails with skeleton "B" clearly suggests a relatively modern date which is compatible with our analysis. Skeleton "A" presents more of an interpretational problem, since it lacks associated colonial artifacts. The only associated artifact reported is a fragmentary pottery vessel found near the right wrist area. According to the archeologist Katheryne Kay, the vessel was definitely associated with skeleton "A" and can be tentatively dated to the Elenoid period, about 950-1250 A.D. If this ca. 1200 A.D. date is correct, it is difficult to reconcile with the morphological evidence from the skeleton. Assuming that the identification and date of the vessel is correct, the most likely explanation is that the vessel-skeleton association was accidental or perhaps represents the chance finding of the vessel when the burial pit was dug originally.

Possibly the contemporaries of skeleton "A" could have found the vessel and placed it with the skeleton at the time of burial. As unlikely as this procedure appears, it is certainly much more conceivable than a Black presence on St. Thomas at 1200 A.D. A bone sample taken from the left femur of skeleton "A" was analyzed by our carbon dating laboratory to be 104% modern (SI #2259) agreeing with a previous bone estimate made from the two fibulae. According to Smithsonian Radiation Biology Laboratory Anthropologist Robert Stuckenrath (personal communication), the analysis of the bone sample rules out a contemporary date for the skeletons, but can not determine how old the specimen actually is. The location of the skeleton near sea water makes organic contamination of the bone very probable. Thus the dating of the skeleton and related interpretations must be based on stratigraphic evidence and the association and analysis of the pottery vessel. These problems must be resolved by the archaeologists, perhaps by future excavation of this and related sites.

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1958. A re-evaluation of estimation of stature based on measurements of stature taken during life and of long bones after death. *American Journal of Physical Anthropology*, N.S. Vol. 16, No. 1, pp. 79-123.

TABLE I

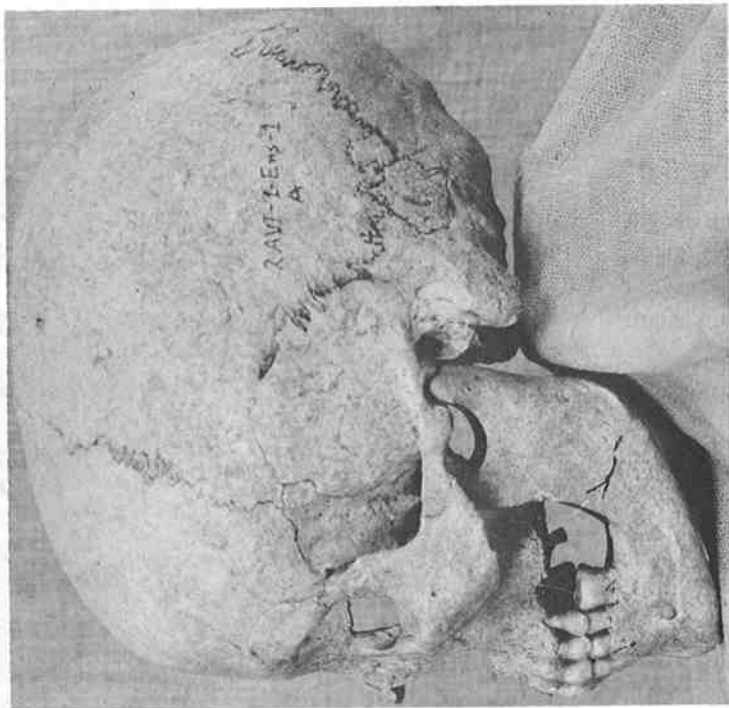
Selected Measurements in mm and Indices  
of the Hull Bay Skeletons

| <u>Skull and Mandible</u> | A   | B   |
|---------------------------|-----|-----|
| Horizontal circumference  | 517 | 489 |
| Glabello-occipital length | 186 | 178 |
| Chin height               | 34  | 41  |
| Ramus breadth             | 34  | 33  |
| Facial angle              | 81  | 76  |
| Nose Breadth              | 30  | 24  |
| Nose Height               | 53  | 48  |
| Cranial index             | 72  | 73  |
| Mean height index         | 71  | 75  |
| Fronto-parietal index     | 77  | 72  |
| Cranial facial index      | 99  | 101 |
| Facial index              | 86  | 90  |
| Upper facial index        | 53  | 50  |
| Nasal index               | 57  | 50  |
| Left orbital index        | 82  | 87  |
| External palatal index    | 112 | 114 |

Table 1 (continued)

**Long Bones**

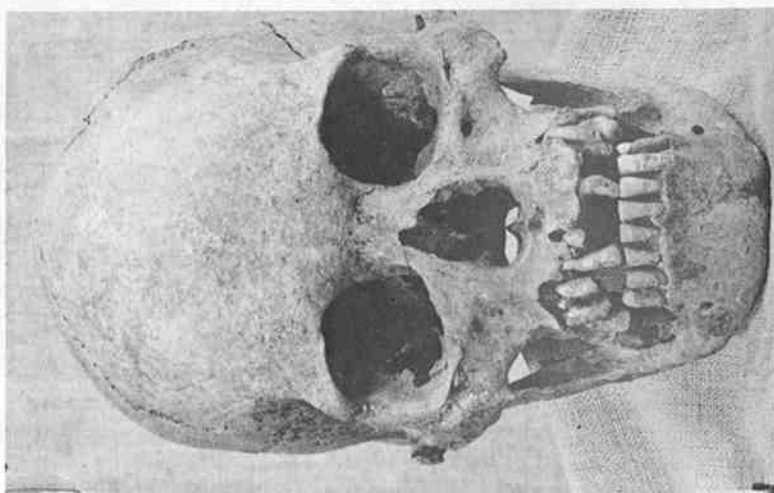
|                    | L   | A | R   | L   | B | R   |
|--------------------|-----|---|-----|-----|---|-----|
| Humerus            |     |   |     |     |   |     |
| maximum length     | 322 |   | 324 | 343 |   | 350 |
| head, vert. diam.  | --- |   | 44  | 49  |   | 49  |
| Radius             |     |   |     |     |   |     |
| maximum length     | 266 |   | 267 | 272 |   | 272 |
| Ulna               |     |   |     |     |   |     |
| maximum length     | 289 |   | 291 | 292 |   | 295 |
| Femur              |     |   |     |     |   |     |
| maximum length     | 466 |   | 466 | 471 |   | 475 |
| head maximum diam. | --- |   | 43  | 50  |   | 49  |
| Tibia              |     |   |     |     |   |     |
| maximum length     | 391 |   | 392 | 399 |   | 399 |
| Fibula             |     |   |     |     |   |     |
| maximum length     | --- |   | --- | 388 |   | 386 |
| Brachial index     | --- |   | 82  | 79  |   | 78  |
| Crural index       | --- |   | 85  | 85  |   | 84  |
| Robusticity index  | --- |   | 13  | 12  |   | 13  |
| Pilastric index    | 120 |   | 126 | 111 |   | 94  |
| Platymetric index  | 80  |   | 83  | 67  |   | 71  |
| Platycnemic index  | 65  |   | 66  | 62  |   | 88  |



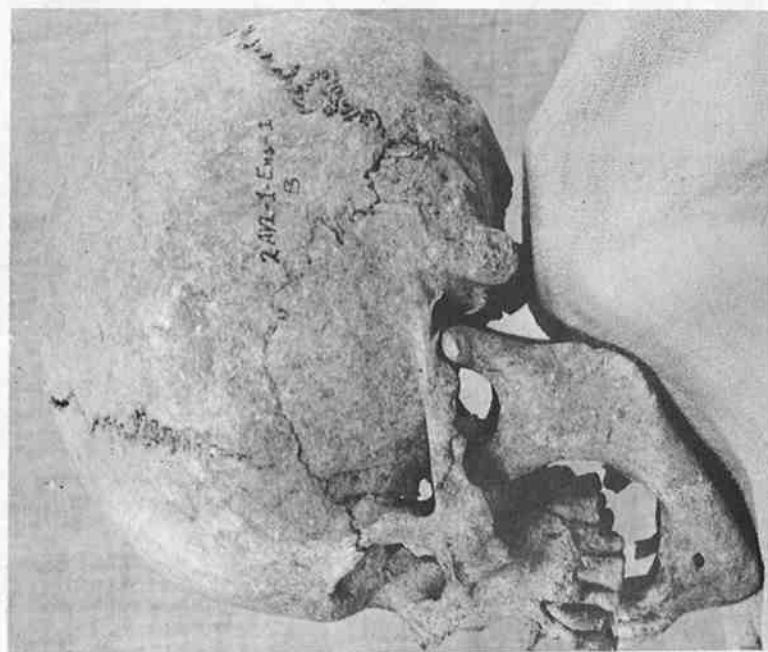
Skull A, lateral view



Skull A, frontal view



Skull B, frontal view



Skull B, lateral view



The Hull Bay Skeletons (A and B) in situ.

## THE IMPORTANCE OF SEA-LEVELS CARIBBEAN ARCHAEOLOGY

by Desmond V. Nicholson, Antigua Archaeological Society

### **(a) CHANGES OF SEA-LEVEL & SHORELINES SINCE THE MESO-INDIAN EPOCH.**

During a recent archaeological survey of Antigua it was noted that middens on the north-east coast were being eroded by the sea. Sherds were actually found encrusted with barnacles. Because of this erosion and change of sea level, the first Lesser Antillean two component site of archaic and ceramic levels was discovered and subsequently excavated (1).

On the otherhand, to the south-west of the island, middens were found up to three quarters of a mile inland. One such site, of archaic age, is at Jolly Beach (2). This is situated in a place that was once a beach now lying a few hundred yards inland. This beach lies between two limestone hills, a tombolo, which formed an ancient peninsula. A water eroded cave to the seaward side of the outer hill was the telltale of the sea's regression. This is also shown by the present day surrounding of swampland.

Other sites around the south-west shore of Antigua bear out this conclusion that the sea is regressing, as they are now lying inland and about 10 ft. above sea-level. Since the sea-level appears to be rising on one side and lowering on the other, it could be concluded that the land mass might be tilting.

Luckily we have a carbon date for Jolly Beach of 1775 B.C. (1-7687) so we are able to calculate the approximate average rate of tilt, should this be proved so. A 10 ft. fall of sea-level in 4,000 years gives an average of one inch in 33 years.

A cause of this tilt could possibly be tectonic. Along the outer Leeward Is., the North American plate coincides with the Caribbean plate, so it is likely there is great stress and tension between them, thus causing a gradual movement, as well as the occasional earthquake.

Another cause of apparent rise on one side and apparent fall on the other side of an island could be due to the erosion and subsequent sedimentation of fine grained particles from the windward or easterly side of the island. Normally land masses erode on their windward shores, and such sediment as is swept downwind, and is not lost to sea, will accumulate on the lee side by the action of currents. Thus many lee bays and estuaries will become barred off by sand beach or barrier bars. The lagoons behind, trap sediment, and eventually through normal eutrophication, end up as swamps. Antigua's changed shoreline in the last 5,000 years is probably a combination of these two causes. Look for them in your locality of interest.

The importance of sea-level change due to these types of land formation, should be realized by the archaeologist, in searching for new sites. Mainly new sites, as surface finds, will be found some distance inland whilst others nearer the shore may be buried quite deeply in sand and other sediments.

## (b) CHANGES OF SEA-LEVEL DURING THE LITHIC AGE

Another type of sea-level change that could aid archaeology in tracing the earliest migrations is the eustatic change caused by the alternate melting and build up of glacial areas. It is difficult to distinguish the influence of eustatic sea-level movements from those of tectonic and isostatic movements in the determination of former levels. However in the calculation of these levels, it is customary to consider only glacial control (3), as this far overwhelms all other trends and factors such as tectonic, isostatic, sedimentation, changes in volume due to temperature, and the decanting of shallow seas due to tectonic upheavals.

The earliest Circum-Caribbean date for the presence of man thus far, is about 17,000 B.P., at which time, the eustatic sea-level was approximately 50 fathoms (300 ft.) lower than at present (4). Most of the Lithic sites and their tool assemblages, which are used comparatively for the tracing of migrations, probably lie submerged in up to 50 fathoms. The depths would vary according to which of the possible migration routes were used, and at what time.

Lithic peoples may have been water-borne. Prehistorians usually assume that Lithic peoples travel only over land, but recent finds in Australia, isolated by the sea for the last 15 million years, prove the presence of man 40,000 years ago. This indicates that the earliest Australians may have been the first seafarers (5). Evidence in the Greater Antilles shows that people of the Lithic age were living in Casimira about 7,000 years ago (6).

Earliest evidence of man in the Circum-Caribbean area is found at Muaco, Cucurucho and Taimi Taima in Venezuela, at just under 15,000 B.C., the time of the last glaciation (7). In these sites, El Jobo type points were found in association with the late Pleistocene megafauna, Mastodon and Megatherium. From this time on, until about 4,000 B.C., the sea-level rose in oscillations from 50 fathoms below the present level, to the present level.

From the accompanying maps, it can be seen that any movement over the sea by early seafarers would have been of much less distance than it is today, as there were more islands, and the present islands and continents were larger and closer together. Thus, there were no long sea passages to make to reach any of the islands.

In addition, there would have been a gentle seafaring climate, as the glaciated areas reached to the present temperate latitudes, compressing the world's climatic zones (8). Thus, the Bermuda high pressure area would have been forced further south, giving the Caribbean light and variable winds.

The three main routes from the mainland to the Greater Antilles, as shown in the map, would have been 1) over the Bahama shelf to Cuba, 2) from Central America over the present continental shelf through the Mid-Caribbean archipelago, including Jamaica, to Hispaniola, and 3) from eastern Venezuela through the Lesser Antilles. Each of these routes could have been navigable until they were finally inundated about 5,000 B.C., 8,000 B.C., and 9,500 B.C. respectively.

Central American lithic sites probably lie on its continental shelf, and Jamaica's sites twelve miles south of Portland Point. Likewise, Grenada's lithic sites very likely lie near the Reindeer Shoals, about twenty miles south-west of St. George's. Hispaniola offers several lithic sites for study today, as no large low-lying areas of land were inundated after the last glaciation.

If we could obtain a flake of flint, or a stone tool, in a sedimentologist's core sample, this could help to trace the earliest migrations into the West Indies.

The material which we seek will be in the form of flint flakes, as these are the most common artifacts of lithic sites. In order to make one tool, the maker would strike off many flakes, from several nodules. The factor that will be the most useful in showing that the flake was indeed made by man will be the existence of a bulb of percussion. This forms whenever a flake is detached forcibly from a parent nodule.

According to a sedimentologist's core sample from the Gulf of Mexico (9), the ice sheet covering much of North America, underwent a sudden surge around 9,500 B.C., readvancing southward, where it quickly melted. The released water would have caused extensive flooding and raised the sea-level perhaps some tenths of metres per year. Since the sea-level was some 130 ft. lower at the start of the flooding than it is today, the isolating and submerging of early habitations would be very possible (10).

Oceanographers must be made aware, when coring for other disciplines, that at certain strategic points and depths, it might be possible to locate a Paleo-Indian or Lithic campsite, that would help us determine the origins of our preceramic cultures.

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### Personal Communication:

Sheldon, F.D. Limestone sedimentologist. Day, M. Geomorphologist. Van Beaver, H. Pleistocene Geologist.





## NEW DISCOVERIES

by  
Katheryne Kay

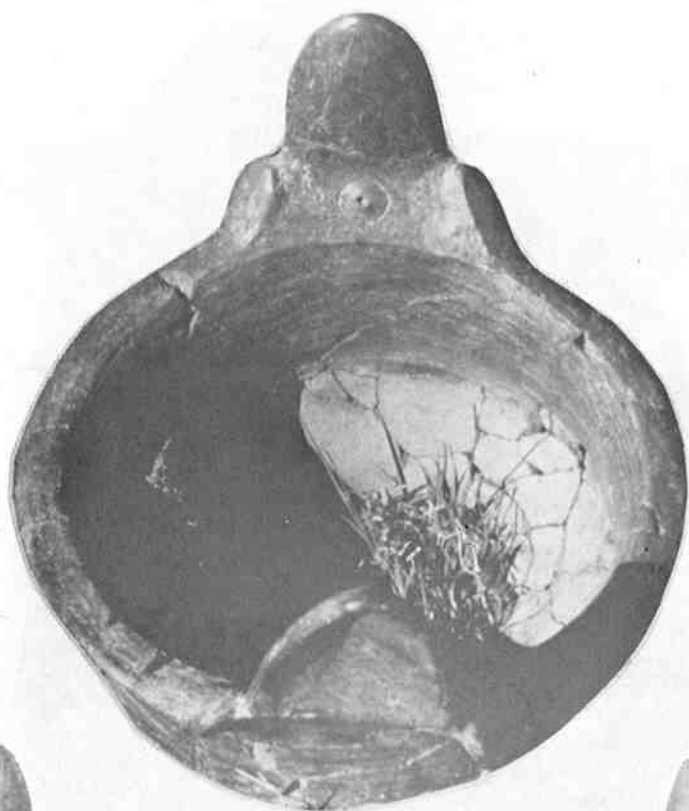


Actual Size

**MOTHER-OF-PEARL EYE PIECE** — this unique and interesting specimen is from Indian Creek, Antigua (R2, Level 3). Dr. Abraham Pollen, Ophthalmologist, Harvard Medical School has examined photographs of it and has commented that it is a "stenopaic slit" which is still used today in modern ophthalmology to test for astigmatism or refractive errors in vision like near or far-sightedness. The slit will improve distance vision in normal, near and far-sighted individuals by eliminating peripheral aberration of rays of light entering the eye and by increasing the depth of focus. Dr. Pollen thinks its main function may have been to cut glare but may also have been used to improve vision (or correct it). It is known that North American, Mesoamerican and Arctic Indians used this principle but until now it was unknown in the Caribbean to our knowledge.

(opposite page)

**DOG-EARED VESSEL** — this specimen comes from the site of Indian Creek, excavation X. Level 5 (100-125cm). It was excavated and carefully reconstructed by Ogden P. Starr just recently. Since its discovery Mr. Starr and Mr. Nicholson, of the Antigua Archaeological Society, have noted several other handles of this type in "other shapes, some not so tall, nearly round, and some rectangular" that would also stand erect on the rims of vessels. Mr. Nicholson also comments that "this positioning is very functional, as it keeps the handles from getting too hot over the fire and keeps the hands free from flame on taking the pot off the fire." It has been noted that "pots associated with these handles appear to be blackened by fire." Comments by other workers in the field would be appreciated to delineate the distribution of this type of handled vessel in the Caribbean.





**THE FOLMER-ANDERSON PORTFOLIO** — Recently re-discovered from the depths of the Folmer-Anderson Collection, in the care of the National Park Service, Christiansted, St. Croix, U.S. Virgin Islands, were a collection of over 200 original color drawings by the late Mr. Folmer-Anderson depicting Igneri and Taino artifacts uncovered by him on St. Croix over 50 years ago.

"Jar drawn from a fragment excavated at Richmond. 1/8" hole bored through the head. Thickness of the bottom and the lower part of the jar 5/16". Object A-466."



"Bowl drawn from a fragment excavated at Estate St. Georges.  
Type: painted after firing." Object A-247. White-on-Red.



Detail of handle.



"Bowl drawn from a fragment excavated at Estate St. Georges.  
Type: painted after firing." Object A-248 White-on-Red.



# SCULPTURED STONE FROM ST. THOMAS, U.S. VIRGIN ISLANDS

by

Katheryne Kay

V.I. Department of Conservation and Cultural Affairs

In 1972, Alfred Chiswell, a resident of St. Thomas, while skin-diving on the eastern end of the island at a popular beach known as Coki Point, noticed something peculiar on the ocean floor some 12 feet below him. This strange form was found to be a stone axe head, or more properly, a petaloid celt. Even more exciting was the figure carved on one of its faces which was undoubtedly human in form. Mr. Chiswell subsequently left the Virgin Islands and donated the specimen to the Smithsonian Institution in Washington, D.C. where I re-discovered it in the fall of 1974 while examining their collections from the Caribbean. With the kind assistance of Dr. Clifford Evans, Chairman of the Department of Anthropology, we arranged to have this interesting and valuable specimen returned to the Virgin Islands on loan to the Virgin Islands Museum, where it is on display today.

Later, in February of 1975, members of the Virgin Islands Archaeological and Conservation Societies were invited to visit the Corning Estate at Botany Bay, located on the extreme western tip of St. Thomas, to photograph and explore reported Pre-Columbian petroglyphs and historic ruins there. During the course of this visit the late Warren H. Corning brought out several pieces of aboriginal ceramics that had been found during the construction of the beach house there. Shortly, we were shown yet another specimen that was very unusual and of particular interest. I was told that during the summer of 1965 a member of the Corning family had been taking a stroll along the beach and had noticed an odd looking stone among the coral rubble and sand. Having seen the ceramics during the construction of the beach house the family was on the lookout for more evidence of aboriginal habitation in the area. The stone was enthusiastically examined and found to be much more than an ordinary rock. As the family had a personal friend in Dr. Junius Bird of the American Museum of Natural History in New York, it was shown to him and identified as an "Elbow Stone" of the Taino Indians.

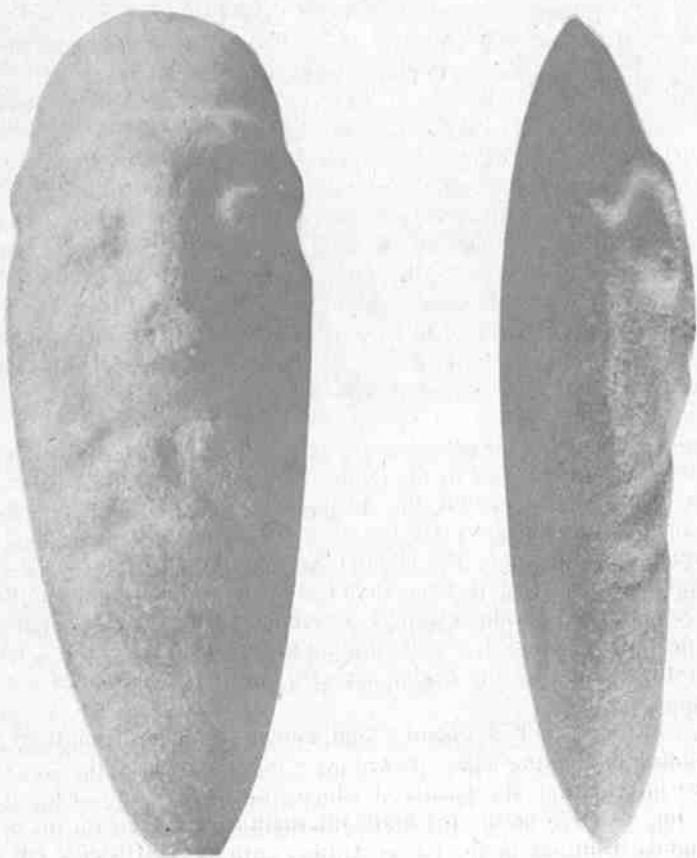
Several archaeologists had been shown the rare "Elbow Stone" over the years, but it had never been mentioned in any publication. The specific use of this type of artifact is still unclear today, but they do appear to have had some political or ceremonial significance and are often found in association with the famed ball courts or ceremonial plazas of the Greater Antilles. This particular specimen exhibits a simple geometric design carved in low relief, although some are found with elaborate anthropomorphic carvings. As reinforced by the associated ceramic style (Elenoid) it should date from around 900-1200 A.D. This is a particularly interesting period as the beginnings of a cultural 'renaissance' are just starting to appear.

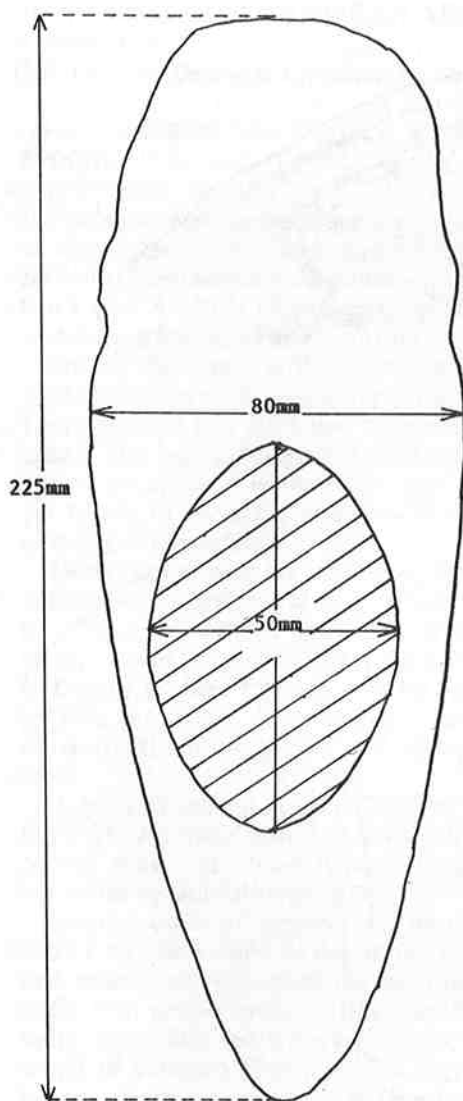
These two very rare, in fact, one-of-a-kind, known specimens from the Virgin Islands are indeed fascinating. They sparked my interest and began the search for interpretative information, the results of which formed the body of my paper delivered in July of 1975 before the Sixth International Congress for the Study of Pre-Columbian Cultures in the Lesser Antilles entitled A SURVEY OF ANTILLEAN SCULPTURED STONE.

By the term 'sculpture' I mean the ART or process of carving (or modeling, in the case of ceramics) in three dimensions as opposed to painting, engraving or incising which would appear in only two dimensions. The sex-based and therefore selective transmission of ceramic traditions makes religious art in general, and stone sculpture in particular, a more valid indicator of this cultural 'renaissance', or period of vigorous artistic and intellectual activity, which seems to have taken place in the Greater Antilles beginning possibly as early as 700 A.D. and extending up until the time of the Discovery.

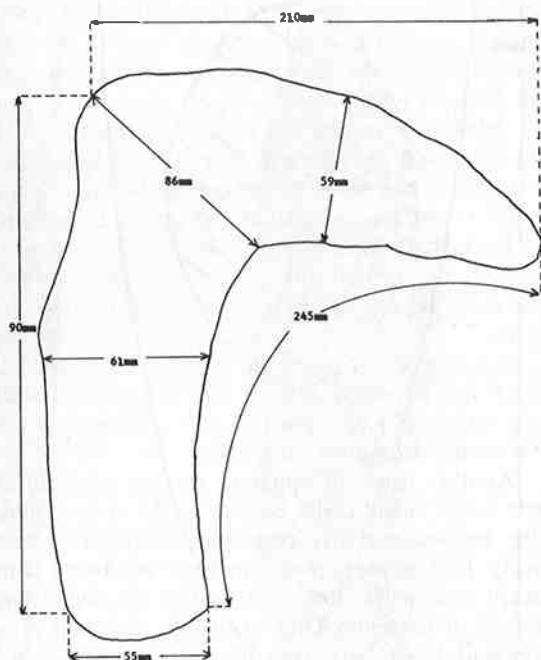
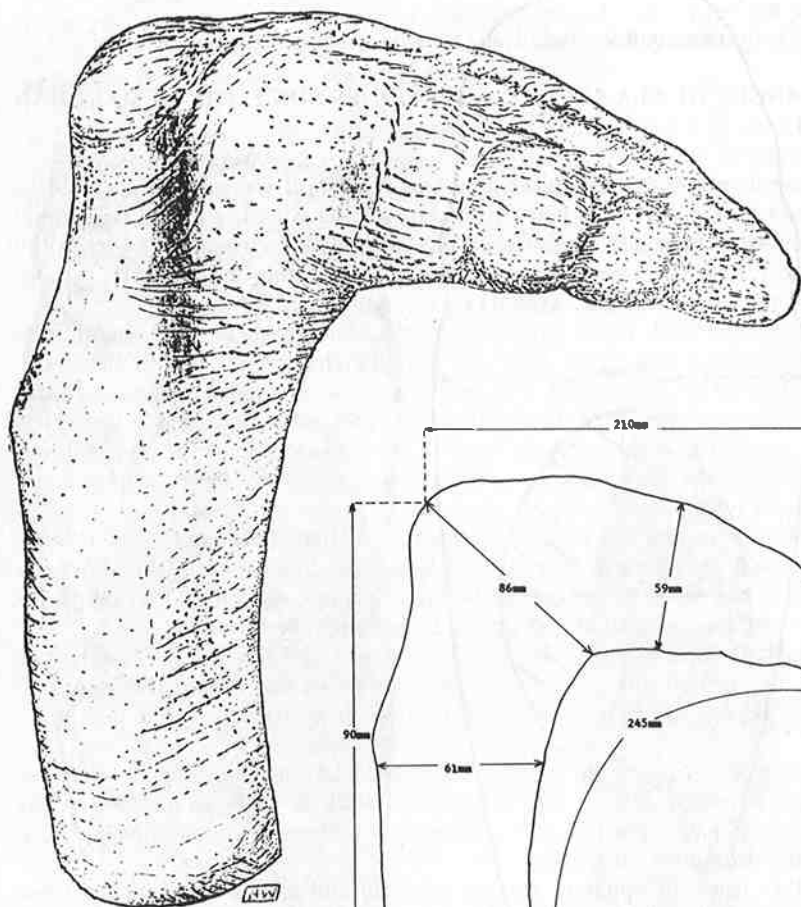
**AUTHOR'S NOTE/ACKNOWLEDGEMENTS:** It is hoped that future articles or publications will include a comprehensive listing, catalogue of known specimens, and their attributes; specific distributional charts and maps; and correlations with associated absolute dates.

This article was produced, at least in part, under the auspices of the Virgin Islands Government, Department of Conservation and Cultural Affairs, Bureau of Libraries and Museums, Office of the Territorial Archaeologist.





V74 (SI 472-992)  
"Chiswell Celt"



V75 (VIAS WHC-1776)  
"Cornicing Elbow Stone"

## THE POTTER'S ART

Text and Illustration  
by  
Norman A. Willock

Some months after the final hectic days of salvage excavations at the Hull Bay site, St. Thomas, the heavy rains came. Since the land at Hull Bay was in the process of condemnation by the local government the extensive test pits were left open until the government took possession. But the rains caused havoc with the once straight walls and sandy bottom levels. This is the story of the discovery of a possibly unique piece of decorated Indian pottery, uncovered by rain in a temporarily abandoned pit, and recovered by a Virgin Island Archaeological Society member, Paul "Driftwood" Querrard.

I personally find Driftwood a wonderfully unique character, and a superb collector. A third or fourth generation Virgin Islander, Driftwood has, since childhood, picked up old bottles, shells, coins, swords, and bits of historical and Indian pottery. Everything seems to interest him. When the call came from Driftwood that he had a "nice" piece of pottery, it was out to his house above Magens Bay immediately.

"It's a blowfish bowl," said a proud Mr. Querrard.

Indeed it looked like a blowfish design, and he had a color postcard of a blowfish to back up his claim.

"Where did you find this?" I asked.

"Not telling now," said our man. Driftwood can be stubborn at times, but I knew that he could be generous with his finds as well, and meant to give this piece to the Virgin Islands Archaeological Society for display. He simply didn't want to tell me right away where he had found it. It was his surprise to tell me that it was found in our poor rain washed abandoned pit at Hull Bay. It was a pleasant surprise.

Zoomorphic representations on our local Taino ceramics are not rare, but they are not common either. Throughout the Greater and Lesser Antilles, the zoomorphic figures these Indians favored are similar and easily recognized by their finders. There are frogs, pelicans, the fruit-eating bat, the "catch-all" category of "dog", the turtle, lizard, fish, manatee, and shark; in fact, most species the Indians saw, or ate, are represented. All kinds of anthropomorphic representations of their Gods, or themselves, are found as well.

But, with only casual, and admittedly amateur research methods, I have yet to learn of another "blowfish" represented. I asked several noted archaeologists about this "blowfish" motif at the Sixth International Congress For The Study of Pre-Columbian Cultures of The Lesser Antilles held last July in Guadeloupe. Among others, Dr. Earle Kirby from St. Vincent, Henri Petitjean-Roget from Martinique, and Kurt Fischer from Haiti had never seen a "blowfish" that they could remember. So perhaps Driftwood did come up with a truly unique piece after all, if we were right in quickly assuming it was a blowfish!

What the general public knows as a blowfish, usually seen dried and inflated as a hanging decoration or made into a lamp, and found throughout the Caribbean and Central America native craft shops, is really a Porcupinefish, or perhaps the smaller Spiny Puffer, of the family 'DIODONTIDAE' or Diodon.

Normally the spines of *Diodon* lie nearly flat against the body, the sharp tips directed posteriorly. After inflation they are fully erect and present a formidable appearance to enemies. Found in mangrove channels and on reefs, the *Diodon* fishes feed on mollusks (especially gastropods), sea urchins, crabs and hermit crabs, all of which it crushes with its strong jaws. It has round puffy eyes, and soft looking puffy lips or snout. That this family of fish swam in our waters centuries ago for the Indian to see, can be inferred by the fact that they still swim here.

Our Indian potter, in depicting the "blowfish," chose not to give the viewer just a profile of the *Diodon*. He or she wished to display more, and on the side of a large open, yet very shallow bowl, the potter gave us the face frontally, and both left and right "puffed" sides. As an amateur potter, I find this technique fascinating and imaginative to extreme. The bowl fragment, of red unpainted clay, is relatively crude, as is some of the accompanying incised decoration. But the remaining fish is superb. The two "puffed" sides, opposite the face, are extended 1.6 centimeters from the sidewall of 8 millimeters thickness. From the accompanying illustration the reader can see the two large applied sides with concentric oval incisions around them and the central gash which outlines and defines these two puffed "sides." Between these are the doughnut-shaped eyes and a full lipped mouth, again with a gash depicting the openness of the mouth. It is simple, direct, and very imaginative, yet executed with a minimum of detailed sculpting.

In making this fish figure, the potter used only the fingers and possibly two small sticks. A stick, less than 3 mm. thick and cut square on the end, made all the decorative incisions, followed with a downward right-handed motion into the middle of the eye appliques to form the pupils. A new tool was then taken up, a flat stick with a "V" cut end, and forcibly punched into the "sides" to a depth of 6 mms. The mouth was formed with the same tool, but was pushed in on the left side, then scraped out to the right. The only remaining decorations visible are a series of zig-zag incisions lightly incised to the left of the bowl fragment, and are so crudely and lightly "drawn" that they appear to be an indecisive afterthought. One can assume that they appeared on both sides of the fish figure and went around the bowl to possibly a matching figure on the opposite side of the bowl.

Paul "Driftwood" Querrard continues to keep a sharp lookout for collectables. His reason for being a member of V.I.A.S. is that he is interested in the Virgin Islands' past. It is through his efforts and those of many other dedicated members that our Society works. Amateurs and professionals are continuing to work here, side by side, so that greater knowledge of the Indian and his life can be exposed to the public at large.

