JOINT AGREEMENT BETWEEN THE STATE OF DELAWARE AND THE STATE OF MARYLAND

WHEREAS, pursuant to <u>29 Del. C.§</u>202(c), the Director of the Division of Historical and Cultural Affairs and the Secretary of the Department of Natural Resources and Environmental Control have been authorized to make joint agreements with the appropriate officials or agencies of an adjacent State and the National Geodetic Survey to delineate more thoroughly any part of any common boundary between the State of Delaware and any adjacent State; and

WHEREAS, pursuant to <u>29 Del. C.</u>§202(c), the Delaware State Boundary Commission is authorized to negotiate a final settlement of questions arising as to the common boundary between the State of Delaware and any adjacent State, in conjunction with the Director of the Division of Historical and Cultural Affairs and the Secretary of the Department of Natural Resources and Environmental Control; and

WHEREAS, Section 2-402 of the Natural Resources Article of the Maryland Code authorizes and directs the Maryland Geological Survey to examine every monument marking the boundaries of the State and to cooperate with adjacent States to restore and repair boundary monuments and to make joint agreements with appropriate officials of adjacent States in order to delineate more clearly any part of any common boundary; and

WHEREAS, by Joint Agreement dated June 27, 1986, the State of Maryland and the State of Delaware resolved pursuant to their respective authorities that the true location of the Transpeninsular Line between the two states is the restored Transpeninsular Line, and that the Transpeninsular Line has been properly represented between Boundary Monument 0, 5, 10, 15, 20, 25(Pin), and Middle Point as set by the Colonial Surveyors and by the one-mile marks set between them, as were more particularly described in NAD27 horizontal datum and set forth in Exhibit B of the 1986 Joint Agreement; and

WHEREAS, the National Geodetic Survey has been able to more accurately describe the true shape and surface of the earth and by doing so has established a new Horizontal Datum for the states of Delaware and Maryland, that being the North American Datum of 1983(1991), NAD83(91); and

WHEREAS, at a joint meeting of the Boundary Commissions of Delaware, Maryland, Pennsylvania, and New Jersey held November 23, 1992 in Newark, Delaware, it was determined that the Delaware-Maryland boundary agreements would be amended to include for clarity the NAD83(91) geodetic positions for each monument on the boundary lines, especially during the period of time over which both states will be switching over to the new NAD83(91) datum as is more particularly described in Attachment A appended hereto and made part hereof; and

WHEREAS, by adopting the new NAD83(91) geodetic positions for each monument on the Transpeninsular Line, the parties now intend to recognize both the NAD27 and NAD83(91) geodetic positions for each monument without changing in any respect the boundary line between the two states;

the Penn family and the coat of arms of the Calvert family on the south and west sides, was placed here. This is the only Mason-Dixon Double Crownstone in existence, since a similar one placed at the northeast corner of Maryland was lost prior to the re-survey of 1849.

From the Middle Point, Mason and Dixon ran the north-south line, which forms the western border of Delaware. As they surveyed, they placed markers at intervals of one mile to mark the line. These stones of limestone were made in England and shipped to the two surveyors in America as needed. These were square posts twelve inches on a side with the top shaped in the form of a low pyramid. The side facing east was marked with the letter "P" and the side facing west was marked with the letter "M". At five mile intervals a crownstone was placed, bearing the arms of the Penns on the east side and the arms of the Calverts on the west side.

Boundary Markers



Of the one hundred and two stone monuments marking the northern, southern, and western boundaries of Delaware, many of them remain in

position. All of these markers show the ravages of men. In 1952, the most easterly monument on the Transpeninsular Line was re-cut by the State of Delaware to show clearly the two coats of arms. This stands in Fenwick Island adjacent to the lighthouse. In 1961, the Delaware State society Daughters of the American Revolution was instrumental in the erection of a shelter over the double crownstone at the southwest corner of Delaware to protect it from exposure to weather. The two men, Mr. George E. Wright and Mr. Harvey Ellis, who owned the land on which the markers stand gave sufficient land to make a small park. The Public Archives Commision of Delaware (now the Division of Historical and Cultural Affairs) together with the Maryland Board of Natural Resources and the State Roads Commission of Maryland cooperated in this project. This shelter was formally dedicated at a ceremony held on November 11, 1961. A bronze plaque placed on one of the brick pillars tells the story of these monuments.

An original crownstone is on exhibit in each of the historical societies of the three states, namely, the Maryland Historical Society in Baltimore, the Historical Society of Pennsylvania in Philadelphia, and the Historical Society of Delaware in Wilmington. Each of these has been replaced on the boundary line by a marble replica.



The source of historical information used in preparation of this pamphlet is the booklet, The Maryland-Pennsylvania and the Maryland-Delaware Boundaries, by William H. Bayliff, Bulletin 4, Second Edition, July, 1959

Published by the Society Daughters of Colonial Wars, Inc., in the State of Delaware, in cooperation with the Delaware Division of Economic Development, Department of Community Affairs and Economic Development.

For more information on Delaware, The First State, write:

Delaware State Visitors Service 45 The Green Dover, Delaware 19901

Printed in USA

Mason-Dixon
Boundary

Markers

and its





The Mason-Dixon Boundary Line which achieved fame during the years immediately preceding the Civil War is the one which marks the southern boundary

of Pennsylvania. This boundary was popularly accepted as the dividing line between the free states and the slave states. The whole line was run to separate the lands of the Lords Baltimore and those of the Penn family, a matter of dispute for almost a century before.

History of the Boundary Line



Lord Baltimore's charter, granted by King Charles I, clearly defined the limits of his territory, but the imperfect knowledge of the geography of the

area and the uncertainty of terms used, caused misinterpretation. On the other hand, the charter granted to William Penn by King Charles II was not so exact and contained ambiguities which caused misunderstanding. After the charter was granted to William Penn, Lord Baltimore was notified and was required to meet with the agents of Penn'to make a true division and separation of the said province of Maryland and Pennsylvania, according to the bounds and degrees of our said Letters Patents by setting and fixing certain Land Marks where they shall appear to border upon such other for the preventing and avoiding all doubts and controversies that may otherwise happen concerning the same . . . ". After delays, a conference was held which resulted in little accomplishment,

In 1682 William Penn persuaded his friend the Duke of York, later King James II, to transfer to him the territory below Pennsylvania on the west side of the Delaware River that had been taken from the Dutch in 1664. In October, 1682, Penn arrived at New Castle to take possession of his new territories, henceforth known as "Three Lower Counties on Delaware", now the State of Delaware.

This transfer of title contributed to the controversy. The question was referred to the Board of Trade and Plantations by the King. On November 7, 1685, this committee recommended to the King that, on the basis of Lord Baltimore's patent being for "hitherto uncultivated" lands, the tract be equally divided by a line from the latitude of "Cape Henlopen" to the fortieth degree of north latitude. On November 13, 1685, the King ordered that the division be made. The boundary line finally fixed by Mason and Dixon was largely determined by this decision.

The controversy did not die, being kept alive by the settlers on the borders. Agreements, recriminations, petitions, hearings resulted, followed by a chancery suit. On May 15, 1657, Lord Hardwicke, the High Chancellor, decreed that Commissioners should be appointed within three months to lay out the lines. He further decided the question of the puzzling circle forming originally the southern boundary of Penn's province. The center of the circle was to be the center of the town of New Castle and the circle should have a radius of twelve miles. The commissioners from the two provinces meeting in New Castle on November 14, 1750, decided upon the Courthouse as the center of New Castle and the dome as the specific point.

The surveyors were sent to "Cape Henlopen" (present day Fenwick Island which is 15 miles south of the cape known today as "Henlopen") to determine the middle point of the peninsula. On June 15, 1751, they reached the east side of the Chesapeake Bay, thus completing the Transpeninsular Line, the length of which was sixtynine miles and two hundred ninety-eight perches.

Part of the agreement of running the Transpeninsular Line was the proper marking of it. The Commissioners had instructed these surveyors to mark each mile with a post and to

set up stones every five miles "so far as twenty-five miles", a distance which was considered to be about half the breadth of the peninsula. The monuments used for marking each five mile interval were cut for the purpose from native stone. They were four and one-half inches by eight inches in cross section with a rounded top. On one side was cut the arms of Lord Baltimore and on the other side the arms of the Penns. Only five of these stones were placed at that time between the ocean and the middle point.

The death of the fifth Lord Baltimore brought about another agreement whereby the new Lord Baltimore hoped to regain part of the territory lost by his father. By this agreement of July 4, 1760, the Commissioners accepted the link run in 1751, fixed the middle point and marke it with a white oak post. When satisfied with the accuracy of their observations, the Commisioners set up a cut stone monument two feet and eight inches to the north of the post which marked the middle point. A similar stone was placed at the thirty mile point on the Transpeninsular Line, since this point had not been marked in 1751. These two stones resembled the five placed in 1751, all being engraved with the arms of the Penns facing Pennsylvania and with the arms of the Calverts facing Marvland.

Mason and Dixon Line



Two mathematicians, or surveyors, were engaged to assist in running the line. On November 15, 1760, these two men, Charles Mason and Jeremiah

Dixon, arrived in Philadelphia from England. They verified the line run in 1751 and the true Middle Point. It was not until 1758 that a Double Crownstone, or corner stone, which bears on the north and east sides the coat of arms of

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THE STORY OF THE

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by
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DOVER, DELAWARE

Published By

GREENBERRY PUBLICATIONS

101 Monticello Avenue

Annapolis, Maryland

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ifferences of opinion about boundaries caused much of the wrangling and bloodshed in North America, during the 1600's and 1700's. For one thing, the instruments used by surveyors, astronomers, and navigators were not really accurate. For another thing, the forests, swamps, rivers, mountains and warlike Indians made it difficult--- and even impossible, at times--- to do surveying and mapmaking.

EARLY MAPS WERE PARTLY TRUTH AND PARTLY FICTION

The early maps usually offered some rather helpful information about thickly settled areas of the Atlantic coast, or well-travelled inlandpathways. Yet the mapmaker was unwilling to leave <u>blank</u> spaces for other sections about which he knew little. Instead, he usually filled in these spaces with fanciful drawings or inspired "guesswork." This was true of Augustin Herrman's otherwise dependable map of the Chesapeake and Delaware Bay country (1673), portions of which are reproduced on the next three pages. Even so, Maryland's rulers considered Herrman's survey and map so important that they gave him several thousand acres of land (Bohemia Manor, Cecil County) before he had even started on this 10-year job.

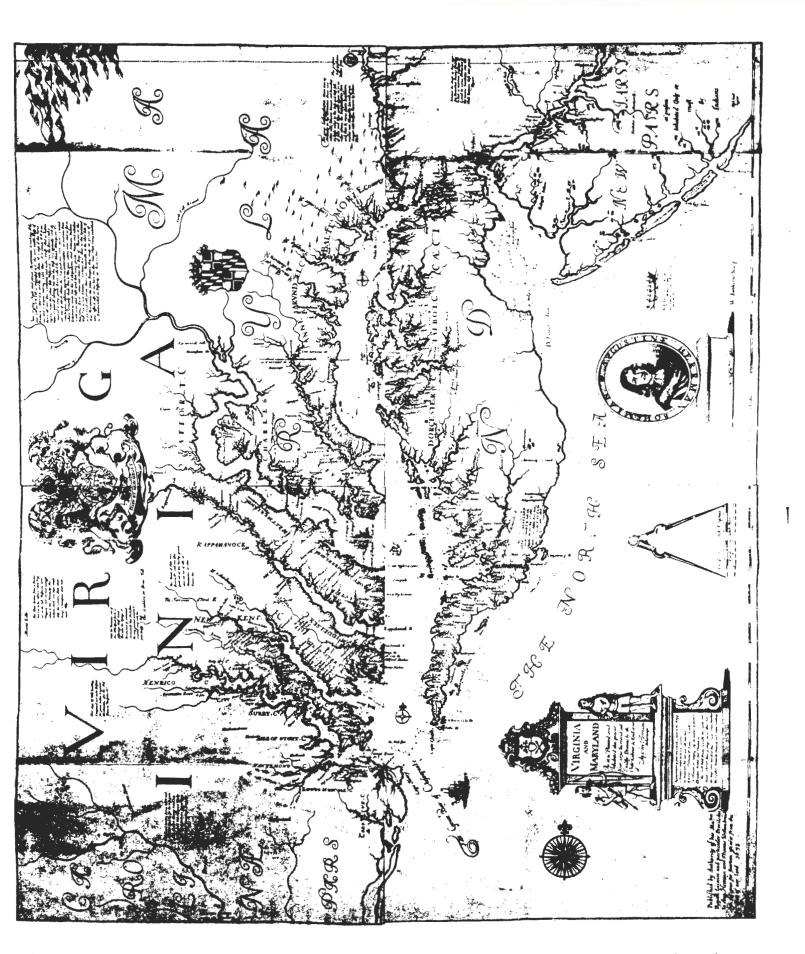
LAND GRANTS WITH OVERLAPPING BOUNDARIES-A RESULT OF ROYAL IGNORANCE

There were other difficulties, too. Kings, who were not very well informed about American geography, now and then gave land patents and trading privileges covering the same area, to more than one person or company. The wording of land grants was often self-contradictory, and therefore sure to cause trouble.

A CONFUSING GRANT OF LAND TO SIR EDMUND PLOWDEN

Consider, for instance, this large but confusing grant of land to Sir Edmund Plowden, made by all-too-generous Charles I in 1632 (the very same year in which Lord Baltimore received a charter including part of the same land):

"The bounds are one thousand miles compass of this most temperate rich province; for our south bound is Maryland's north bound; and beginning at Aquats, or the southernmost or first cape of



Augustin Herrman's great map of Maryland and Virginia, drawn and engraved (1673) in four sections, pieced together. The original four sections are in the British Museum, London.

These mighey High and areat Mountaines trouching NE and Silv and W.S.W. is supposed to be the very middle Kidg of Northern America and the only Natural Cause of the fierce. nes and extreame Storme Cold Wind that comes NeW from thence all over this Continent and in the frost And at Indians reports from the other fide Westwords 'so the Rivers take their Originall issuing out into the West Sea especially sirst discovered a very great River called the Black Minequans River our of which about the Susqualiana fort meets a branch Some leagues diflance opposit to one another outsthe Salequationa River where formerly those Black Minequas came over and as far as Delaware to trade but the Sassquahana and Sinnicus Indians went over and destroyed that very great Nation and whether that same River comes out into the Buy of Mexico or the Certain it is that as the Spannard West Sea is not known is possessed with great Store of Minneralls at the other side of these Mountaines the same Treasure they muy in process of time afford also to us here on this Side when Occupyed which is Recommended to Posterity to Remember North £ 37

Although tidewater areas are shown in considerable detail and with accuracy, not much could be supplied for heavily wooded, swampy, or mountainous inland regions. At such places (as shown above) Herrman placed descriptive sentences. On the Virginia portion of the map, for imstance, is this wording: "The land between James River and Roanoke River is for the most parts Low Suncken Swampy Land not well passable but with great difficulties, And there in harbors Tygers, Bears and other Devouring Creatures."



Only two copies of Augustin Herrman's map exist today - one in the British Museum,London, and the other in the John Carter Brown Library, Providence, Rhode Island.Actually the map consists of four separate sheets, each measuring about 15½ by 19 inches.These, when joined together, are about 37¼ inches wide by 31¼ inches high. The 1673 map by Herrman was looked upon as the only reliable map of Maryland and Virginia until the middle and late 1700's. Others who drew maps copied liberally from it.

Delaware Bay, in 38° 40', and so runneth by, or through, or including Kent Island through Chesapeake Bay to Piscataway (not far below what is now Washington, D.C.), including the Falls of Patowmack river to the head or northernmost branch of that river, being three hundred miles due west; and thence northward to the head of Hudson's River..."

"The preposterous geography of the above statement", comments the historian, Scharf, "shows what vague ideas with regard to the western world were current at the time."

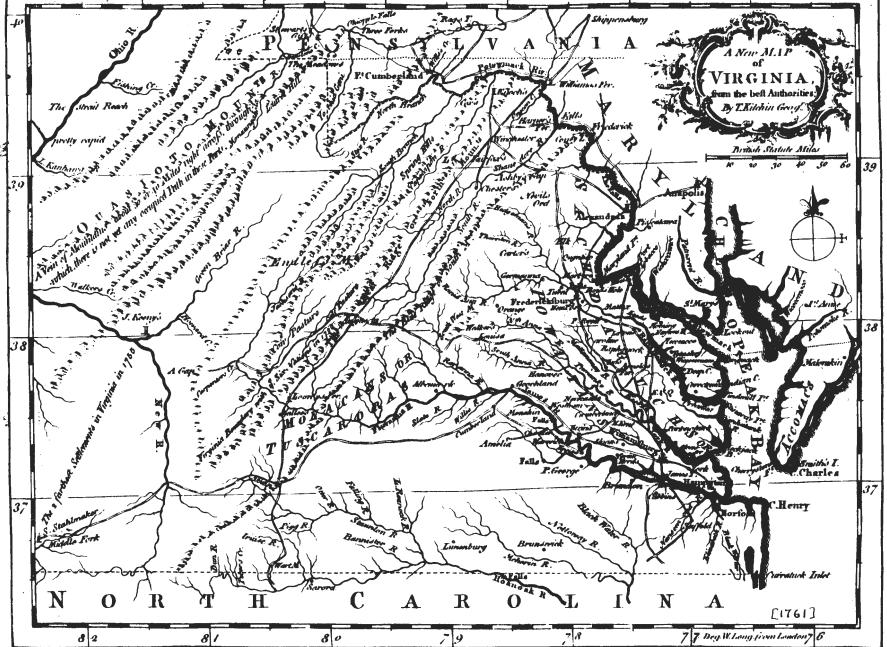
Sir Edmund thought of calling his colony "New Albion", and of starting a new order of nobility--- the "Knights of New Albion." He also planned for his daughter to be the "Baroness of Richneck", with an estate in what is now southern New Jersey.

In a way, it was fortunate that he never carried out all his plans. Sir Edmund did not get into a fight with the Dutch, the Swedes, the Calverts of Maryland, Captain William Claiborne of "Isle of Kent", or the original owners of the land (the Indians), simply because his "New Albion" expedition was a rather comic failure. It seems that he delayed about ten years before actually sailing to start his "dream settlement." When he reached the Delaware coast (by way of Virginia), his plans were successfully resisted by those who had already been living there for some time. To make matters worse, his crew mutinied and left him, half-naked, on an island--- "from which he was rescued, in the nick of time. He went back to England, and the province of 'New Albion' went with him."

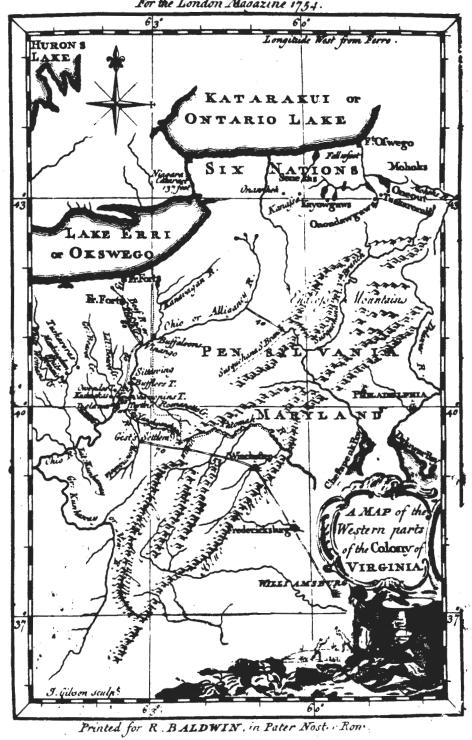
(NDTE: The preceding quotation has been taken from a very interesting book by Struthers Burt, called: "Philadelphia- Holy Experiment." Those who want more information about Sir Edmund--- or a great deal of fascinating comment about Philadelphia--- should consult it. Sir Edmund is duscussed on pages 21-28; also on pages 237-238 of Scharf's "History of Maryland, Vol. 1" and on pages 61-64 of "The Story of Early Maryland" by George and Virginia Schaun).

CLAIMS BASED UPON PRIOR DISCOVERY

Another difficulty came from the fact that some settlers based their claims upon "prior discovery." (The Dutch, for instance, claimed land far and wide because Captain Henry Hudson - an Englishman they had hired - sailed along the Atlantic Coast in 1609, landing and exploring here and there.) Some colonies (such as Virginia) made claims to land as far westward as the imagination could soar. (See the following two maps.)



For the London Masazine 1754.



THE INDIANS NEVER REALLY BELIEVED IN OWNERSHIP OF LAND

Most Indians looked upon land as something to be <u>used</u> by <u>everyone</u>. It is true that one tribe might claim hunting and fishing privileges for a particular area, driving away any intruders that happened to be hunting or fishing there. Though they might fight about this, the Indians still did not believe in ownership of land by any <u>one</u> person. Consequently, they seldom realized that the settlers thought they had <u>bought</u> land (as the Dutch did on Manhattan Island) in exchange for beads, hatchets, knives, and other such items. Very likely the Indian chiefs thought that they had sold nothing more than temporary hunting privileges, or that the new arrivals from Europe were just being generous with their supplies of colored beads and gaily-colored yard goods. But such misunderstandings became serious, especially when the settlers put up more and more fences and pressed the Indians back, farther and farther westward.

THE STORY OF THE DELAWARE-PENNSYLVANIA-MARYLAND BOUNDARIES BEGINS IN THE EARLY 1600'S

The story of the Delaware-Pennsylvania-Maryland-Virginia boundaries really goes back to the early and middle 1600's. The Dutch colony of New Netherland (New York) was governed from 1647 to 1664 by Peter Stuyvesant. One of his most dependable and brilliant helpers was Augustin Herrman who lived, with his wife and children, on Manhattan Island.

Stuyvesant, determined to end the boundary disputes with Maryland, once and for all, sent Herrman and another trusted representative to arrange a settlement.

DUTCH AND MARYLAND CLAIMS CONFLICT

In 1655, the Dutch had taken what is now Delaware from the Swedes--- and they meant to keep it. They preferred to do this without actually fighting Maryland. Yet Maryland's land claims (which the Calverts based upon a grant of 1632 from Charles I), extended to the 40½ parallel, north latitude, and overlapped those of the Dutch.Colonel Charles Nathaniel Utie of Maryland actually went to New Amstel (New Castle) in 1659, threatening destruction of that town unless its inhabitants paid taxes and gave allegiance to Maryland! War seemed likely.

HERRMAN POINTS TO A POSSIBLE FLAW IN THE MARYLAND CHARTER

One of Herrman's first moves, when he talked with Lord Baltimore's

representatives in Maryland, was a request to examine the wording of the Maryland grant. With little loss of time he pointed out two Latin words "hactenus inculta" ("hitherto uncultivated"). He argued that the lands given to Maryland should include only those "not previously cultivated and settled by Europeans." Since the west shore of the Delaware had already been cultivated and settled by the Dutch (1630-1632), Herrman therefore claimed that all this territory was "excluded from the King's grant."

HERRMAN MOVES TO MARYLAND, BECOMES A CITIZEN THERE, AND MAKES A SURVEY

The matter didn't end there. Apparently, the Marylanders were just as determined as the Dutch. Maryland officials learned that Herrman felt he had been unfairly treated by Stuyvesant. Furthermore, the Calverts preferred to have such a shrewd man on their side. It was not long before the Maryland Governor made arrangements so that Herrman could come, with his family, to Maryland, and become a citizen. In return, Herrman worked for ten years, surveying all the Delaware River and Chesapeake Bay land and water areas he could reach. From the information he painfully gathered in this way he drew a map (portions of which are reproduced on other pages). For well over fifty years, it was the best map for this part of North America.

Just as Omar Khayyam, the Persian mathematician, became famous because he wrote a poem (<u>The Rubaiyat</u>) so Herrman, the diplomat, planter, businessman, and statesman, became one of Maryland's most influential men - mainly by drawing a map.

THE ENGLISH FORCE THE DUTCH OUT, BUT WILLIAM PENN MAKES SIMILAR CLAIMS

It was in 1674 that the Dutch were obliged to give up their settlements to the British, by treaty. After that, the Dutch never again had any claims for land in North America. By this time, though, the great drama of land claims was just beginning. A new rival appeared on the scene. It was William Penn, to whom light-handed pleasure-loving Charles II had given (March 4, 1681) a patent (for what is now Pennsylvania).

Some of the principal events, both before and after William Penn's appearance as a claimant, are given on the following pages, in table form--together with some mention of other important events in various parts of America and Europe:

WHAT WAS HAPPENING IN THE DELAWARE RIVER - CHESAPEAKE BAY AREA

WHAT WAS HAPPENING ELSEWHERE

- 1607- Three English ships reached the Potomac River and established a permanent settlement-- Jamestown, Virginia.
- 1608- Summer: Captain John Smith and 14 companions met many dangers, and suffered many hardships, during two notable explorations of the Chesapeake Bay. After returning to Jamestown, Captain Smith drew a very good map of the Bay.
- 1612- Discovery of a new way to cure tobacco led to tremendous growth of tobacco as a crop and as a profitable item of export.
- 1614- 1620- Dutch ships explored the Delaware Bay and River (called,by them, "South River"-- as distinct from the "North River", now known as the Hudson).
- 1631- Spring: A whaling colony was established by the newly-formed
 Dutch West India Company, near
 the present site of Lewes, Delaware. This was named Zwaanendael.
 In 1632, however, news was brought
 to Holland: Zwaanendael had been
 destroyed by Indians, and its inhabitants had been massacred.
- March 25- The Province of Maryland was founded on the Potomac River, with Leonard Calvert as Governor. His brother, Cecilius Calvert, as Lord Proprietor, remained in England. Actually, this grant to the Calverts by Charles I, concerned land claimed by Virginia; but Charles I paid little attention to the protests of the Virginians.
- Spring: An expedition of the New Sweden Company (partly supported by the Swedish Government) bought land from the Indians (farther up the Delaware) at the present site of Wilmington. Colonies were established under various leaders, including Johan Printz (called "the big tub" by the Indians, because of his great size).

1611- England: The King James version of the English Bible (ordered by James I, in 1604) was published.

1632-39- The Taj Mahal was built in India. On Manhattan Island (New York) the Dutch settlers erected their first wooden church. Across the Atlantic, in Italy, Galileo first observed the phases of the moon by means of his telescope.

1636- Harvard College founded.

WHAT WAS HAPPENING IN THE DELAWARE RIVER- CHESAPEAKE BAY AREA

WHAT WAS HAPPENING ELSEWHERE

1649- Charles I, of England, was executed. Oliver Cromwell and his Puritan supporters took power there.

- 1655- The Swedes, along the Delaware, surrendered to the Dutch.Before long, the Maryland government was having a serious quarrel with the Dutch settled along the Delaware as well as with the parent Dutch government of New Netherland (New York). The Marylanders insisted that the grant by Charles I to Lord Baltimore gave them not only the land south of the Delaware but also all land right up to the 40th degree, north latitude. This would mean that their northern boundary would run through the center of the area now occupied by downtown Philadelphia! (Many years later--- 1736--- a Marylander named Thomas Cresap was arrested by Pennsylvania authorities because of his part in some rough boundary fights. As he was being paraded through Philadelphia streets he aroused a great deal of anger by saying, loudly and sarcastically: "Philadelphia--- the finest city in Maryland!")
- 1663- 1668- An unusual feature of the Virginia-Maryland boundary, as written in the charter of Maryland: the line was to run along "the farther (that is, the southern) bank of the Potomac, from the Chesapeake to the farthest source of the river, the western line to run from this point to the 40th parallel north latitude." To this day (though not without some discussion, both in and out of law courts) Marvland's Potomac River boundary has continued much the same. The U.S. Supreme Court (May 31, 1910) decided that the "uniform southern boundary of Maryland was at low-water mark on the south bank of the Potomac, to the intersection of the north and south line between Maryland and West Virginia..."

1665- London: The Great Plague
vividly described in the
1: famous Diary of Samuel Pepys
(pronounced "Peeps") killed
about 68,000. The following
sa- year, London had its Great
te Fire, when 13,200 houses and
89 churches were destroyed.

WHAT WAS HAPPENING IN THE DELAWARE RIVER - CHESAPEAKE BAY AREA (continued)

1663-1668- However, from the middle 1600's on, Virginia and Mary-land could not agree concerning which stream was the source of the river. When the dispute was finally settled, Maryland had lost about 500,000 acres of rich farmland (now forming part of West Virginia).

There were also conflicting ideas about just where Maryland and Virginia met on the Eastern Shore. In 1668, the Governors of the two states appointed Philip Calvert (a brother of the Second Lord Baltimore) and a Virginian named Scarborough to establish the meeting place. It appears that the line was not drawn straight and, in consequence, Maryland lost 15,000 more acres of land.

(See Encyclopedia Americana, Topic: Boundaries, U.S.)

1664-The Dutch surrendered to the British.

1674-The Dutch gave this area to the British (Delaware), by treaty, after having regained it for a short time.

1681-March 4- William Penn, a Quaker convert, by a patent from Charles II, became Proprietor of Pennsylvania.

(At that time, this was often spelled in several different ways, such as "Pensilvania"). Penn had wanted to name his Province "Sylvania". Charles II, when he read the text, inserted the word "Penn", before "Sylvania." Penn, objecting, said that he might be accused of vanity. "No, we will keep it," replied the king, "but not on your account, my dear fellow. We will keep the name in honor of the admiral, your noble father."

Augustin Herrman's well-planned map of the Chesapeake Bay and Delaware River areas (filed by Lord Baltimore with the Privy Council in England, during 1674) clearly showed the northern boundary of Maryland at the

WHAT WAS HAPPENING ELSEWHERE

1665-1684- Tea, newly introduced in England from India, was called "a curious brew". Isaac Newton's "law of gravity" startled many scientists. In Italy, Antonio Stradivarius had produced his first signed instrument- a violin.

WHAT WAS HAPPENING IN THE DELAWARE RIVER - CHESAPEAKE BAY AREA

WHAT WAS HAPPENING ELSEWHERE

1681- 40th degree, north latitude. Yet the charter granted to Penn gave him all the land:

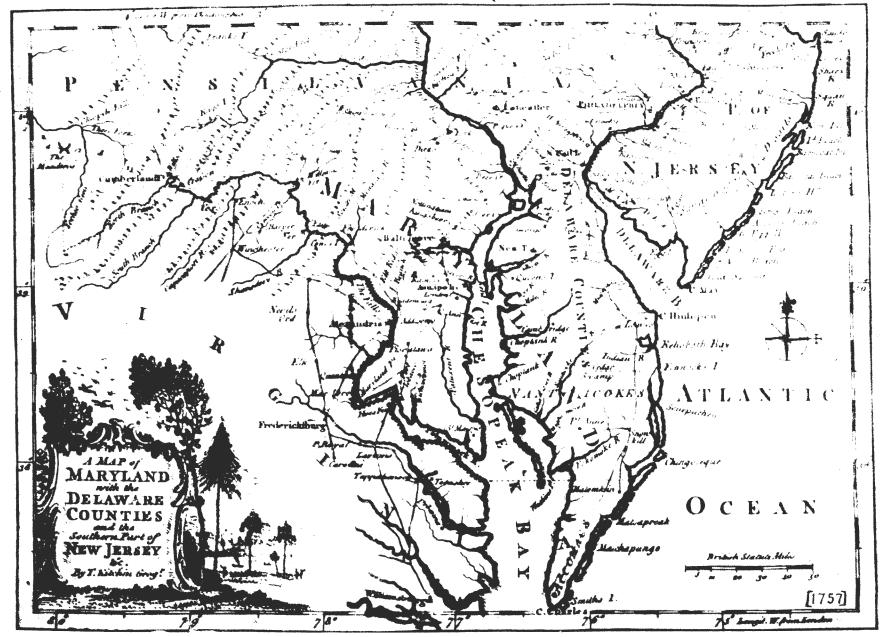
..."bounded on the East by the Delaware River, from twelve miles distance, Northwarde of New Castle Towne unto the three and fortieth degree of Northern Latitude... the said lands to extend Westwards, five degrees in Longitude... and the said lands to bee bounded on the North, by the beginning of the three and fortieth degree of Northern Latitude, and on the South, by a circle drawn at twelve miles distance from New Castle Northwards, and Westwards unto the beginning of the fortieth degree of Northern Latitude; and then by a straight line Westwards, to the limit of Longitude..."

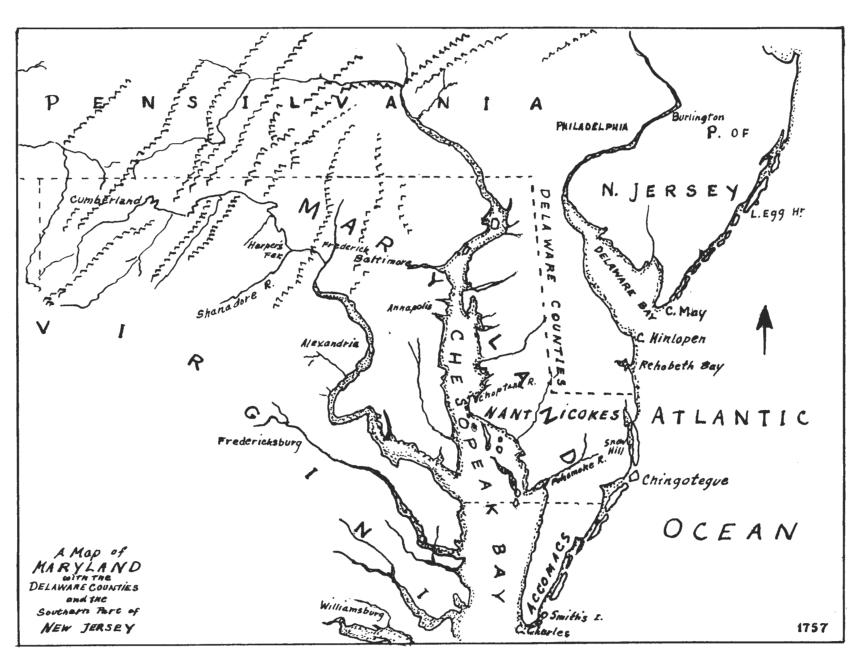
First of all, it would be impossible for such a circle to reach the 40站 degree of latitude. Secondly, this circle "drawne at twelve miles distance" might mean: 1) a circle having 12 miles circumference; 2)one having a radius of 12 miles, beginning in New Castle; or, 3) one having a diameter of 12 miles, with New Castle in the center. Since the wording was so indefinite, each side naturally chose the one which seemed most favorable to its claims. This circle, and its location, therefore became an important part of all the many quarrels, claims, and counterclaims that followed.

It appears that Penn was eager to have a port located on the Chesapeake Bay. At one time, he actually offered to buy enough land from Maryland to make this possible. Lord Baltimore, it is easy to understand, was unwilling to sell, fearing that this might be misunderstood in England, and that his entire Maryland grant would then be in danger.

Suspecting that his dreams of a Chesapeake Bay port might not come true, Penn (in August, 1682) persuaded the

1682- La Salle, French explorer, took possession of the lower Mississippi country, naming it Louisiana for King Louis XIV of France.





This map shows names (such as we would now. O The Allegheny M Others wer principal "C h e s c e s o atam p e features p e a k called , x s of the one reproduced opposite. Many k " Bay) were spelled differently than all like those used today. For example; led the "Endless Mountains." = =

WHAT WAS HAPPENING IN THE DELAWARE RIVER - CHESAPEAKE BAY AREA

WHAT WAS HAPPENING ELSEWHERE

- 1682- Duke of York (later James II)
 to give him the land along
 the west shore of the Delaware
 River--- previously taken by
 the English from the Dutch. It
 is this (now Delaware) which
 Penn usually called his "territories", and which, later, was
 known as "the three lower counties."
- 1683- The General Assembly of Penn's government was formed. To one of the "territories", he gave the name of Sussex, and the county seat was given the name of Lewes. To St. Jones County he gave the name of Kent.

Before long, it was evident that there were numerous disagreements between Penn's government and many residents of the "territories". Some refused to pay "quit-rents", claiming that these belonged to the Duke of York. A popular complaint was that Penn had failed to protect them against raids by pirates (such as the much-feared Blackbeard and Captain Kidd) and also against being bothered by Lord Baltimore's agents who claimed this land for Maryland. These agents sometimes collected taxes for Maryland at pistol-point. When payment was refused, they even seized property and imprisoned its ошners. To avoid this danger, some landowners actually paid taxes twice. Others refused to pay any taxes. There was desperate need, therefore, for setting boundaries which everyone would understand and acknowledge.

1685- The Board of Trade and Foreign Plantations recommended that "the land lying between the Delaware and the Eastern Sea, on one side, and the Chesapeake Bay, on the other.... be divided into two equal parts by a line from the latitude of Cape Henlopen to the fortieth degree of north latitude. "King James II ordered this division made.

1685- Death of Charles II. His brother, the Duke of York, takes the throne, as James II.

WHAT WAS HAPPENING IN THE DELAWARE RIVER - CHESAPEAKE BAY AREA

WHAT WAS HAPPENING ELSEWHERE

- 1689-1694- When the Bank of England was founded, banking in England land was gradually taken away from the goldsmiths. The noted writer and philosopher, Voltaire, was born 1694, in France. The famous insurance organization, Lloyds of London, was started in a coffee house. The court of Louis XIV, in France, was much interested in the fountains and waterworks which had been built at Versailles.
- 1700-1750- Beginning of the "Age of Reason", and such "new ideas" as "government by the consent of the governed", proposed by John Locke (1632-1704)
- 1704-America's first regular newspaper, the <u>Boston News Letter</u> was established. Deerfield, Massachusetts, was attacked by Indians who killed 40 and took 100 as captives.
- 1701- A survey made for William
 Penn, by Taylor and Pierson,
 showed the center of "the 12mile-circle around New Castle"
 to be "ye end of ye Horse
 Dyke at New Castle".(This
 point was changed to "the
 Court House spire, "approved
 in 1769 by George III)
- 1704- From this time until the American Revolutionary War, the "three lower counties"(Delaware) held (at New Castle) a separate assembly from that of Pennsylvania, and conducted most of their affairs as a Colony of the Crown (though without an official name). However, they went through the formality of accepting Penn's Governors, since these were approved by the King.
- 1718- Death of William Penn. His widow, Hannah Penn, and other heirs continued with the same boundary claims.
- 1728-A Botanical Garden-- thought to be the first in America-was started on the banks of the Schuylkill (Philadelphia), by John Bartram.
- 1729-A small village named Baltimore Town (now the City of Baltimore) was founded on the Patapsco River.

WHAT WAS HAPPENING IN THE DELAWARE RIVER - CHESAPEAKE BAY AREA

WHAT WAS HAPPENING ELSEWHERE

1732- The whole question of Pennsylvania-Maryland boundaries was referred to the Committee for Trade and Plantations, in England. Each side, realizing that land cannot always be described very well by words, supplied a map to support and explain its claims. Later, Lord Baltimore made several statements. First, and foremost, it was his contention that someone (not on his side) had secretly attached a false map to Maryland's documents. Be that as it may, the map in question actually showed Cape Henlopen (one of the landmarks to be used in determining part of the southern boundary of Pennsylvania) at the very spot where Fenwick Island actually is located--- about fifteen miles farther south than the Cape's true position. An agreement was announced, and Commissioners were appointed--- but there was little action, and the disagreements continued. (Fenuick Island had earlier been called "the false cape" because, from the sea, it did look like a cape).

1735- Freedom of the press was established in this country when John Peter Zenger, editor of the Weekly Journal in New York, was acquitted of a libel charge brought when he criticized British Governor Cosby.

1750- Lord Hardwicke, as High Chancellor, handed down a decree. He ruled, (after a Chancery suit) that "Cape Henlopen should be taken to be situated at the place where it is laid down and described in the map or plan annexed." There were some additional legal tangles, appeals, and decisions--- but Pennsylvania's case, at this point, had been won. What was needed, however, was an accurate survey.

WHAT WAS HAPPENING IN THE DELAWARE RIVER - CHESAPEAKE BAY AREA

1750-1751- Colonial surveyors, headed by John Watson, ran a line from Fenwick's Island to a point near the Chesapeake Bay (Taylor's Island). They also fixed a "Middle Point" and marked it (now the southwest corner of Delaware) about 6 miles west of presentday Delmar, Sussex County, Delaware, a town which actually straddles the state line). This "trans-peninsular line" was accepted by the Commissioners who had been appointed under an agreement of 1760. (See map on the following page). Meanwhile, the High Commis⊖ sioners had handed down a decision authorizing use of a circle having a 12-mile radius around the New Castle Courthouse. Watson and his men, who deserve credit for doing excellent work, continued by running a line northward more than 79 miles from "Middle Point." Here. they set up a post "twelve English statute miles from the spire of the Courthouse of New Castle."

> It is possible that this line, too, might have been accepted. However, it was learned, at this time, that the Commissioners had engaged two English mathematicians and astonomers, Charles Mason and Jeremiah Dixon. To these two Englishmen, therefore, fell the task of laying out the circle around New Castle, of checking John Watson's work previously done, of setting permanent stone markers, and--- last, but not least--- of establishing an east-west line which would be the southern limit of Pennsylvania. (See page 43, "Delaware: A Guide to the First State," 2nd edition, 1955, Federal Writer's Project, W.P.A.)

WHAT WAS HAPPENING ELSEWHERE

1750-1800- Gradually, the "Industrial Revolution" brought scientific advances, mass production, more "conveniences", and more leisure time.

- 1752- June 15- Benjamin Franklin, flying a kite in a thunder-storm, demonstrated that lightning is electricity.
- 1752-Adopting the Gregorian calendar, Great Britain and the American colonies dropped eleven days from the calendar. September 2 was followed by September 14.

SOME LANDMARKS OF THE CHESAPEAKE-DELAWARE BOUNDARY REGION Philadelphia PENNSYLVANIA The Wedge mington (formerly Fort Christina) Intersection Stone (1765, 1849 Castle (formerly New Amstel) Elkton Tangent Point (eastern end of C & D Canal) Milestone 82 (1766, 1849)NEW JERSEY Chesapeake & Delaware Canal (Started 1829) Dover Cape May DELAWARE Cape Henlopen (formerly the "Three (formerly Denton lower counties" of Hinlopin) Pennsylvania) Lewes (formerly Zwaanendael Middle Trans-peninsular Fenwick Point boundary line,1750-51 Island

Beginning in 1750, about 13 years <u>before</u> Mason and Dixon started their work (1763), colonial surveyors established the "trans-peninsular boundary line" (see above).

Mason & Dixon

1763- November 15: Mason and Dixon arrived in Philadelphia. (80th men had been assistants at the Greenwich Observatory in the late 1750's. In 1760, the Royal Astronomical Society had picked them to observe, in Sumatra, the transit of Venus. On the way there, however, they encountered heavy winds and so landed, instead, somewhere in South Africa).

They were occupied, at Philadelphia, from November 16 to December 18, in unpacking their instruments, building an observatory, and attending meetings called by the Commissioners. Among instructions given them were these:

"You are to Enter fair Minutes of your proceedings in two Books, to be by you kept for that purpose, which Minutes are every Day to be signed by both of you, and in such Minutes you will take Notice of the most remarkable Buildings, Waters, Bridges and Roads.... If the Lines you are required to run, pass through any Houses, Orchards, or Gardens you are not to destroy or Injure any such House nor cut down any Fruit trees without the Consent of the owners..."

Under the agreement of 1760, the northern boundary of Maryland had been decided upon as "a parallel of latitude fifteen miles south of the most southern part of Philadelphia."

Therefore, their first important piece of work was the establishment of the "latitude of the South Point of the City of Philadelphia"---39°, 56', 29.1". With wagons and tents, servants, axmen, and laborers, they worked their way 31 miles westward, and then southward to the Middle Point. On the way, they established the Pennsylvania-Maryland boundary at 39°, 43', 17.6" (very close to the figure used today), and completed the difficult task of laying out the 12-mile-radius circle around the land side of New Castle.

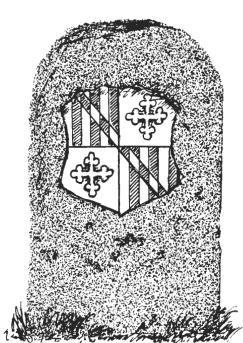
Last of all came the work of establishing and marking the east-west boundary, through rugged mountain country inhabited by various tribes of Indians. It was probably the hardest part of their job. (See map, next page). Several times, they were obliged to stop work temporarily, either because of difficulties with Indians or because of bad weather.

The Indian question was settled, in a way, by an agreement with the Six

The solid line, "2-3-4", represents the famous boundary line surveyed by Charles Mason and Jeremiah Dixon between 1763 and 1767. The dotted line, "1-2", had been established previously. Few people realize that the <u>first Mason-Dixon line</u> was the north-south one dividing Maryland from what is now Delaware. The east-west line was done a year or two later.



The title of a map drawn by Mason and Dixon during 1768, after they had finished their historic boundary survey.



One of the first stone markers placed for the Maryland-Delaware line.

Nations whereby fourteen "braves" were hired as an escort. However, about 245 miles from the Delaware River, the surveyors came to an Indian warpath (traditionally used by the Shawnees). Here, the Indian escorts announced that it was the will of the Six Nations that the survey stop <u>right there</u>. Mason, Dixon, and their companions attempted to go farther, without the Indian escorts, but soon realized that this might be extremely dangerous. Finally, they felt compelled to return to Philadelphia. Their work was finished in 1767. Neither one of them lived to see the east-west line carried to its conclusion.

NOTE: Some of the stone markers placed by Mason and Dixon (for instance, at the "Tangent Point" and elsewhere on the "Circle"), were of dark granite having rather poor quality. They had intended to replace these, later, but this was not done. Elsewhere, especially along the famous east-west line, Mason and Dixon used great care to place more durable monuments, having these made in England from colitic limestone. Learning a lesson from all this, Colonel Graham, and others who followed him, used granite of fine quality. (See the illustration of two "Tangent Point" markers, one bearing the letter "P", for Pennsylvania", and also two native-stone markers set up in 1760 - page 25). An illustration, of a marker placed in 1760 on the southern Delaware boundary is printed on the preceding page, and shows the Maryland coat of arms-(John Watson's survey).

Mason and Dixon set up somewhat similar stone monuments at five-mile intervals - each, as a general rule, having a crown cut into the stone over the Maryland coat of arms on one side and over the Pennsylvania coat of arms on the opposite side. Between these large monuments they set smaller stones, at one-mile intervals, having an "M" facing Maryland and a "P" facing opposite.

* * *

WHAT WAS HAPPENING ELSEWHERE

1766- "The Flying Machine"- a stagecoach line which usually managed to cover the 90 miles (of bad roads) between Philadelphia and Paulus Hook (now Jersey City) in two days! (See booklet entitled "Highways Of History," prepared by the Public Roads Administration. 25¢ postpaid, Supt. of Documents, Washington 25, D.C.)

WHAT WAS HAPPENING IN THE DELAWARE RIVER - CHESAPEAKE BAY AREA

WHAT WAS HAPPENING ELSEWHERE

- 1776- With the outbreak of the
 American Revolutionary War,
 the "Three Lower Counties"
 (now completely independent
 of Pennsylvania) became the
 State of Delaware. On December
 7, 1787, Delaware was the first
 state to ratify the U.S. Federal Constitution.
- 1781-Articles of Capitulation were drafted for surrender of the British under Lord Cornwallis, at Yorktown, Virginia.
- 1788-Jan. 26- First settlement made in Australia (then called New Holland) by the British, at Port Jackson.
- 1788- June 21- Adoption of the U.S. Federal Constitution was assured when New Hampshire (9½ state to take such action) ratified the document.
- 1788- The Maryland-Virginia boundary: A survey was made by Francis Deakin, but this did not settle certain disputes concerning the correct location of the line between Maryland and a part of Virginia which is now West Virginia. (See maps on pages 6 & 7). The charter of Maryland stated that the western boundary should be a line running due north from "the first fountain of the River Potowmack" to the northern limits of the grant. Mason and Dixon. when they completed their survey in 1767, had made no attempt to mark the place where the northern and western boundary of Maryland met--- and no survey of the western boundary had been made previously.
- 1845- America's first steam-heated building: the Eastern Hotel, Boston, Massachusetts.
- 1847- Michigan became the first state of the United States to abolish capital punishment.
- 1847- July 1- First U.S. postage stamps were placed on sale (5¢ & 10¢).
- 1849- Karl Marx and Engels issued their "Communist Manifesto", and urged "proletarians" to unite.

WHAT WAS HAPPENING IN THE DELAWARE RIVER - CHESAPEAKE BAY AREA

1849-1850- Colonel Graham's resurvey:

Because some important markers were reported missing, or in bad condition, Lt. Col. James D. Graham and other engineers were given the job of surveying and re-marking several spots including "the beginning of the curve, or north end of the 'Tangent Line.'" He placed substantial new granite posts (see below) at four important points of the circle measured as a 12mile radius from New Castle. One of these (at the northeast corner of Maryland) was marked with the letter "M" on the south and west sides, and with the letter "P" on the north and east sides (the "Wedge" being regarded by Graham as part of Pennsylvania). (See Page 29).

WHAT WAS HAPPENING ELSEWHERE

1849- California Gold Rush began, resulting from discovery of gold by James W. Marshall, in 1848, on a branch of the Sacramento River, near Coloma. At this time, the fastest rail-road trains travelled at an average speed of 25 miles an hour. Many Conestoga wagon and stagecoach companies were going out of business.

1849- "This is the place", said Brigham Young, when he and his advance guard of Mormons reached Great Salt Lake.



LEFT: The native-stone marker set up by colonial surveyors in 1760 (32 inches north of what is now the "true Middle Point"). RIGHT: The double "crownstone" placed in 1768, by Mason and Dixon, at the "true Middle Point". See map.

TANGENT 1849

FOREGROUND: The granite marker set up in 1849, by Colonel Graham and his surveyors, at the "Tangent Point." NOTE: A part of the weather-worn marker installed here in 1766, by Mason and Dixon, can be seen behind Colonel Graham's marker. See map.

WHAT WAS HAPPENING IN THE DELAWARE RIVER - CHESAPEAKE BAY AREA

1859- Another survey of the line between Maryland and a part of Virginia was made by Lieutenant N. Michler but without settling the dispute. This continued even after that portion of Virginia became the State of West Virginia (1862). A final settlement was not made until 1910 (see note under that date).

NOTE: Prior to the Civil War (18611865), the Mason-Dixon line
between Pennsylvania and
Maryland also came to represent a dividing line between
the "free states" and slave
states" east of the Ohio
River. Since then, it has
been looked upon as the dividing line between the
North and the South.

1885- The Sinclair Re-Survey: Mason and Dixon had been obliged to end their eastwest trail blazing at Dunkard Creek (about 15 miles southeast from present-day Waynesburg, Pennsylvania, and about ten miles northwest of Morgantown, West Virginia). This was 33 miles west of Maryland's farthest point, but 22 miles short of Pennsylvania's western limit. Meanwhile, West Virginia had become a state, and also was anxious to have its boundaries determined. With cooperation by the two states, the U.S. Coast & Geodetic Survey placed C.H. Sinclair in charge of surveying 45 miles of western boundary and 55 miles of southern boundary which Pennsylvania shares with West Virginia.

WHAT WAS HAPPENING ELSEWHERE

- 1859- "Dixie" composed by Dan D. Emmett, minstrel performer.
- 1859-Aug. 27- Oil boom started when the world's first oil well went into production at Titusville, Pennsylvania.
- 1859-October 16- John Brown, abolitionist, with 21 men, seized the U.S. Armory at Harper's Ferry. U.S. Marines, led by Lt. Col. Robert E. Lee, captured Brown and his party, killing 11.
- 1860- First Pony Express trip was made between Sacramento, Cali-fornia and St. Joseph, Missouri (1980 miles). There were 80 riders and 420 horses (changed every 10 or 11 miles) and 190 relay stations. Service continued until October 1861.

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- 1879-America's first "dime store" was founded by Frank Wool-worth, in Utica, N.Y.
- 1885-August 10- The first electric street railway in America began operations in Baltimore, Maryland.

WHAT WAS HAPPENING IN THE DELAWARE RIVER - CHESAPEAKE BAY AREA

1900-1903- A Re-Survey was made by Maryland and Pennsylvania, assisted by the U.S. Coast & Geodetic Survey, of the eastwest boundary originally established between those two states by Mason and Dixon.

As noted in their journal,
Mason and Dixon had been unable to take their wagons any
farther west than Sideling
Hill (roughly, between presentday Greencastle, Pennsylvania,
and Clear Spring, Maryland).
A number of stone markers--which could not be used--had been left near Fort Frederick; and mounds of earth and
stone were used to mark the
line after that.

It was during this re-survey that many markers not used by Mason & Dixon were found and put to use. Others, which had been moved and used as door steps (for a small church on the Baltimore-Cumberland Road, Route 40), horse-blocks, and building materials, were reclaimed. Some, which had been built into the walls of barns and houses were, naturally "beyond recovery."

WHAT WAS HAPPENING ELSEWHERE

- 1895- The first newspaper comic strip in colors, called "The Yellow Kid" was printed in the New York World.
- 1897- The country's first subway was opened in Boston, Massachusetts. The first New York subway went into operation October 27, 1904.
- 1900-1901- The Boxer Rebellion, in China, quelled by 18,000 British, American, French, Japanese, and Russian troops.
- 1901-President McKinley shot, at Buffalo; died September 14. Theodore Roosevelt became the 26± U.S. President.
- 1901-Dec. 12- Marconi, inventor of "wireless telegraph", signalled the letter "S" across the Atlantic Ocean.
- 1902-May 20- The Cuban Republic was inaugurated, and the American occupation of Cuba ended.
- 1903-May 23-Aug. 1- For the first time, an automobile crossed the United States, from San Francisco to New York City. The "horseless carriages"were becoming more popular, and some of them ("town cars" equipped with special batteries) were driven by electricity.
- 1903-Dec. 17- First successful flight of a heavier-than-air mechanically-propelled airplane, by Orville Wright, at Kitty Hawk, North Carolina.
- 1910-Feb. 8- Founding of the Boy Scouts of America.

WHAT WAS HAPPENING IN THE DELAWARE RIVER - CHESAPEAKE BAY AREA

- 1910- The disputes about the West Virginia-Maryland boundary were finally settled after Maryland brought suit against West Virginia, in the U.S. Supreme Court. The court ordered a re-survey, with the cost divided between the two states. To mark the line, 34 concrete monuments were set up.
- 1912-May 27- The line described above was declared the true West Virginia-Maryland boundary, by the U.S. Supreme Court.

1921- The "Wedge" Becomes Part of Delaware. (See map on next page).

After Delaware became a separate state (1776) a more or less "wedge-shaped" piece of land seemed to be unclaimed by either Maryland, Delaware or Pennsylvania (See maps).

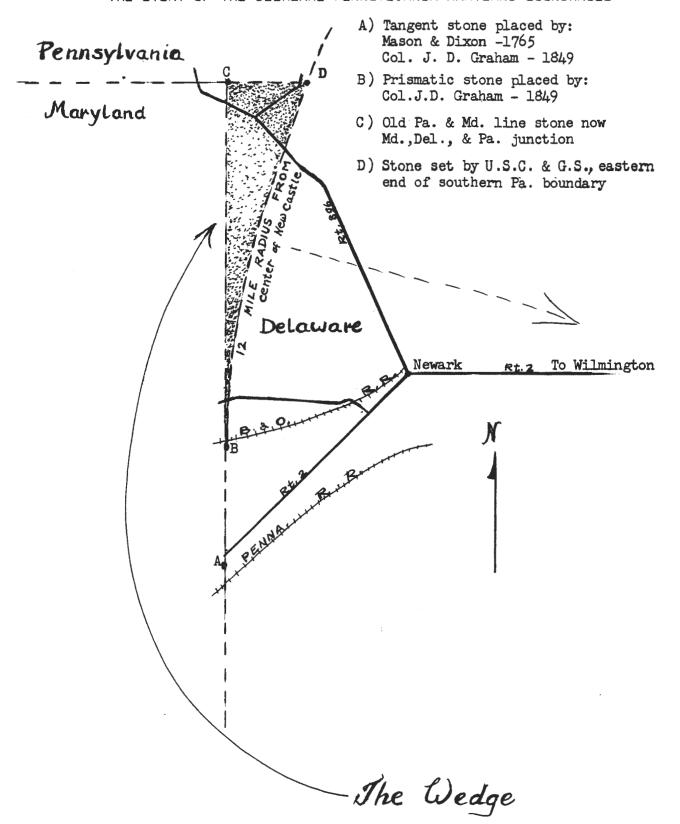
In 1920, this area contained 714 acres, having 39 owners. For many years they paid taxes to Delaware although that state did not officially recognize them and Pennsylvania actually appeared to have much stronger claims. Those who lived there might be described as "men and women who lived in a country but not in a state."

WHAT WAS HAPPENING ELSEWHERE

- 1910-May 29- Glenn H. Curtis won \$10,000 for the first continuous airplane flight from New York City to Albany (137 miles in 152 minutes).
- 1912- Captain Robert F. Scott and four companions reached the South Pole, January 17, but died on the return journey. Their suffering from lack of food was brought about because tin, used to solder cans of food, crumbled to bits as a result of the extreme cold.
- 1912-April 14-15- S.S. Titanic, on her maiden Atlantic crossing, struck an iceberg and was wrecked.

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1921-The Peace Treaty of the United States with Germany and Austria, officially ending the First World War, was signed by President Harding, July 2, and ratified by the Senate, October 18.



This formerly disputed "wedge" area was officially ceded to Delaware June 30,1921.

WHAT WAS HAPPENING IN THE DELAWARE RIVER - CHESAPEAKE BAY AREA

1921-(The "Wedge",continued:)
Where the "Wedge" narrowed
more and more,to a point,
a farmer could cross his land
in one step - while leaving
one state and arriving in
another.

After so many years of uncertainty, the U.S. Congress passed a resolution (June 30, 1921) by which the "Wedge" officially became part of Delamare.

1950- Inspections of the Maryland-Delaware and Maryland-Pennsylvania boundaries:

> The Maryland Board of Natural Resources had learned that the Maryland-Delaware boundaries--more or less neglected for nearly two centuries--- were not well marked. In addition, there were reports that some portions of the Pennsylvania-Maryland line were no longer clearly marked. Therefore, the Maryland General Assembly passed a resolution ordering an inspection to determine the condition (and proper placement) of the markers. On June 20,1950, the Board engaged Mr. Gwynn Reel "to inspect the Maryland-Pennsylvania boundary markers and Dr. A.L. Trussell to inspect the monuments on the Maryland-Delaware boundaries... Dr. Trussell not only furnished his own camera, and all photographic supplies, but declined to take any remuneration whatever for his work."

(NOTE:See pages 37-38 of "The Maryland-Pennsylvania and The Maryland-Delaware Boundaries", Bulletin No. 4, 2nd Edition, July 1959, by William H. Bayliff (paper-bound,

WHAT WAS HAPPENING ELSEWHERE

- 1950-Jan. 31- President Truman authorized the Atomic Energy Commission to produce the world's first hydrogen bomb (the "H-bomb").
- 1950-Dec. 11- The U.S. Supreme
 Court ruled that, under the
 Fifth Amendment to the U.S.
 Constitution, no one could be
 forced to testify against
 himself.

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NOTE: continued-

120 pp., illustrated, and with maps). Price: \$1.00, postpaid. Published by: Maryland Board of Natural Resources, State Office Building, Annapolis, Maryland.

This especially useful reference source contains a large amount of dependable historical information concerning the Middle Atlantic region, gathered during almost a year of patient and dedicated research by the author's wife.

Another reference book on this subject, which can be recommended, is: "Delaware: A Guide to the First State", compiled and written by the Federal Writer's Project of the W.P.A.--new and revised edition, May, 1955, by Jeannette Eckman, edited by Henry G. Alsberg. Its two companion books in this "American Guide Series", dealing with Maryland and Pennsylvania, are also well done, though a little out of date, here and there).

WHAT WAS HAPPENING IN THE DELAWARE RIVER - CHESAPEAKE BAY AREA

1961-1962- Re-Survey, by the U.S. Coast & Geodetic Survey, of the north-south Maryland-Delaware boundary.

WHAT WAS HAPPENING ELSEWHERE

- 1961-April 12- Major Yuri Gagarin, of the Soviet Union, was reported as the first human being to travel in space---launched into orbit from Siberia.
- 1961-July 23- The Eastern Time
 Zone of the United States
 was extended farther west, to
 include a large part of eastern Indiana and some of north
 central Kentucky. As a result,
 Fort Wayne, Indianapolis, and
 Louisville changed from Central to Eastern Standard Time.
 (See pages 128 & 471, 1963
 World Almanac)

THE STORY OF THE DELAWARE-PENNSYLVANIA-MARYLAND BOUNDARIES

- WHAT WAS HAPPENING ELSEWHERE

 1961-Aug. 12-13- The Border was
 closed between East and West
 Berlin, and a much-discussed
 wall was built there by the
 Communist East German Government to prevent escape of
 many of its citizens to the
 West- and freedom.
- 1962-Feb.20- Lt.Col. John H. Glenn went around the earth three times in U.S. "Project Mercury" space capsule, "Friendship 7."
- 1962-May 6- Nuclear-powered U.S.
 Submarine "Ethan Allen" fired
 a Polaris missile containing
 a nuclear warhead which exploded in a testing area of the
 Pacific Ocean.
- 1962-Aug. 27- "Mariner II", a 447pound space probe was launched
 at Cape Canaveral, Florida,
 and, several months later,
 passed near the planet Venus,
 sending back scientific data
 to the earth.

* * *

A FINE PRESENT-DAY EXAMPLE OF COOPERA-TION AND FRIENDLY MUTUAL HELP

The inspections, in 1950, resulted in a great deal more friendly cooperation and teamwork than Peter Stuyvesant, William Penn, or the Calverts would ever have dreamed possible.

Previously, no agency or official of Delaware or Maryland had been responsible for protecting and maintaining State boundaries. As one direct outcome of the inspections, however, the Maryland General Assembly passed an Act (1951- Ch.614) "prohibiting removal or injury of an official marker" and providing for cooperation, by the Maryland Board of Natural Resources, with neighboring states in anything concerning protection or restoration of boundaries. The text of this Act was then sent to Delaware officials and the Delaware General Assembly, in that same year, passed a somewhat similar Act (Ch.256).

THE STORY OF THE DELAWARE-PENNSYLVANIA-MARYLAND BOUNDARIES

Pennsylvania, it was found, already had a law"enabling the Department of Internal Affairs to cooperate with any state adjacent to Pennsylvania in maintaining their common boundaries."

As another result of the inspections, the U.S. Coast & Geodetic Survey was asked to re-survey the Maryland-Delaware boundaries - beginning with the north-south line. (The actual start of the survey was postponed until 1961 because of the work on hand.)

Beginning in 1951, a number of informal talks were held by representatives of the three states. "In these conferences, the cordial relationships ... contrasted sharply with the bitter boundary disputes which covered part of the seventeenth and much of the eighteenth century."

"SOMETHING THERE IS THAT DOESN'T LOVE A WALL...."

In preparation for the 1961-1962 re-establishment of their north-south dividing line, by Maryland and Delaware, each appropriated \$10,000 to pay for repairing damaged markers - re-setting those which had been moved, and replacing missing ones. Of the six reported missing in 1950, Milestone No. 42 is believed to be covered by a man-made lake, above the dam at Choptank Mills, Delaware. Milestone No. 10 is reported buried at a depth of several feet, under a highway which now follows the boundary. Some others had been moved from their proper positions, either by man or by weather conditions. Others, more or less in place, had been damaged by farm equipment. A great many had been scarred by hunters or others who had used them for target practice. All this is likely to make one think of some lines by a gifted American poet, the late Robert Frost (1875-1963):

"Something there is that doesn't love a wall, That sends the frozen-ground-swell under it, And spills the upper boulders in the sun; And makes gaps even two can pass abreast...."

THE FIRST MASON-DIXON LINE-ESTABLISHED BEFORE THE MARYLAND-PENNSYLVANIA BORDER

When the "Mason and Dixon Line" is mentioned, many people think of just one boundary--- the one running from east to west, and forming the southern limit of Pennsylvania. Actually, however, as previously indicated, Mason

THE STORY OF THE DELAWARE-PENNSYLVANIA-MARYLAND BOUNDARIES

and Dixon surveyed and marked the north-south Maryland-Delaware line a year or two earlier.

THE 1961-1962 RE-SURVEY

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The re-survey of the <u>first</u> Mason-Dixon Line, about ninety miles long, was begun in autumn of 1961 by men of the U.S. Coast & Geodetic Survey. The team of present-day surveyors--- compelled to stop work now and then because of snow-drifts or heavy rains--- finished their work about six months later. Meanwhile, they lived in trailers, and made use of other modern equipment which would have been eagerly welcomed by the earlier trail blazers.

To avoid disturbing farm crops, orchards, or industrial activities, the modern "chain and transit" men erected steel towers, at one-mile intervals, over various markers. These steel towers made it possible to do much of their work "in the air."

It is pleasant to report that the surveyors of today had high praise for the accuracy and thoroughness of Mason and Dixon's two-century-old work. Beyond doubt, Mason and Dixon would have made equally complimentary remarks about the dedicated men of today's U.S. Coast & Geodetic Survey.

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SOME ADDITIONAL REFERENCE SOURCES

In addition to the reference books mentioned in the text, several others will be found helpful. These include the "Encyclopedia Americana", and other encyclopedias (particularly under heading of "Boundaries"); "A New American History" by W.E. Woodward, 1938, Garden City Publishing Company, Garden City, N.Y.- pages 59 to 73, for some unusual bits of opinion and early history; "The American Colonies, 1492-1750" by Marcus Wilson Jernegan, a paper-back republished 1959 by Frederick Ungar Publishing Company, N.Y.C.-pages 194 to 222, for historical background; and "My Maryland," by Kaessmann, Manakee and Wheeler, published 1934 and revised 1955, by the Maryland Historical Society, 201 W. Monument Street, Baltimore 1, Maryland.

A concise newspaper account of Mason & Dixon's survey, well worth consulting, is in the December 2, 1956 issue of <u>The Baltimore Sunday Sun</u>, Rotogravure Section; and additional information will be found in <u>The Baltimore Sun</u> of December 25, 1938.

Accounts of the 1961-1962 re-surveys will be found in The Baltimore Evening Sun, October 16, 1961 and The Baltimore Sun, September 9, 1962.

Probably the best single source of information is the previously-mentioned publication by William H. Bayliff, published by the Maryland Board of Natural Resources. (See pages 30-31).

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DEPARTMENTAL LIBRARY AND INFORMATION CENTER DEPARTMENT OF FULLIC INSTRUCTION DOVER, DELAWARE 19901

Edited and revised by W.S. Schenck 7/1/94. DELAWARE GEOLOGICAL SURVEY BOUNDARY REPORT

July, 1994

CHRONOLOGY:

*1631

April,

A Dutch Colony was established at Whorekill on the west bank of the Delaware River on land bought from the Indians. This Dutch settlement was known as Zwaanendael (now Lewes). It disappeared within one year when the inhabitants were massacred by Indians.

*1632

A second Dutch settlement was established on the Delaware River and was also quickly abandoned. When colonists arrived there were no European settlers within the territory included in Lord Baltimore's charter.

"The Maryland Charter" for land in Maryland was granted to George Calvert, First Lord Baltimore, by King Charles I, of England. " All of the land from the colony of Virginia, north to 40 degrees latitude, with provision that it was land previously uncultivated by man".

* 1661

Confirmation of Lord Baltimore's Charter for land in Maryland by Charles II.

* 1682

August 24,

William Penn was granted two deeds and two leases from the Duke of York for land west of the Delaware River between 40 and 43 degrees north latitude; "The Lower Counties of Pennsylvania" (Appendix to Vol. 1, De. Laws, pt. 1). This granting of land resulted in the loss of a large part of Lord Baltimore's land.

December,

Negotiations began between Lord Baltimore and William Penn over the boundaries of their lands.

*1683

March,

A formal grant from Charles II was issued to William Penn for "The Three Lower Counties of Pennsylvania".

* 1685

November 13,

*1739-1740

Temporary Line of 1739-1740: On May 1738, the proprietors of Maryland and Pennsylvania met at the Privy Council at Kensington and agreed to settle their differences over lands in the area of Philadelphia and the Susquehanna River. It was felt that the preceding Order in Council had put an end to border difficulties in the three Lower Counties. A temporary agreement was made to preserve peace while work was in progress which placed all land above 15 miles south of Philadelphia and not occupied by either party, in possession of the Penns, and all south of it in the hands of Lord Baltimore. The survey of the disputed territory on either side of the Susquehanna River commenced in the spring of 1739. The surveyors line was continued to a point 88 miles west of the Susquehanna River.

* 1750

(CHANCELLOR'S DECREE); Lord Hardwicke, the High Chancellor, ordered that the Decree of May 10, 1732 be carried out. The decision was made in favor of the Penn Proprietors. Commissioners were appointed to lay out the boundaries as laid forth in the 1732 agreement.

SURVEY OF THE TRANSPENINSULAR LINE:

Colonial Surveyors: Pennsylvania- William Parsons

John Watson

Maryland- John Emory Thomas Jones

Commissioners: Ryves Holt (PA)

Col. Robert Henry Jenkins (MD)

* 1751

January 5,

Work began on the Transpeninsular Line at Fenwick Island, soon to be delayed by weather conditions.

April 27,

Colonial Surveyors resumed their work on the Transpeninsular Line and extended the line westward toward the Chesapeake Bay.

June 15,

Colonial Surveyors reached the eastern side of the Chesapeake Bay (69 miles, 4917 feet from the "0" mark at Fenwick Island). A granite stone monument, marked _ M/P, was set at 33 miles from "Cape Henlopen" (really Fenwick Island) and another like it at 34 miles, 309 perches.

-Monuments were set at Fenwick Island and at 5,10,20,and 25 miles from the ocean, plus the Terminal Point (Middle Point) half-way between the Delaware and Chesapeake Bays. The terminus of the Transpeninsular Line was judged to be at a distance of 34 miles, 309 perches. This stone, therefore, is the official midpoint marker of the peninsula. The

surveyors then located "true" middle point by going to the 35 mile post and finding a point 11 perches east of the same where they put up a white oak post at an apparent distance of 34 miles and 309 perches from either shore of the peninsula. A cut stone 2 feet, 8 inches, to the north of the post marking "true" middle point was then set. A similar stone was placed at the 30 mile point on the Transpeninsular Line, since this post had not been permanently marked by the surveyors of 1751.

* 1760

July 4,

Final Agreement for the allotment of the "Three Lower Counties of Pennsylvania" to the Penn Heirs.

Signed: Lord Baltimore (MD) Thomas Penn (PA) Richard Penn (PA)

November 16,

Lord Frederick (successor of Lord Baltimore), the Maryland proprietor, and the Pennsylvania proprietors entered into an agreement on the basis of articles already written up in 1732 and incorporated into the Chancellor's Decree of 1750. The agreement was signed by the following Board of Commissioners:

Maryland: Governor Sharpe Benjamin Tasker, Jr.

Edward Lloyd

Robert Jenkins Henry

Daniel Dulaney Stephen Bordley

Reverend Alexander Malcolm

Pennsylvania: James Hamilton William Allen

Richard Peters Benjamin Crew Lynford Lardner

Ryves Holt

George Stevenson

The Union Republican

GEORGETOWN, DEL.

PUBLISHED WEEKLY

FRIDAY, JULY 18, 1919

Entered as second-class matter February 17, 1898, at the Postoffice at Georgetown Delaware, under the Act of March 3, 1879

Interesting Article Written on Stone Monument on Boundry Line at Finwick Island Light

While at Fenwick's Island Lighthouse a few days age the following article, written by F. H. Shelton, of Philadelphia, was shown us, and we publish it for the benefit of our readers:

Immediately behind the store | Penn on the north. is a stone monument or marker, stone is the first stone erected in connection with the Mason and Dixon line survey; is the first, the ocean's edge. only and original stone; was set up there 168 years ago, and is of great historic interest.

When King Charles of England granted Penn his 29,000,000 acres in 1681 that now form the state of Pennsylvania, a controversy immediately began, with Lord Baltimore, who owned the Maryland territory, as to the boundary line. As Penn acquired, also, what is now Delaware, it affected the line of that territory as well. This controversy raged through three and four generations, and was not settled until Apparently it was settled in wrangling by the second genera tion, both sides signed up a long agreement. But Baltimore figured that he had gotten the worst end of it, and did not go forward in the carrying of it out, as the surveys called for, etc. So, in surveys called for, etc. So, in 1735, Penn went to Court in England with a bill of complaint and prayer for an order to compel Bal-timore to live up to it. For fifteen long years it was fought through the higher English courts, resulting in a final decision on May 15th,

This is the house of the Fenwick Island light, stone that stands there to day. Stones were further set up at the apparently of granite, having the cept at the 15 mile point, where a arms of William Penn carved on river prevented. So there should the north side and the arms of Lord be and probably there stand to-day Baltimore on the south side. This yet, precisely similar stones to the stone is the first stone erected in light house stone, at the 5, ro, 20 and 25 mile distance points, from

> After that running of the line across to the Chesapeake, 69 miles and 298 perches, the middle point was taken—34 miles and 309 per-ches—and that was the starting point for the north line, which was and is, the present west line of Delaware. Soon after this Lord Baltimore died, and that delayed things, and nothing was done for another ten years nearly; when under a new agreement of 1760, between the then generation of the s Penns and Baltimore, surveys were started again on this north line, the object being to lay it out so as to hit the twelve mile circle, 80 miles above, determined upon for the northern boundry of Delaware and with New Castle as the centre. The surveyors made such a poor job of that, despite several efforts, that after three years Penn and Baltimore, in England, hired Mason and Dixon, two engineers of note, to go over to America, take charge and do the job. That is how and when Mason and Dixon s came into the matter.

They arrived in 1763, accepted the lower, or east or west lines, 1750, entirely in Penn's favor, and across the Peninsula as right, rerandirecting both sides to go ahead in the north line, and they ran the across the Peninsula as right, reran

1750 and at once proceeded to wrangle and dispute further as to facts and details, and do no actual work. Finally the Penn side said that they might as well start the lower east and west line anywaythe only one they were not quarreling over; so they appointed two surveyors to go there, determine the compass variation and start the survey of the line (which was and is the present lower line of Dela- from England. The top was a flat ware state). The surveyors arriv- pyramid and the arms were fancy, ed at Fenwick Island in December. They drove a stake at a point 139 perches west of the "Main Ocean" at a group of four mulberry trees where the light house now stands. Then they measured east to the "Verge of the ocean" and began the line there. (They could put no permanent mark at the water's therefore, has the above story attached to it. It is wenerable, his 6 miles west, and then quit, for the weather had come off bad, their cabin had burned up and the exposure was great. So things rested until the spring of 1751.

In April, 1751, all hands met at Fenwick's Island. The Commisthe previous December, and approved; and on April 26, 1751, a stone was set up, where the stake had been, having the arms of Lord in succeeding years, will do his Baltimore on the south side and of part to protect and preserve it.

90 days to survey and lay out and line from the N. W. corner of mark the boundary lines that had Maryland, west, to the end, about been finally agreed upon. Both 223 miles. This is the generally sides appointed Commissioners to understood Mason and Dixon line; meet in America, to do so. They but as stated, they also ran the met in New Castle in the fall of north and south line that is the 1750 and at once proceeded to west boundary of Delaware. Five years were occupied in this, and not until 1768 was the last stone set that ended the controversy of nearly a century.

On the north and south line, and on the west line stones were set up every five miles (same as in 1751), but these stones were a new lot of limestone monuments, 12 inches square, made in and shipped and the stones quite different from the ones on the east and west line of 1751, that starts from the ocean at Fenwick's Island light. It is sup-posed that these latter were also made in England and sent over, but of that I am not certain.

edge). They measured then some tached to it. It is venerable, historic and of great interest. It has stood the exposure remarkably well, as the carving is still in good condition. As the first stone set up in the Penn-Baltimore controversy, and the first stone of what later became the Mason and Dixon survey sioners were shown the work of it is a monument of interest, and it is hoped that this, its brief story, will be preserved in the Fenwick Island light, and that every keeper

ORPHANS' COURT SALE

TRUSTEE'S SALE

Real Estate

Situate in Lewes and Rehoboth and In-River Hundreds, Sussex Coun-and State of Delaware, to and be sold under proceedings in partition as the lands of Josephine R. Spencer, Benja-min W. Robinson, Jr., and Walter P. Robinson.

By virtue of an order of the Orphans' Court of the State of Delaware, in and for Sussex County, made on the 9th day of July, A. D., 1919, I will expose for sale by way of public auction, on

Saturday, July 26, '19

at ro'clock, p. m., at the Rodney House, in Lewes, in Lewes and Rehoboth Hundred, Sussex County, Delaware, the

formerly of Charles Goldsborough, on the North-east by a Branch and by War-ren's Creek, and on the North-west by lands formerly of Zadoc Milby, contain-ing three hundred and seven (307) acres, more or less, improved by two sets of dwellings and outbuildings thereon, the dwelling houses being two story houses. Being the same lands conveyed by deed of bargain and sale from Robert Phillips. et. al., to Benjamin W. Robinson, said deed bearing date January 2, 1901, and recorded in the office of the Recorder, &c., at Georgetown, in Deed Record, C. G. J., at Georgetown, in Deed Record, C. G. J., No. 135, Folio 189, &c. Tract No. 2.—All that certain tract,

Tract No. 2.—All that certain tract, piece or parcel of land, situate in Indian River Hundred, Sussex County, Delaware, adjoining lands now or late of William S. Robinson, Tilghman L. Robinson, William A. Hazzard, John T. Hazzard, Arthur A. Hazzard's heirs, William Davidson, Harbeson Hickman's heirs, William T. Warrington and others, containing one hundred and seventy-three (173) acres, more or less, improved by a two-story dwelling house and outbuildings thereon. Said tract consists of sevings thereon. Said tract consists of sev-Tract No. 1.—All that certain tract, piece or parcel of land, situate in Lewes and Rehoboth Hundred, Sussex County, Delaware, described as follows: Bounded on the South by Rehoboth Bay, on the Southwest by Love's Creek and lands

Marker Recalls Early Land Dispute

Fenwick Island Lighthouse Near Spot Dividing Estates Of Lord Baltimore And William Penn

By HELEN GRAHAM STILES.

FENWICK Island Lighthouse stands guarding the shoals along a lonely ocean front where 157 years ago a dispute of nearly a century was settled about the Maryland boundary at just this spot.

Here remains the first stone erected in connection with the Mason and Dixon line survey, which resulted from the long controversy between Lord Baltimore and William Penn regarding their overlapping land grants.

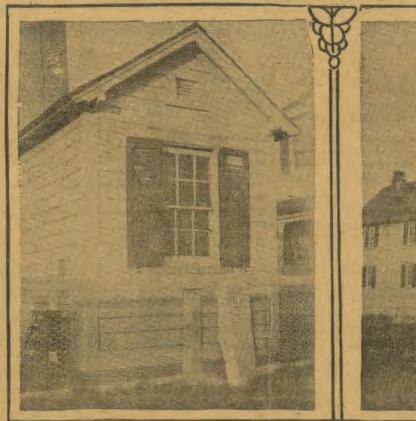
Visitors to the summer resorts of Ocean City, Md., and Rehoboth, Del., make special trips every season to the tower. A six-mile drive over slag road and sand, after turning off from the easterly highway, leads through an unfrequented tract, partially cultivated, to the Government reservation, which fringes the Maryland line, but is entirely in Delaware.

Many stories and legends are told about the small monument that marks the dividing line of the two States. Conflicting statements spread confusion regarding the reason for the stake at this point.

Few people really know the authentic account of the days when the aging slab was set in the marshes by the sea.

Many of the tourists who visit Fenwick Island climb the steep steps to the top of the white brick turret and gaze out at the span of blue water and across the flat, bare country without observing the modest stone at the rear of the station storeroom.

OTHERS, who ponder over the carving on the granite, receive erroneous impressions of the history which placed the arms of Lord Baltimore on the south side and the arms of William Penn on the north side.





Left, the first marker of the Mason-Dixon line which stands beside Fenwick Island light. Right, the light, showing the old marker at extreme right.

proceed within ninety days to survey, lay out and mark the boundary lines, according to the decree.

Commissioners were then appointed to represent Lord Baltimore and Penn. They met in New Castle, Del., in the fall of 1750, where prolonged diversity of opinions prevented the surveyors from accomplishing any actual work.

dunes in an ever-changing pattern. Here they built a crude cabin, back from the shore, and set to work. But the odds were against them.

"After measuring to the east 'verge of the ocean,' as they called it, they continued west for some six miles. About this time their hut burned. The exposure was severe, and had it not been for the friendly ministrations

starting point for the north line, which was —and is—the present west line of Delaware.

But again came a delay in the survey, when Lord Baltimore died, and for nearly ten years nothing was done. In 1760, under new agreement, the then generation of Baltimore and Penn, started the running of the north line.

The plan was to hit the twelve-mile circle

A. T. Stites a stocky, strongly built man, whose hair is beginning to turn gray. For fourteen years he has been in service on the secluded island.

During that time he has gleaned much information from vanied sources about the origin of the old marker.

"The true meaning of the stone has a long prelude and must not be confused with the Mason and Dixon line, which separated the free States from the slave States," the captain said.

"Sometime ago," he said, "a memorandum was prepared for the station records by a historian who studied the place. He made his summary from well-established facts, he told me, and from data procured from the Historical Societies of Maryland and Dela-

"I believe that I can show you a brief but complete chronicle of the stone and why it was planted at Fenwick Island before the more generally understood Mason and Dixon line at the northeast corner of Maryland, running west, was recognized."

ENTERING his home, which flanks the light tower to the west, the keeper was gone for a few minutes. Fe returned with a ledger and some bulky papers.

Then from the finely typed pages of some creased sheets he offered an outline of the bitter quarrel which terminated only after Jeremiah Mason and Charles Dixon, English astronomers, had been brought to the shores of Fenwick Island.

When King Charles of England, in 1681, granted William Penn his 29,000,000 acres, which now form the State of Pennsylvania, a dispute immediately arose with Lord Baltimore, who owned the Maryland territory, as to the boundary line, the historian writes.

Previous to this the Duke of York had leased all of what is now Delaware to William Penn for the period of 10,000 years. This section was considered as "the lower counties," and thus became involved in the altercation.

For three or four generations the dispute was carried on. Apparently settlement was reached in 1732, for in that year, after continuous argument by the second heirs, both sides signed a long agreement.

Lord Baltimore, however, figured that he had gotten the worst of the bargain and did not go forward in perfecting his pledge, as stipulated.

So in 1735 Penn went to the Court of England with a bill of complaint and a prayer for an order to compel Lord Baltimore to live up to his word.

OR fifteen years the case was fought I through the higher courts. At last, in May. 1750, the decision was made entirely in Penn's favor. Both sides were directed to

Finally Penn's agents decided that they might as well start in at the lowe reast and west line, since that was the only one about which there was no argument.

TWO surveyors therefore were assigned to I proceed to Fenwick Island to determine the compass variation and start the survey. By this time the winter had crep upon them and it was December when the engineers arrived at their destination.

They drove the first stake at "a point 139 perches west of 'Main Ocean,' at a group of four mulberry trees" in the exact spot where the lighthouse stands today.

·Looking up from the paper the lighthouse keeper paused for a moment.

"I often think of those young Englishmen," he said, "as I sit in the watch tower on duty, and I picture them landing on this bleak beach where the wind swept the sand of the Nanticoke Indians they would have

"With much of their outfit destroyed the Englishmen were unable to complete the work. They remained until spring with the Delaware tribe of red men and as the weather cleared they turned north again."

History concludes the story, however, with the narration of the general meeting by the commissioners at Fenwick Island soon after. The work of the previous December was

ON April 26, 1751, the stone now standing on the island was set up where the stake had been. Other markers were placed at five-mile intervals for twenty-five miles, except at the fifteen-mile point, where a river prevented.

From the line which ran across to the Chesapeake, 69 miles and 298 perches, the middle point was taken. This formed the

of government at New Castle and which still curves into the Pennsylvania boundary BECAUSE the surveyors made such a poor job of their contract the Maryland and Pennsylvania heirs engaged Mason and

which had been laid out in an arc by the

Duke of York so as to protect his center

Dixon, in England, to come to America and take over the work. This is how the two engineers of note came into the matter.

Arriving in the new country in 1763 they came to Fenwick Island first. After deliberation they accepted the lower of east and west line, across the peninsula, as right. In this way the old marker became the first stone of the famed Mason-Dixon survey.

On the north and south line and the west line the stones used by the surveyors were of a new lot of limestone about twelve inches

They had a pyramidal flat top and were made in and shipped from England. In appearance they are quite different from the one at Fenwick, which is also supposed to have come from England.

"And that," says the lighthouse keeper, "is the way it all happened."

Another tradition centered about the island is the tale that the first Lord Baltimore, pleased with the prospect of developing the country, once intended to plant the city of Baltimore here, where it would face

He relinquished the idea, it is said, when he found that the inlet, which then offered the natural means of-local communication. opened and closed periodically with elemental forces. He then decided to establish his stronghold on the Western Shore.

AS for Fenwick Light, itself, the captain says, a more modern, if not less interesting history may be woven.

The building was erected in 1857 and the first light blinked out on the treacherous shoals on January 1, 1858, although the tower was not actually finished at this time. Since then the station has been in constant service.

It is rumored that the tower will be abandoned in the near future, the keeper asserts. The need for such shore guards is now decreasing rapidly as the barges and smaller sailing vessels are being replace! by the bigger ships which travel outside the fifteen-mile radius of the light.

"Lighthouses are more like human beings than most of us imagine," Captain Stites declares. "Some of them are tall, some short, some strong, some weak.

"They are of many colors, shapes and sizes, and I even believe they are possessed of divers dispositions. Some are lonely. dreary and bleak, some are cheerful, colorful and seem to bask in an aspect of content.

Bowling's The Thing Nowadays

playing. They were skillful players, but they did not keep their minds on the game to the exclusion of everything else, and many glances were cast toward the pretty

bobbed-hair blonde and her good-looking instructor. "There's that blonde flapper," remarked

one of the five. "This is the fifth time in two weeks I've seen her here being taught how to bowl, and each time she's been with a different fellow.

"I'll say she's got a good line-you know how men love to show off before the ignorant and admiring female. Huf."

And, as if disdainful of such methods, she sent her ball down the alley with a vicious swing that resulted in a strike. However, there was a reflective gleam in the eye of two of her companions.

IF bowling could be utilized as a line—Well, it was worth trying, and everyone knows the girl at the summer resort who has to be taught to swim is more popular than the one who is a perfect mermaid and can beat the man in a race to the raft any old time.

Both men and women, say the authorities on the game, are taking to bowling to reduce—and then they become devoted to the pastime for its own sake. At any bowling center there is proof of this. Close to the group of girls there was a party composed of two fat, midle-aged men and their two fat, middle-aged wives.

The scores of this party were not so high. but as the avoirdupois decreases, doubtless the scores will increase. Puffing rather heartily, both the fat men were already engaged in a deadly rivalry.

"Oh, yes," explained the manager of this floor, "there are lots of stout people here all the time! I don't believe you can find anything better for the figure."

Then there are the young men and women, evidently workers who find in the hour or two passed at this sport the exercise needed after a day in the office or behind the

Employes of many large organizations in the city have formed leagues and these leagues have stated evenings for playing.

That women have invaded this sport as one of their rights and privileges is indicated most strongly by the fact that one company is represented by sixty girls in twelve teams of five girls each.

Women not of the business world, say the managers of these centers, are beginning to drop in during the afternoons for a few games.

How much energy is utilized in one game of duckpins, described in terms of manpower, has so far as is known not been decided, but after noting the mighty swing given when the ball is sent on its way it is impossible to deny that it is a great developer of muscle.

As to the distance covered by the balls, one can make an accurate computation.

A bowling alley is eighty-two feet over all, with sixty-three feet from foul line to pit end. Two bowlers, says an authority on the

(Continued on Page 10.)

Den Ry # 173B

SENATE BILL NO. 362

AN ACT WITH REFERENCE TO THE BOUNDARIES OF THIS STATE BY ESTABLISHING CERTAIN DUTIES OF THE STATE ARCHIVIST AND CHIEF ENGINEER OF THE STATE HIGHWAY DEPARTMENT WITH RESPECT THERETO AND BY PROVIDING A PENALTY FOR THE DESTRUCTION OR WITHHOLDING OF ANY BOUNDARY MARKER,

BE IT ENACTED BY THE SENATE AND HOUSE OF REPRESENTATIVES OF THE STATE OF DELAWARE IN GENERAL ASSEMBLY MET:

Section 1. The monuments marking the common boundaries between the State of Delaware and any adjacent state or commonwealth, are hereby declared to be the joint property of the State of Delaware and such adjoining states or commonwealth. The State Archivist and the Chief Engineer of the State Highway Department are hereby authorized and directed to examine at least every five years the monuments marking the boundaries of this State. Whenever the State Archivist and the Chief Engineer of the State Highway Department shall find the monuments marking the boundary between Delaware and any other state or commonwealth to have been lost, moved, removed or defaced so that the boundary thereof becomes obscure, inaccurate or incorrect, the State Archivist and the Chief Engineer of the State Highway Department shall cooperate with the state officials of any adjacent state or commonwealth in the replacement, restoration or repair of the monuments and the said common boundary line. The State Archivist and the Chief Engineer of the State Highway Department are further authorized on behalf of the State of Delaware to make joint agreements and to enter into joint contracts with appropriate officials or agencies of any adjacent state or commonwealth and with the United States Coast and Geodetic Survey or any similar neutral party or agency to resurvey, remark or otherwise delineate more thoroughly any part of any common boundary between the State of Delaware and any adjacent state or commonwealth; provided, however, that any resurvey made shall reproduce with

greatest possible fidelity the present established boundaries of this State. The State Archivist and the Chief Engineer of the State Highway Department, their authorized agents or employees, are hereby authorized and empowered to enter upon any property for the purpose of examining any boundary monument, provided, however, that this Section shall not authorize the said State Archivist or the Chief Engineer of the State Highway Department, their agents or employees, to enter during the growing season upon any land planted in crops which might be damaged by such entry.

Section 2. Any person or persons who shall move, remove, break, mutilate, deface, destroy, or otherwise injure any monument or monuments marking any boundary between the State of Delaware and any adjacent state or commonwealth shall be guilty of a misdemeanor and upon conviction thereof shall be fined a sum not exceeding Fifty Dollars (\$50.00) for each and every offense. Any person or persons who shall have in his or their possession any monument heretofore placed, or prepared to be placed, upon any of the boundary lines herein specified shall upon demand being made for the same by the State Archivist and the Chief Engineer of the State Highway Department, surrender and deliver the same to said Archivist or the Chief Engineer of the State Highway Department, or to their authorized agents or employees; and upon failure of any such person on demand to surrender and deliver such monument as heretofore required, such person shall be guilty of a misdemeanor and upon conviction thereof shall be fined a sum not exceeding Fifty Dollars (\$50.00) for each and every offense.

THE FIRST STONE OF THE TRANSPENINSULAR LINE

Sitting just outside the fence surrounding the Fenwick Island Lighthouse is the first stone set in place by Commissioners of Maryland and Pennsylvania to mark the Transpeninsular Line of 1751. As such it is the oldest standing, man-made object on the coast between Indian River Inlet, Delaware, and Ccean City Inlet, Maryland, and marks, as well, Delaware's southern boundary with the State of Maryland. Known as a "crown stone", the monument bears the coat-of-arms of the Calvert family, the Lords Baltimore, of Maryland on its south side and those of the Penn family, proprietors of Pennsylvania and "the Three Lower Counties Upon Delaware" on its north side.



TRANSPENINSULAR LINE MONUMENT STONE

- SOUTH SIDE-

CORT. OF ARMS OF THE LORDS BALTIMORE, THE CALVERT FAMILY, OF MARYLAND. ~ NORTH SIDE ~

CORT OF ARMS OF THE PENN
FAMILY OF PENNSYLVANIA
AND "THE THREE LOWER
COUNTIES UPON DELAWARE."

The Transpeninsular Line, like the later Mason-Dixon Line which begins at its "middle point" at Delaware's southwestern corner, was a product of the nearly century-long boundary dispute between the Penns and the Calverts and the efforts of the King of England to bring that dispute to an end. The boundary dispute itself was extremely complex and a full discussion of it is beyond the scope of this brief account. Suffice it to say that its cause was the unfortunate habit of English sovreigns in those heady days of discovery to grant the same lands to several different persons, a habit made all the more complicated by the fact that 17th century maps rarely agreed with actual geography. To be quite accurate, all of what is now Delaware is contained in the limits of the grant made to George Calvert, First Lord Baltimore, by King Charles I in 1632 (though the Calverts didn't attempt to settle the area until 1634). However, the western shore of the Delaware Bay

was first settled by the Dutch with an unsuccessful settlement at the mouth of the bay near present-day Lewes in 1631. In 1638 the Swedes established a fort at the mouth of the Christina River at what is today Wilmington. This settlement survived and led to the permanent European settlement of the western side of the Delaware. The Lords Baltimore were not aggressive about pressing their claims to the area, being content to develop the far more fruitful shores of the Chesapeake and its tributaries.

In the 1670's, at a time when the Dutch had temporarily superseded the Swedes in the Delaware Valley at the same time that their nation was at war with England, James, Duke of York (soon to become King James II), sent a fleet to attack Dutch possessions in the new world. His men succeeded in taking the Dutch settlement of Niew Amsterdam, promptly renamed New York, and other Dutch possessions in both the Hudson and Delaware Valleys, including those lands on the west bank of the Delaware which technically fell within the limits of the Calverts' grant. Possession, as the old saying goes, is nine points of the law, particularly when the possessor is the brother of King Charles II and he won the possession in a military conquest. Thus, the Calverts did not consider it prudent to press for the return of these lands, at least not at that time.

he situation became considerably more complicated in 1681 when the young quaker William Penn petitioned King Charles for a large grant of land to the north of Maryland in payment for a large debt owed to the estate of his late father, Admiral Sir William Penn. chances weren't hurt any by the fact that he was a close friend of the Duke of York. Though Penn ostensibly agreed to honor Lord Baltimore's land claims, the wording of his grant when it was made was sufficiently ambiguous that he could press a claim to extensive portions of lands claimed by the Calverts along their northern border with his new domain. Then in 1682 Penn also obtained title to "The Three Lower Counties Upon Delaware" from the Duke of York, which he had sought in order to give his Pennsylvania domain access to the sea. From this point onward the boundary dispute was in full bloom, occasionally even breaking out into violence as public officials from one side or the other would seek to collect taxes from residents of an area claimed by the other side. situation also created great uncertainty as both proprietors would grant lands to settlers in the same area.

The matter of determining the boundaries was referred by the King to the Board of Trade and Foreign Plantations in 1685. That body soon took up a clause in the wording of Lord Baltimore's original grant noting that it was for "hitherto uncultivated" land. Noting that the Dutch had actually established a settlement in the area between the Delaware and the Chesapeake in 1631, the year before the grant to Lord Baltimore was made, and that the area had thus been inhabited by Christians, they recommended that from the latitude of "Cape Henlopen" northward to the fortieth parallel the land between the bays be equally divided between the two parties. Although the King signed an order to that effect in the fall of 1685, nothing formal was done to carry out the order because of the period of instability which followed in English politics.

Through the early 18th century settlement proceeded at such a pace that the lack of formal boundaries between the two colonies became more and more of a problem. Efforts began once again to work out a resolution. Each side submitted a map showing their proposed solution. The map which was finally accepted turned out to be favorable to the Penns, although

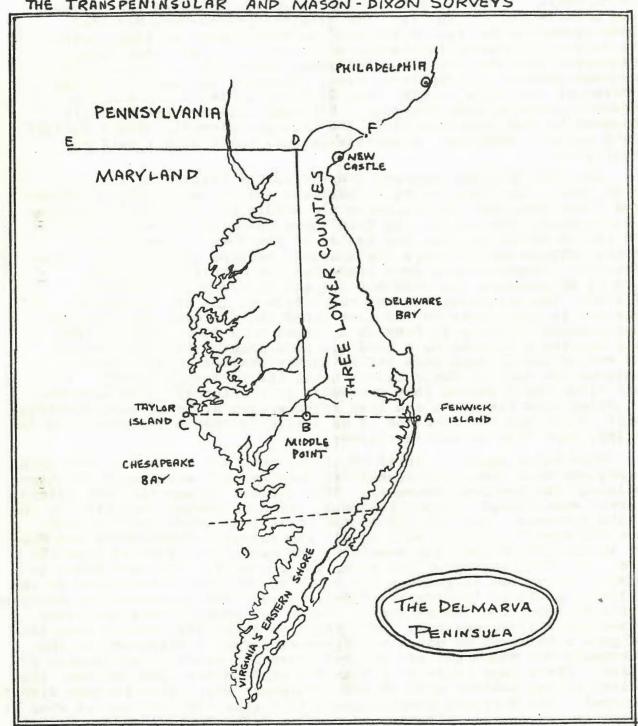
they always contended that it had in fact been the Calverts'map. The Calverts contended that the map which was approved had somehow been substituted for theirs. The original proprietors had long since passed on and the battle was now being waged by their heirs. The matter of primary importance with regard to the later Transpeninsular Line was that Cape Henlopen, which was to serve as the southern boundary of the Three Lower Counties, was shown as being located at Fenwick's Island, some 20 miles south of the point we presently know as Cape Henlopen. Although this map was formally accepted by both sides in 1732, the Calverts promptly sought further court action, resulting in another lawsuit which wasn't settled until 1750.

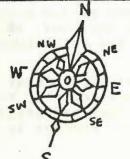
The 1750 British Chancery Court decision called for a survey to be done. The first order of business was to run a line westward from "Cape Henlopen" to determine the middle point of the peninsula. A north-south line was to run from there to intersect with a circle run twelve miles out from the center of the Town of New Castle, before turning west to mark the boundary between Maryland and Pennsylvania. Commissioners were appointed for both sides and the work of determining the middle point got underway in December of 1750. The beginning was not auspicious as the two surveyors sent out to begin work on the line faced heavy storms and then had their temporary cabin at Fenwick's Island burn down, leaving them only partially clothed on a cold winter's night. But they stayed and worked for 22 days more before winter weather forced them to postpone the rest of their labors until the following spring. that first short season they succeeded in running the line westward six miles from Fenwick's and they set a wooden stake at their starting point, which was the location of an earlier wooden stake they took to be left over from an earlier survey.

Work began again on April 22, 1751, when two surveyors from each colony met with the commissioners to consider the work begun at "Cape Henlopen" the previous December. They decided to use the line already started even though a local resident, one John Bowden, reported to one of the surveyors that the old wooden stake from which the line had been run wasn't a survey mark at all but rather a stake which had been set in the ground near the beach for the making of lines to fish for drum. But the feeling of all hands was apparently that one stake at Fenwick Island was as good as any other so the drum stake stood as the beginning point of the Transpeninsular Line. The surveyors for Maryland were John Emory and Thomas Jones. Those for Pennsylvania were John Watson and William Parsons. They began on April 27th and by June 12th had gone a total of 66 miles to Slaughter Creek, a tributary of the Chesapeake Bay which cut off an area known as "James's" or "Taylor's" Three days later at a distance of 69 miles, 298 perches, they arrived at the eastern side of the Chesapeake Bay. Here another dispute The Maryland commissioners felt that the line should stop at occurred. Slaughter Creek, the tributary of the bay. The Pennsylvanians felt it should run to the open water of the bay. The matter was handed over once more to the Lord High Chancellor in England for a decision, which, given the usual snail's pace of the boundary dispute, was not handed down until 1760.

In the meantime, however, the surveyors had set five permanent crownstone markers at intervals of five miles, with one exception, to mark the first 25 miles of the Transpeninsular Line. They had originally intended to set the first stone at Fenwick's Island, 139 perches in from

THE TRANSPENINGULAR AND MASON - DIXON SURVEYS





- KEY-

TRANSPENINSULAR LINE - LINE A-C MASON AND DIXON "NORTH LINE" - LINE 8-D MASON AND DIXON "WEST LINE" - LINE D.E - POINT D-F 12-MILE CIRCLE

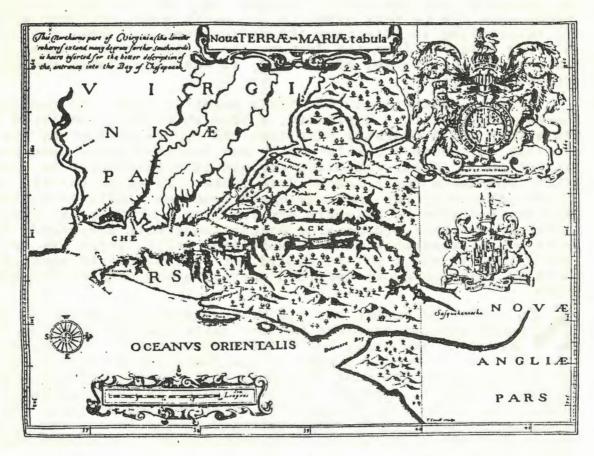
"the verge of the main Ocean" and to set a stone each five miles to the 25-mile point, for a total of six stones. However, only five were set in place because the 15-mile point fell in the midst of the Great Cypress Swamp and the headwaters of the Pocomoke River and it proved impossible to set a stone there. Finally, in 1760, the Chancellor ruled that the Taylor's Island end point was the proper one, making the peninsula officially 69 miles and 298 perches (4,817 feet) wide. In that year another stone was set at the 30-mile point and a stone marking the middle point was set at what is now the southwest corner of the State of Delaware, a fraction shy of 35 miles west of the ocean at Fenwick's Island.

The monuments used for marking each five-mile interval of the Transpeninsular Line were cut especially for this purpose of native American stone. Each was a rectangular prism 4.5 inches by 8 inches in cross-section and with a rounded top. On the south side of the stone were the Calvert arms; on the north side, the Penn arms. It is interesting to note that the design used for these coats-of-arms differs slightly from the design used on the crown stones of the later Mason and Dixon Survey of 1764-67, as does the design and shape of the stones themselves.

Having established the middle point in 1760, the commissioners began running a line northward, a task which they completed by 1763. This line would probably have been the final one had not the two English astronomers Charles Mason and Jeremiah Dixon been hired to assist them. Mason and Dixon arrived in Philadelphia on November 15, 1763, and began their labors from there. As noted earlier, Mason and Dixon officially ran the line north from the Middle Point forming the western boundary of Delaware and the line west from the circle to form the southern boundary of Pennsylvania with Maryland. While their work was a remarkable feat of surveying skill, given the level of technology at the time, it should not overshadow the equally impressive work of the home-grown American surveyors who ran the Transpeninsular Line.

prominence in American history while the Transpeninsular Line which served as the basis for it gets relegated to the footnotes of history is that in the 19th century the Mason-Dixon "west line" came to be synonimous in the public mind as the division between north and south. Slavery, where it existed, was confined to the area south of the Mason-Dixon Line while everything north of it was the realm of the yankees. Delaware, a slave state which remained in the Union, was an anomaly, being the only state east of the Mason-Dixon Line rather than north or south of it.

One of the curious aspects of this entrance of the Mason-Dixon Line into the realm of public folklore is that many of those living along Delaware's southern border during the 19th century, knowing that Mason and Dixon had been active in their general area, knowing that there were crown stones along the boundary line, and hearing that the Mason-Dixon Line divided north from south, became convinced that Delaware's southern boundary was part of that line. This sounds reasonable enough if one has never taken the trouble to delve into the historical details and it has been passed down to generations of persons living in Sussex County, Delaware and Worcester County, Maryland as historical fact. Even today



REPRODUCTION OF LORD BALTIMORE'S ORIGINAL 1635 MAP OF HIS MARYLAND DOMAINS. NOTE MOUNTAINOUS DELMARUA PENINSULA AND OTHER FANCIFUL TOUCHES.

there is a well-known and long-established motel at Fenwick Island which is known as the "Mason-Dixon Motel." The southern boundary of the motel property is actually on the Transpeninsular Line and the establishment is some 35 miles away from the nearest point on the Mason-Dixon Line, but there it sits in veneration of a historical error some 130 years old. Ten miles to the west in the Town of Selbyville is "The Mason-Dixon Printing Company" and over the years there have been dozens of other places of business with names honoring the wrong line.

Perhaps, though, one shouldn't be too much of a stickler for accuracy. After all, if the Transpeninsular Line surveyors had started their work at the real Cape Henlopen, instead of starting at what everyone mistakenly thought was Cape Henlopen, everything in Delaware south of Lewes, including the entire Delaware Ocean Coast, would be in Maryland. If William Penn hadn't played fast and loose with the wording of his and Lord Baltimore's land grants, not only the City of Philadelphia but the entire state of Delaware would be in Maryland. In the meantime there sits quietly, year after year, decade after decade, at the foot of the Fenwick Island Lighthouse the first stone of a line, the surveying of which Charles Mason and Jeremiah Dixon had absolutely nothing at all to do with.

By Richard B. Carter, 1986

A NOTE ON SOURCES:

A vast amount has been written over the years on the history of the Mason-Dixon Line and a lesser amount on the Transpeninsular Line. While there are many primary sources of great interest, two secondary sources have been used as the basis of this short account. They are:

- REPORT ON THE RESURVEY OF THE MARYLAND-PENNSYLVANIA
 BOUNDARY, PART OF THE MASON AND DIXON LINE, Published
 by the Mason and Dixon Line Resurvey Commission at the
 direction of the Legislatures of Maryland and Pennsylvania
 in 1907. This volume was printed by both states with two
 separate covers covering the same contents. Mine was
 published by the Maryland Geological Survey. The most
 useful parts are Part III, "History of the Boundary Dispute..."
 and Part IV, "Manuscripts and Publications ..."
- BOUNDARY MONUMENTS ON THE MARYLAND-PENNSYLVANIA AND THE MARYLAND-DELAWARE BOUNDARIES by William H. Bayliff. Annapolis: 1951. Bulletin No. 4 of the Maryland Board of Natural Resources.



Report Prepared for the Boundary Commission

April 2, 1979

Mr. Lawrence C. Henry, Director Division of Historical and Cultural Affairs Hall of Records Dover, DE 19901

Dear Larry:

I wish to acknowledge, with thanks, the report concerning the Transpeninsular Line that was prepared by Ned Heite of the Division of Historical and Cultural Affairs. I appreciate the careful research and professional preparation evident in that report and hope you will convey my thanks to Ned. I am transmitting copies to the members of the Boundary Commission.

Sincerely,

Robert R. Jordan Chairman, Delaware State Boundary Commission

RRJ:mac

OFFICE OF THE DIRECTOR

RECEIVED

APR 4 1979

April 3, 1979

DELAWARE GEOLOGICAL SURVEY

Dr. Robert R. Jordan State Geologist Delaware Geological Survey University of Delaware 101 Penny Hall Newark, Delaware 19711

Dear Bob:

Enclosed is the first report from Ned Heite concerning the transpeninsular boundary. He indicates further information is forthcoming.

Should you have any questions concerning this first report please do not hesitate to contact Ned.

Sincerely yours,

Lawrence C. Henry

Director/State Historic
Preservation Officer

Enclosures

State of Delaware

FIRST REPORT
on the
TRADITIONAL BOUNDARIES
in
LITTLE CREEK HUNDRED

April 1979 '

Bureau of Archives and Records Hall of Records Dover, Delaware

INTRODUCTION

At the request of the Boundary Commission, the Bureau staff investigated the existing public records that relate to the southern boundary of Delaware (the Transpeninsular Line) in Little Creek Hundred, Sussex County.

Staff researchers sought to find records that clearly delineated the boundary, with reference to landmarks that might be located in the field. No attempt was made to field-check the data.

Sussex County road dockets and deed books were examined for plots that related to the location of the line. Highway Department contract files were consulted without success.

We are continuing to search the title of properties adjacent to boundary stones.

1. The Town of Delmar

Delmar was originally laid out as a railroad division-point around 1860. No plot of the town has been discovered for that period. Our researchers believe that the town plan resulted from piecemeal land sales over several years, since no plot of the entire townsite has been found.

An Act of Assembly dated March 3, 1899 (20 Delaware Laws Chapter 286) is Delmar's town charter. Section I of the Act required the commissioners to make a town plot and file it with the Recorder of Deeds. This plot was executed and filed in Sussex County Deed Book 134, pages 268 and 269. A copy is included herein.

The plot, certified on July 7, 1899, clearly shows the state line along State Street. The line's bearing was S82930'E, but the street was neither straight nor parallel to the state line.

Delmar's irregular street plan confirms the supposition that the town grew incrementally, and that there was no original plan. The present street alignments therefore probably can be correlated with old property lines that, in turn, can be tied to the traditional location of the state line.

No attempt was made to trace the individual titles in Delmar, but they certainly can be tied to the railroad right-of-way and the state line.

2. The Road Record Evidence

Since 1793, Sussex County has kept separate roadalignment records. Before the creation of the present highway system, the Levy Court and the Court of General Quarter Sessions and Gaol Delivery had jurisdiction over road locations.

Road alignments were recorded in road books, which were kept at the court house. Road commissioners were generally quite careful to note each landowner's exact frontage, since the plots were used to compute "damages" paid to landowners.

The first plot of interest is August 25, 1886. It is found in Road Book 1878 (The books are designated according to the first year they were used), page 516.

In this case, the county was opening a new road from the Providence Church-Salisbury Road to the Maryland-Delmar Road. The new road was 744.5 poles long, and adjoined the state line. There are enough landmarks on the plot for a surveyor to confidently identify this road in the field.

In the order to lay out this road, on page 515, the court specified that it was to be built on the Delaware side of the state line.

Thus the order and plot, Appendix B of this report, is a Delaware court's assertion of the location of the state line, nearly a century ago.

The second plot of interest concerns the location of the road from Salisbury to Line M.E. Church. This plot appears in Book 1878, page 508, and was returned in 1886. The road in question was opened to connect the road to Line Church with the road from Delmar to Whitesville. The plot clearly shows that the state line ran to the north of the line road at this point.

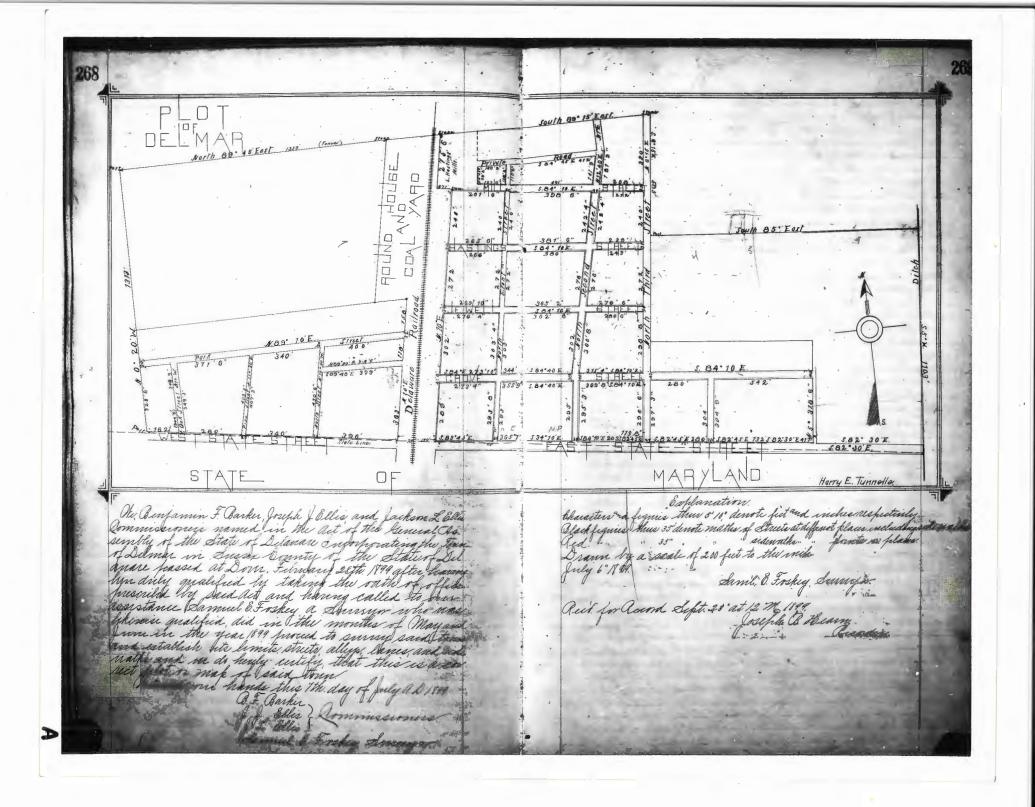
CONCLUSION

The evidence given in these three documents should be sufficient to establish the location of the traditional boundary of Delaware in Little Creek Hundred. Many property corners, rights-of-way, and natural landmarks are noted, together with magnetic north.

It should be possible for a surveyor, using modern property boundaries and rights-of-way, to accurately locate these line locations in three separate sites. Major property division lines seldom deviate from their traditional locations, and several of the roads are known to survive.

While the town plan is almost certainly a transit survey, the road plots are most likely compass surveys. Nonetheless, the road surveys obviously were chained, and the error should be no more than 33 feet over the whole distance.

One of our archivists is currently tracing the title to the property where stone 30 stands. Its location, on the south side of the line road, has been called into question by some local residents, according to our researcher. However, we have every reason to hope that some survey in the chain of title will mention the boundary marker. This research naturally will take some time, but we feel that it could be the most fruitful line of research.



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an order to Lay sente al Wew Public Ro and in Rights Breeze Hundred. State of Delaware Survey Country & JBe it Remont that at a Count of governal session of the Seaso at Gorgetown. Derm a. D Eighteen hundred and Eighty ship before the Konorable Joseph 3. Comeggs by John It. Stouchon Judges of Raid Court the petition of Elyal It. Kinney Inc. St. Startings " 12 Others was read to the Bust foraying the same to appoint fire fresholders of the County agoreand to go West. View and lay out a Hest spublis and in Little Creek House Reginning on the Allaware side of the State line, dividing the State of Delaware from the 8 take of maryland at the Public Road more leading from Frontena. Med. But, church to Salisting Maryland and bandler of Elijah M. Kinney so running from thence across said Kenney's land in an Easterly direction clong he sclowers side of the aforesaid state line across lands of John A Hashup of moses across Moses Har land Johathan Waller's land, Eli & Hastingo land and cande & Elijato Process to and Germinating at a Bublio Grad leading from the State of manyland into the Village of Delmar. Whereupon the Court offe ainte & Leving Hill Job Dimucal, Joseph. Phillips . Jas , & willey Capt . wow Hearn Ju dicious impostial fresholders of the said County to view the premises (tring finet sworm or affirmed) and determine concerning the fame and make return of their fracedings under their hands or the hands of a majority of them to faid Court on the first day of the next terms thereof to te held in and for the Raid County and auchorizing them to Employ. of necessary a excepted and impartial Surveyor to te nominated and appointed by them or a majority of them and the said freeholders are directed that if they or a majority of them shall determine that there is seed you a new Public road as mentioned no the aforecaid Jestitions then they shall lay out such Rublic road as in there Juniet Should be Onoch Joropor, baving respect to making of the fround, the shortness of the distance and all Circumstances of Jublic or ferivate Convenience or detriment and Shall Cause a draft of said road to be made, referesenting the Comment distanced thereof with notes of the most remarkable pleases and of the Wordland, cleared Land and improvement by or through which the Jame shall pase and shall access the dance ges of every the Ordners or horders of said hands and improvements on occasion of the lax ing Out of Raid good taking into Consideration are the circumstances of benefit or injury which wiel acome to each owner or hoeses have from any dwall make a Comportation of the Costs of opening and morking said road and the brigges & Convertage Thereon, Letting down the Fereral items Jaain Tooks and that if a road be laid Out the said fresholder should in their return set forthe among their former dings a description of said road and their determination that there in suced for the same for Suthis Convenience and Allace annex to their return The aforemention deraft Artestimony where I the are herealth det my hand and affine he real of the said Courts. Ebe W. Sunnell C. B

State of Delaware Dohn H. Elist Justice of the Sease it hereby Certify Survey Sunty S that device J. How dearn Commissioners Were by Me Sword of the Holy Brangels of almights Ind that they wiel faithfully and importially Gerform the several duties required of them by the annexed Order of Court according to the best of their existing fundament.

But witness to hereif of the faid John Halist Justice of the Deave. Rave Gereward Set my hourd this 20 th day of august in the Jear of our Long One Thomand Eight hundred and Eighty Sig (1886)

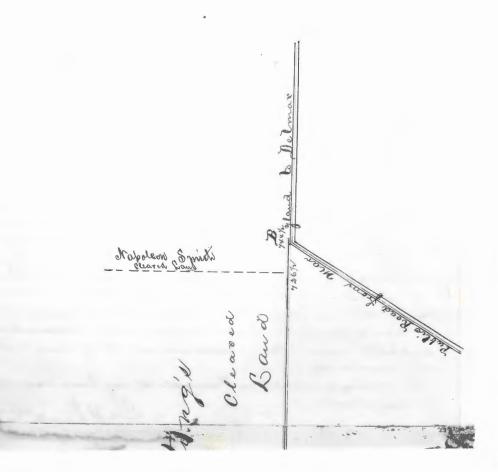
John A. Ellisth

Justice of the Peace.

C'tate of Delaware & Capt. I'm Hearn the free holder named in the Eussex localty & Sames a Commission do Certify that John Ho Elliott Surveyor was by me sworn that he will faithfully and impartially perform the several tuties of him required us ourryor under the annexed Commission, according to the best of his skie and Judgment

Ou witness whereof I wave hereunto set my want this & 5 th day ".). august in the year of aur Kord and thousand Eight hundred and Eight Sin (1886.

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Commissioners Report. Erab Sessions of the Feare and fait Delivery of the Court of Sens. On Obedience to the above annexed order of the Konorable Court He Saac V. He care James B. He care Benjamin Hastings Joseph 16 Bannow and Edward F. Cannow being the five freeholders, Damed in Said Order did on the touth day of august a. D. 1886 go to and upon said land and fremises being first Sworn in due form (see certificale above I taking to our assistance of the Ho. alliott a skillful and Impartial surveyor by us momented he being also Livor in due form of law as per annexed Certificates above after Viewing paid lands and foremisce did determine there was need of a new Public Road for Public travel and and convenience did command paid Lurry or to lay out the same specifying the Courses and distances as follows to wit. Beginning in the Center of the Public Roadleading. mi Delmar to mitesville See letter a on the Franglit and run from thence South thirty degree West across land of minos Ho Britingham gifty four and one quarter to do to and terminating at the line dividu the States of Delaware and maryland and to intersect the Publis Road on what was formerly Philip le Hearn's land now Jesse J. Wells land See Lecter Bon the Draught He chave estimated. to Cast of making said to ad and the bridge and Cansersays thereon at diffeen dollars (\$15.00) and we have awarded unto minos the Britting haw to Sum of Seven dollars and fifty Cento as and for damages on Occasion of the laying out out said road. We further determine that a Rublic road was necessary for public travel and and Convenience and have laid out such road as in our Judgment was most forofer, having respect to the nature of the ground the Shortness of the distance and all circumstances of fublic convenience or detriment and have caused a draught of said road to be made referrenting the Course and distances thereof with notes of the most remarkable places of the woodland, cleans Land or improvements by or trough Which the fame planes. making a computation of the cartof making Raid road as bridger and have assessed the damages of every the Owners or holders, of said land and improvements on accasion of said road, with a determination that there is need of said road for Public Convenience. Therefore having done all things in Obedience to the annexed Order, WE make this return in writing under Our hands and we ask the Honorable Court to accept this as our return Twew under our hands this second day of September a. D. 1886. Oppenses. Jac S. Ho carn Oone. & d. \$4.00 | Beturned Oct 11 1886. De aar I Hearn 4.00 Oct. 3.186. do wit Oct. Jas. G. Hearn 4.00 21 Read Horoformal Benjamin Hashings Jos. H. Bloamow J. 3.6. ch. g. Tesse S. Helle Chainman Edward & Cannow 1 à. 1.50 Placed on allowana list I'm & White 1 d Meanon AD 1887

January 19, 1979

Dr. Kenneth N. Weaver Maryland Geological Survey Merryman Hall Johns Hopkins University Baltimore, MD 21218

Dear Ken:

You will have received the announcement of our meeting on January 26 under separate cover. I appreciate your cooperation in planning this meeting and your willingness to come to Wilmington. If it would be convenient for you, please stop in here and we can go to the Wilmington meeting together.

Enclosed is a copy of the notes that we took on our boundary inspection trip on January 11, 1979. These notes are not intended to be formal in any way but merely a guide to finding the monuments in the field and casual reminders about the nature and condition of various markers.

I am also enclosing a graph on which we have plotted various points along the Transpeninsular Line relative to a convenient parallel of latitude that appears on all the 7.5 minute topographic maps along the Line, that is, 30°27'30" North latitude. This is not a detailed plot because detailed information is not available to us; however, in a crude way it shows the trend of the line and differences between the new and the old indicators of its position. The points labeled "traditional" are the centers of roads or the State line as drawn on the 7.5 minute topographic maps. The points labeled "NGS" are those roughly plotted locations of the new monuments from our inspection trip. The relative positions of the two indicators at any given boundary point may be misleading because the information available is inadequate so the graph should not be given any serious weight. I hope to do a more detailed plot along the same lines when we receive the description sheets from the new monuments from NGS. After waiting a week for those sheets, we have telephoned a special request and hope to have them before our meeting on the 26th.

Sincerely,

Robert R. Jordan State Geologist and Chairman, Delaware State Boundary Commission

RRJ:mac

Enc.

Notes on Inspection of Transpeninsular Line Boundary Markers, 1/11/79

Attendees: R.R. Jordan - Delaware (Boundary Commission)

Michael Christopher - Delaware (DGS)

Fred Ruyter - Delaware (Div. of Highways)

Kenneth N. Weaver - Maryland (Maryland Geological

Survey)

Ralph Poust - Natl. Geodetic Survey

Andy Anderson - Maryland

Boundary Marker #0.

-at Fenwick Island Lighthouse. This is an original Colonial Survey marker in good condition. The marker has a benchmark set into its top, and stands inches outside a chain link fence guarding the Fenwick Lighthouse. The possibility of having the survey marker protected was discussed.

The marker can be reached by entering Maryland on Delaware Route 14, and turning west on 146th Street of Ocean City for approximately 200 yards.

Boundary Marker #1

-to reach marker #1, travel west on Delaware Route 32, cross the Assawoman Canal, turn south on Jefferson Ave. and west on Hayes Avenue. The boundary marker is located 5 houses west on Hayes avenue, near DP & L pole #15, and in a manhole in the center of Hayes. The manhole cover is the only one on Hayes Ave (marked storm-drain). The marker is a Delaware/Maryland disc in a concrete post.

Boundary Marker #2

-on Lone Cedar Point, 5' south of the end of pavement of Del. Rd. #394. The brass disc is buried under 6" of sand for protection. The first disc at this location was vandalized.

Boundary Marker #3

-entering Maryland on Delaware Rd. #395. Disc set on the southeast side of the road shoulder near a witness post.

Boundary Marker #4

-entering Delaware on Del. Rd. #395. The disc is set in a small yard behind a white pickett fence on the west side of 395. This disc is very well maintained and protected from the road, sitting approx. 7' behind the fence line.

-approximately 400 feet south of the intersection of Del. Rd. #396 and 396-A. This is an original Colonial Survey marker, and it is well maintained and protected by the home-owners in the neighborhood.

Boundary Marker #6

-this brass disc is located under the only manhole in Del. Rd. #396 (State Line Road) about 1 mile west of Marker No. 5.

Boundary Marker #7

-brass disc located on the south side of Delaware Rd. #396, near Chesapeake Utility pole #28/18. It is set 10' south of the shoulder of the road.

Boundary Marker #8

-on the east side of Delaware Rd. #397. This disc is set on the shoulder of the road.

Boundary Marker #9

-located on the east side of Delaware Rd. #398 entering Maryland. This disc is 2' east of the shoulder of the road.

Boundary Marker #10

-east side of Del. Rt. #113; on the Selbyville Quad. map as Benchmark Norman. This is an original stone set by the Colonial Surveyors, and although it is not protected by a fence, it is about 50 yards removed from Hwy. #113 and is well maintained by a local civic group.

Boundary Marker #11

-located on the west side of Del. Rd. #378. The disc is 5' west of the shoulder of the intersection of Rd. #378 and a dirt driveway.

Boundary Marker #12

-continuing west on the same dirt road mentioned in the description to Marker #11. Marker #12 is 50 yards south of this dirt road and 1/2 of a mile west from Delaware Rd. #378, close to an abandoned farm house. (This site was not visited by the field party).

Boundary Marker #13

Marker located about 1/4 mile northwest of Maryland Rd. # in a farmers field. The disc is accessible by a farm lane.

-marker located 0.6 of a mile northeast of a witness post and triangulation station at the entrance of The Cypres Swamp Wilderness Area. A rough path is cut from the Wilderness area entrance northeast to the boundary marker. (This site was not visited by the field party).

Boundary Marker #15

-disc #15 is located on the west shoulder of Del. Rd. #48. The Colonial Survey had trouble locating an adequate foundation for a stone at this location, and did not set one.

Boundary Marker #16

By agreement of the Commissions no marker was set at this location because of swampy conditions.

Boundary Marker #17

-located on Del. Rd.#419 at the Bethel Church. Disc #17 is located in the northwest corner of the bend in Rd. #419.

Boundary Marker #18

-disc is located 10' north of Delaware Rd. #419, under the plowline of a field. The witness post is off the shoulder of the road, on a fence line 5' from the shoulder.

Boundary Marker #19

-100' north on Delaware Rt. #26 from the centerline of Road #419 at 26. The marker disc is on the road's east shoulder.

Boundary Marker #20

-original Colonial Survey marker at Line Church approximately 100' north of Rd. #419. This marker sits near the boundary of a graveyard and is unprotected from the road.

Boundary Marker #21

-lies west on Del. Rd. #419 from Line Church. The boundary disc sits under a manhole cover ("storm drain") on Rd. 419. There is no witness post at this location.

Boundary Marker #22

-disc set under a manhole ("storm drain") in Delaware Road #419.

Boundary Marker #23

-disc on southern shoulder of Del. Rd. #419.

Boundary Marker #24

-on southern shoulder of Rd. #419 near Chesapeake Utility pole #38A.

-thirty feet east of intersection of Del. Rd. #419 and 454. Actual location marked by a pin in a manhole under the south road shoulder of Rd. 419. The original Colonial Surveyor's monument had been moved for the construction of Road 419 prior to the current work.

The original stone is in good condition, with the coats of arms still clearly visable, but it is in an unprotected area barely 5' from the shoulder of the road. This monument seemed to be in need of immediate protection.

Boundary Marker #26

-on Del. Rd. #419, about 1/4 mile east of intersection of Del. Rd. #453. The boundary disc is on the north side of 419, 5' from the shoulder of the road.

Boundary Marker #27

-disc is near the foundation of a small brick house (SE corner of house), approximately 40' north of the shoulder of Del. Rd. 419.

Boundary Marker #28

-disc is located in a city park (near the center of the park) in Delmar, 125' north of the center of Del. Rd. #419.

Boundary Marker #29

-located north of a liquor store at the tangential intersection of Delaware Rd. #76 and 512 on the north shoulder of Rd. 76. Located near a triangulation station on Delmar map.

Boundary Marker #30

-original monument stolen; replacement disc is in woods 170' north of center of Del. Rd. #512 (Md. Rd. 455 on Delmar Quad Map).

Boundary Marker #31

-disc is located in field 150' north of the center of Del. Rd. #512 (Md 455), near an abandoned shack. Triangulation station and witness post nearby seem to have been disturbed by a farmer's plowing.

Boundary Marker #32

-disc is located in the northern end of Blackwater Solid Waste Transfer Station. Near a "no man's land," a small wedge of land said to be unclaimed between Wicomico Co. and the Delaware line.

-at the intersection of Del. Rd. #509 and Spring House Lane. The disc is set near a wooden shed, 10' north of Springhouse Lane and 50' West of 509.

Boundary Marker #34

-south of Del. Rd. #513. The actual boundary disc is approximately 1/4 mile south of DP & L pole #44504/96689. Marker itself was not visited.

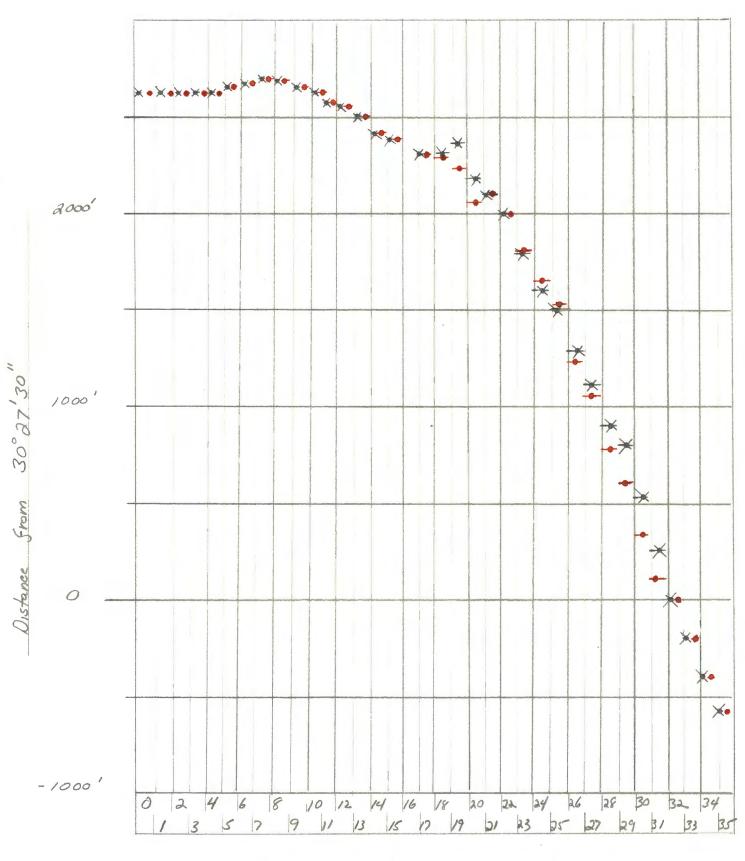
Middle Point-Monument No. 35

-not visited, but reported to be in good condition and well maintained.

NOTE: In the above descriptions all distances are approximations based on visual estimates or pacing. At the time of the inspection trip NGS had not furnished detailed descriptions of the locations to the States.

The party also visited a Mason-Dixon Line marker buried in the parking lot of in Mardela Springs, Maryland. This point appears to be due south of the Target Point of the Mason-Dixon line and also on the Transpeninsular line extended 5 miles west of Middle Point. There is no authoritative information available about this location.

MJC:dcw



Boundary Markens

* traditional boundary

NGS boundary

MARYLAND - DELAWARE EAST-WEST LINE

BOUNDARY SUMMARY

BOUNDARY MONUMENT # 0

There was no action required at this monument. The old Monument Number 0 was recovered and found in good condition along with all marks at triangulation station FENWICK ISLAND 1932. The actual location at the state line will be marked appropriately.

BOUNDARY MONUMENT # 1

The computed position of the boundary was found to be in the center of a paved road. A new point was selected along the line to the west 44.4 feet from the computed point. The point is 14.736 meters from triangulation DIVISION 1974 and in a clockwise direction of 259° 41' 42.2" from the azimuth mark at the triangulation station. It is marked by a small cup tack in the top of a 2 by 2 inch square wood stake driven flush with the surface of the ground. It is 69.8 feet southwest of the southwest edge of the first house to the northeast, 55 feet northeast of the shoreline, 47 feet southeast of a powerline pole numbered 15, 44.4 feet southeast of a powerline pole numbered 16 and 34.8 feet southwest of a guy anchor. The area may be reached by following the description for triangulation station DIVISION 1974. It is located on State owned property.

BOUNDARY MONUMENT # 2

The computed position of the boundary line was found to be in a safe location, therefore it was marked at this date. It is marked by a cup tack in the top of a 2 by 2 inch square wood stake driven flush with the surface of the ground. It is 20.097 meters or 65.93 feet south of triangulation station CEDAR 1974. It is in a clockwise direction of 261° 05' 40.6" from the azimuth mark at triangulation station CEDAR 1974. It is 68.0 feet southeast of a witness post, 30 feet south of the center of a paved road, 22.6 feet east of a small pile of concrete slabs. The area may be reached by following the description of station CEDAR 1974.

The computed position of the boundary was found to be in a cultivated field. A new point was selected along the line to the west and on the road right-of-way. The new point is 45.212 meters or 148.33 feet SW of triangulation station GREYERS 1974 and in a clockwise direction of 349° 56' 34.2" from the azimuth mark at the triangulation station. It is marked by a 2 by 2 inch square wood hub with a cup tack in the top and driven flush with the surface of the ground. It is 24 feet southwest of the center of a paved road and 4 feet northeast of a fence line. The area may be reached by following the description of station GREYERS 1974.

BOUNDARY MONUMENT # 4

The computed position of the boundary was found to be in a safe location, therefore it was marked at this date. It is marked by a cup tack in the top of a 2 by 2 inch square wood stake driven flush with the surface of the ground. It is 9.491 meters or 31.14 feet south of triangulation station HUDSON 1974. It is in a clockwise direction of 218° 25' 50.7" from the azimuth mark at station HUDSON 1974. It is also 55.5 feet southeast of a powerline pole with two transformers, 40 feet southwest of the center of a paved road, 32.5 feet south of a 12-inch walnut tree, 27.8 feet northwest of the northwest corner of a barn and 24.2 feet southwest of a fence. The property is owned by Mr. Rollie Hudson, Rt. 1 Box 94, Selbyville, Delaware. The area may be reached by following the description for station HUDSON 1974.

BOUNDARY MONUMENT # 5

There was no action required at this point. The old monument number 5 along with triangulation station HALL 1974 were recovered and found in good condition as previously described.

BOUNDARY MONUMENT # 6

The computed position of the boundary was found to be in a paved east-west road. There was no way possible to move the point to the east or west due to the road running along the boundary for about 3 miles. It was agreed by the states of Delaware and Maryland that the only way to mark this point would be to place a monument under a manhold cover in the paved road. The position of the boundary was marked at this date with a PK spike drived into the paved road. It is 5.663 meters or 18.58 feet north of triangulation station DICK 1974. It is in a clockwise direction 89° 01' 44.0" from the azimuth mark at triangulation station DICK 1974. It is on the road right-of-way, 120 feet northeast of the northwest corner of a wooded area, 16.2 feet north of a powerline pole numbered 12 and 4 feet south of the center of the paved road. The area may be reached by following the description for triangulation station DICK 1974.

The computed position of the boundary was found to be in the south edge of the same east-west paved road as boundary monument number 6. This monument must be set in the same method as number 6, marked by a monument under the paved road and covered with a manhole. The point is 2.118 meters or 6.95 feet north of triangulation station BISHOPVILLE 1974 and in a clockwise direction of 88° 41' 31.1" from the azimuth mark at the triangulation station. It is on the road right-of-way and marked by a PK spike driven into the south edge of the road. It is 66.4 feet southeast of a witness post, 22 feet north of the north edge of a wooded area, 11.5 feet south of the center of the paved road, 8.6 feet north-northeast of a powerline pole numbered 18 and 1 foot south of the south edge of the road surface. The area may be reached by following the description for triangulation station BISHOPVILLE 1974.

BOUNDARY MONUMENT # 8

The computed position of the boundary was found to be in the edge of a cultivated field, therefore it was moved to the east 19.07 feet. It is 8.364 meters or 27.44 feet to the southeast of triangulation station SLAB 1974 and in a clockwise direction of 187° 40' 57.7" from the azimuth mark at the triangulation station. It is on road right-of-way, 100 yards northwest of a red shingle house, 93 feet southeast of a powerline pole numbered T66, 66.5 feet northwest of a powerline pole numbered 19 T 65, 24 feet northwest of a Maryland State Line sign and 14 feet south of the center of the paved road. The area may be reached by following the description from triangulation station SLAB 1974.

BOUNDARY MONUMENT # 9

The computed position of the boundary was found to be in a safe location and it was marked by a 2 by 2 inch square stake with a cup tack in the top. It is 6.498 meters or 21.32 feet to the south of triangulation station CABE 1974 and in a clockwise direction of 169° 40' 45.9" from the azimuth mark at the triangulation station. It is on road right-of-way, 85 feet south of a private drive, 48 feet northeast of a powerline pole numbered 44, 64 feet southeast of a powerline pole numbered 43, 32 feet northeast of a field entrance and 15 feet southeast of the center of the paved road. The area may be reached by following the description for triangulation station CABE 1974.

BOUNDARY MONUMENT # 10

There was no action required at this monument. The old monument 10 along with all marks at triangulation station NORMAN 1932 were recovered and found in good condition as described in the 1974 description.

The computed position of the boundary monument was found to be in a safe location, therefore it was marked at this date by a 2 by 2 inch square wood stake with a cup tack in the top driven flush with the surface. It is on road right-of-way, 44 feet west of a north-south road, 35 feet north of a witness post, 27 feet west-southwest of a culvert, 15.5 feet west of a 30 inch tree and 14 feet north of the center of an east-west road. It is 8.359 meters or 27.42 feet north of triangulation station DAVIS 1974 and in a clockwise direction of 86° 09' 31.4" from the azimuth mark at the triangulation station. The area may be reached by following the description for triangulation station DAVIS 1974.

BOUNDARY MONUMENT # 12

The computed position of this monument was found to be in a cultivated field. A new point was selected to the west and out of the area of cultivation. It is 74 meters southwest of triangulation station BRIAR 1974. The area may be reached by following the description for the description for the triangulation station.

BOUNDARY MONUMENT # 13

The computed position of the boundary was found to be in the edge of a ditch. A new point was selected 2.88 feet to the west of the computed point. It is marked by a 2 by 2 inch square wood stake with a cup tack in the top of the stake and it is driven flush with the surface of the ground. It is 3.479 meters or 11.41 feet south of triangulation station STEEN 1974 and in a clockwise direction of 51° 34' 32.3" from the azimuth mark at the triangulation station. It is 14.12 feet northeast of reference mark one, 11 feet southsouthwest of a T junction in the ditch, 5 feet east-northeast of the northsouth ditch and 7 feet east of the center of a field road. The area may be reached by following the description for triangulation station STEEN 1974.

BOUNDARY MONUMENT # 14

The computed position of this point was found to be in a cultivated field. A new point was selected to the west and in the edge of the timber. It is marked by flagging and can be found by following the description for triangulation station CYPRESS 1974 and going south 702.0 meters to timber area and the point.

The computed position of this point fell in a dirt road, therefore a new point was selected 26.74 feet to the west of the computed point. It is marked by a 2 by 2 inch square wood stake driven into the ground. It is flush with the surface of the ground and it has a cup tack in the top marking the spot. It is 22.105 meters northwest of triangulation station NECK 1974 and in a clockwise direction of 9° 57' 02.4" from the azimuth mark at the triangulation station. It is 28.75 feet west-northwest of a stone post, 18 feet north of the edge of the timber line, 12 feet west-northwest of the center of the north-south road, 9 feet north of a culvert, 8 feet east of a ditch and on property leased by Mr. Edmund Harvey (Delaware Wild Lands, Inc.). The area may be reached by following the description for triangulation station NECK 1974.

BOUNDARY MONUMENT # 16

A triangulation station was not established at this point. Recon was performed at this date to determine the boundary.

BOUNDARY MONUMENT # 17

The computed position of this point was found to be in a cemetery. A new point was selected on line and to the east 150 feet of the original point. The area may be reached by following the description for triangulation station BETHEL 1974.

BOUNDARY MONUMENT # 18

The computed position of this monument was found to be in a safe location. It is 19.346 meters north of triangulation station NORTH FORK 1974 and in a clockwise direction of 272° 05' 40" from the azimuth mark for the station. It is marked by a stake driven into the ground. It is 15.6 feet northeast of a 10-inch pine tree with a red spike in the east side, 8 feet north of a ditch and 31 feet north of the center of an east-west road. The area may be reached by following the description for the triangulation station.

BOUNDARY MONUMENT # 19

The computed position of the boundary monument was found to be in a safe location. It was marked by a 3/4 inch iron rod with a yellow cap and driven into the ground flush. It is 33.648 meters north of triangulation station GUMBORO 1974 and in a clockwise direction of 340° 57' 14" off of the azimuth mark for the station. It is 110 feet north-northeast of the center of a cross-roads at the intersection of state highways 26, 54, and 353, 93 feet north of the center of highway 54, 18 feet east of the center of highway 353 and 26 and 50 feet east of a powerline pole numbered KA 75 on road right-of-way.

The old monument # 20 and triangulation station LINE 1932 were recovered in good condition.

BOUNDARY MONUMENT # 21

The computed position of this monument was found to be in the south part of the east-west road. There is no way possible to move this point to the east or west. It must be placed under the road and covered with a manhole. It is marked by a spike driven into the road and painted red. It is 6.259 meters north of triangulation station RACE 1974 and in a clockwise direction of 880 18' 06" off of the station's azimuth mark. It is also 50.8 feet wouthwest of a powerline pole numbered SA 145, 32.7 feet north of the northeast corner of a chicken pen and 10 feet west of a driveway. The area may be reached by following the description for the triangulation station.

BOUNDARY MONUMENT # 22

The computed position of this monument was found to be in the south part of an east-west road and it was not possible to move it east or west. It must be set below the road and covered with a manhole. It is now marked by a spike driven into the pavement and painted red. It is 9.350 meters north of triangulation station RACCOON 1974 and in a clockwise direction of 271° 31' 11" from the azimuth mark at the station. It is also 30.4 feet north of a witness post, 30 feet north-northwest of a woods road, 27 feet north of the west edge of a culvert and 4 feet south of the center of the road. The area may be reached by following the description for the triangulation station.

BOUNDARY MONUMENT # 23

The computed position of this monument was found to be in a safe location and it was marked by a 3/4 inch iron rod with a yellow cup driven into the shoulder of the road. It is 7.235 meters north of triangulation station MELSON 1974 and in a clockwise direction of 89° 29' 42" from the azimuth mark at the station. It is also 63.6 feet east of a culvert, 43.5 feet north of a 10-inch pine tree and 18.8 feet south of the center of highway 54. The area may be reached by following description for the triangulation station.

The computed position of the boundary monument was found to be on the shoulder of State Highway 54 and in the only safe location in the area. It was marked by a 3/4-inch iron stake with a yellow cap driven flush with surface. It is 4.496 meters north of triangulation station MORRIS 1954 and in a clockwise direction of 269° 59' 21" from the azimuth mark at the station. It is also 22.2 feet south of the center of State Highway 54, 10.2 feet north-northwest of powerline pole numbered 38 B and 3 feet north of a ditch. The area may be reached by following the description of the triangulation station.

BOUNDARY MONUMENT # 25

The old monument, the offset monument and triangulation station TOWNSEND 1975 were all recovered in the same area and found in good condition.

BOUNDARY MONUMENT # 26

The computed position of this point was found to be in a safe location. It was marked by a 3/4-inch iron stake driven into the ground. It is 269° 06' 16" in a clockwise direction off of the azimuth mark at triangulation station ANDREWS 1974 and 1.487 meters north of the station. It is also 100 yards west-northwest of a field entrance, 31.6 feet north of the center of State Highway 54 and 5.5 feet northeast of a witness post. The area may be reached by following the description for the triangulation station.

BOUNDARY MONUMENT # 27

The computed position of the monument was found to be in a safe location on the south side of a house owned by Mr. Maurice F. Adkins. It is 33.561 meters north of triangulation station MAYER 1974 and in a clockwise direction of 89° 01' 44" from the azimuth mark at the station. It is also 89 feet north of the center of State Highway 54, 65 feet northeast of an old wagon wheel cemented in the ground and 6.4 feet southwest of the southeast corner of Mr. Adkin's house. The area may be reached by following the description for station MAYER 1974.

* * * * * * * * * * * * * * * * * * *

BOUNDARY MONUMENT # 28

The computed position of this monument was found to be behind a very large tree, therefore it was moved to the west 16.99 feet. It is marked by a 3/4-inch round iron rod driven 18 inches into the ground and flush with the surface. It has an 1½ inch round yellow cap atop it with an 1/8-inch center hole marking the spot. It is 117 feet north of the center of State Highway 54, 73 feet northeast of a granite monument, 27.5 feet southwest of an 8-inch willow tree and 27 feet north of a 24-inch oak tree. It is 27.684 meters or 90.83 feet north-northwest

of triangulation station FREEDOM 1974 and in a clockwise direction of 81° 57' 0.78" from the azimuth mark at the triangulation station. It is on property owned by the Town of Marydel and it may be reached by following the description for triangulation station FREEDOM 1974.

BOUNDARY MONUMENT #29

The computed position was found to be in a area which may be cultivated. It was moved to south side Rt. 54 and out of the area of danger. It is 39.0 meters south southwest of triangulation station DELMAR RM 4 1974. The area may be reached by following the description of the triangulation station.

BOUNDARY MONUMENT #30

The computed position of this monument is in a safe location in the south edge of a wooded area. It is 55.5 meters North of triangulation station CONNELLY 1974. The area may be reached by following description for the triangulation station.

BOUNDARY MONUMENT #31

The computed position of this monument is in a safe location in the south edge of a wooded area. It is 51.1 meters North of triangulation station HURLEY 1974. The area may be reached by following the description for the triangulation station.

BOUNDARY MONUMENT #32

The computed position of this monument is in a safe location. It is 69.7 meters North of triangulation station DUMP 1974. The area may be reached by following the description for the triangulation station.

BOUNDARY MONUMENT #33

The computed position of this monument is in a safe location. It is 18.2 meters

North of triangulation station BRADLEY 1974 and just west of a North - South Road,
in edge of wooded area. The area may be reached by following the description
for the triangulation station.

BOUNDARY MONUMENT #34

The computed position of this monument is in a cultivated field, therefore it was moved 200 feet to the East to the edge of a wooded area and in a safe location. It is about 450 meters Southeast of triangulation station BLACKWATER 1974 and it may be reached by following the description for the triangulation station.

BOUNDARY MONUMENT MARYLAND - DELAWARE CORNER

The old boundary monument along with all marks at the triangulation station were recovered as previously described.

State of Delaware DELAWARE GEOLOGICAL SURVEY UNIVERSITY OF DELAWARE Newark, Delaware 19711

ROBERT R. JORDAN, STATE GEOLOGIST 101 PENNY HALL PHONE: 302-738-2833, 2834

February 1, 1979

Dr. Kenneth N. Weaver Maryland Geological Survey Merryman Hall Johns Hopkins University Baltimore, MD 21218

Dear Ken:

In accordance with our telephone conversation I have prepared the enclosed Resolution and letter in final form for your signature. I have provided two copies of the Resolution so that each State may have one bearing "live" signatures for its records.

I believe that the documents agree with the actions taken at our meeting of January 26. If, however, you find any reason to make changes or corrections, please feel free to retype them and return them for signature.

If you find everything to be satisfactory, please forward the letter to Captain Phillips of the NGS together with a copy of the Resolution and send me a copy of the letter and an original of the Resolution.

We appreciate your continuing cooperation.

Sincerely,

Robert R. Jordan Chairman, Delaware State Boundary Commission

RRJ:mac

Enc.

DELAWARE GEOLOGICAL SURVEY Penny Hall University of Delaware Newark, DE 19711 MARYLAND GEOLOGICAL SURVEY Merryman Hall Johns Hopkins University Baltimore, MD 21218



February 1, 1979

Capt. John O. Phillips Acting Director National Geodetic Survey NOAA Rockville, MD 20852

Dear Capt. Phillips:

The Boundary Commissions of the States of Delaware and Maryland have appreciated the opportunity to review the final draft of "Report on Surveys of Delaware-Maryland Boundaries" prepared by Buford K. Meade. The information contained in the report made possible a detailed review of the findings of the surveys, especially those pertaining to the Transpeninsular Line. Representatives of Delaware and Maryland have met in the field and, ably assisted by Ralph Poust of the NGS, inspected the monuments set as a result of the work along the Transpeninsular Line. We have conferred with our colleagues who were involved in these efforts and the Commissions have held a joint meeting at Wilmington, Delaware on January 26, 1979.

The States agreed on the enclosed Joint Resolution at the meeting of January 26. The Resolution clarifies the fact there has been no change in the boundary between Delaware and Maryland known as the Transpeninsular or East-West Line. Because the monuments placed on the line defined by the joint surveys reported in Mr. Meade's paper have no standing without mutual acceptance, we have found that the report as drafted would be misleading and, in a legal sense, inaccurate. We agree, therefore, that the National Geodetic Survey should not issue the report until additional research into its findings may result in formal agreement between the States of Delaware and Maryland.

Please note that we have not found reason to dispute the technical accuracy of the surveying involved. Furthermore,

Mr. Meade's report itself is considered to be of high quality. We believe, however, that the three partners who have sustained high precision and clarity throughout these efforts should continue to cope with all the implications of the work to the completion of the program.

We are encouraged by the research accomplished during the past month to believe that the outstanding questions concerning the Transpeninsular Line can be resolved with minimal delay. We have attempted from the outset to reproduce the work of the first surveyors of our boundaries and to restore and clarify, not modify, their results. Significant differences exist between the present, traditional boundary and the positions of the markers placed in 1976 near the western portion of the Transpeninsular Line. The situation in this area is complicated by the lack of a position for Boundary Monument No. 30 and it is understandable the questions might arise in its vicinity. It is our opinion that these questions should not cause unnecessary concerns for citizens or governmental units.

The appropriate units in both States are making major efforts to obtain information concerning the original location of Boundary Monument No. 30 and anything else relating to boundary in that area. Preliminary calculations suggest that the departure of the Transpeninsular Line, as originally surveyed, from a parallel of latitude may be systematic and that if the system can be determined, the location of Boundary Monument No. 30 may be predicted. The technical abilities of the National Geodetic Survey could make an important contribution on this point.

We would welcome the opportunity to discuss this entire situation with you. We expect that by working together a mutually satisfactory resolution of the Transpeninsular Line should be possible. We will be in contact by telephone in order to arrange a meeting.

Robert R. Jordan

Chairman, Delaware State

Boundary Commission

Kenneth N. Weaver Director, Maryland Geological Survey

RRJ/KNW:mc Enc.

JOINT RESOLUTION

OF THE

BOUNDARY COMMISSIONS OF DELAWARE AND MARYLAND

In order that the status of the boundary between Delaware and Maryland known as the "Transpeninsular Line" or "East-West Line" may be made clear to all it is resolved that:

The traditional boundary line known as the Transpeninsular (or East-West) Line running between Fenwick Island and Middle Point continues to be recognized as the boundary between Delaware and Maryland.

Further, the boundary monuments placed in the vicinity of the Transpeninsular (or East-West) Line in 1976 as a result of the survey performed by the National Geodetic Survey in cooperation with the States of Delaware and Maryland do not constitute a new boundary or a change in the boundary between Delaware and Maryland.

Adopted January 26, 1979 at a joint meeting of the Boundary Commissions of Delaware and Maryland held at Wilmington, Delaware.

Robert R. Jordan Chairman, Delaware State Boundary Commission Kenneth N. Weaver Director, Maryland Geological Survey

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Robert R. Jordan Chairman, Delaware State Boundary Commission Kenneth N. Weaver Director, Maryland Geological Survey

The Border Stones That Delineate Sussex County, Delaware

This section is devoted to the locations and personal history, if any, of each of the individual stones that line the limits of Sussex County, Delaware. Information of each stone consists of a photograph of the marker, directions in which to find it, and any historical information that could be secured.

The directions to locate the stones are as exact as possible.

But discrepencies are very likely in pacing out distances in the woods, where few landmarks are around. Distances are marked out in miles where travel by car is possible and in feet where travel only by foot is necessary. The distances in feet are within approximately 10% accuracy, for exact pacing is impossible due to obstacles in the way, such as trees, logs, holes, etc. Please allow for this deviation when searching for the stones. The measurements are also provided in metric equivalents.

The accompanying maps will prove to be the most important source of locating the stones. But bear in mind that in time, wood roads become overgrown, fields disappear, new fields appear, woods are cut down, and worst of all, upright stones are buried in water or leaves or even disappear. The directions I have used had to be all updated and corrected due to the landscape changes since the last relocations during the winter of 1952 - 1953. This present relocation survey was taken during the summer of 1974 and the winter of 1974 - 1975. I have discovered that the summer is the worst possible time to look for the stones. Underbrush abounds, trees are in full bloom, and insects are constantly following you. With all these factours against you, it is best to search for the stones during the winter, when the leaves have fallen and one can see for greater distances in the woods than in the summer.

In some circumstances, when the stones are located on a person's immediate property, it is beat to ask permission to look at it.

This is not merely a courtesy, but it can be for your own safety.

Some people become very frustrated with trespassers, and a few pot

shots can remind you of asking next time.

The stones used on the southern boundary or Transpeninsular

Line for marking each 5-mile interval were made of native stone
(a granite-schist complex from the Wissahickon formation of northern

Delaware) in the form of rectangular prisms. The dimensions were

from 4 to 4½ feet long and a width of 8 inches with a 4½ inch

thickness, and sporting a rounded top. On the north side is cut the

coat of arms of the Penns and on the south side with the coat of

arms of Lord Baltimore. The design for these coats of arms differs

from those used on the stones set later by Mason and Dixon. (See the

end of this introduction for design comparisons) The original posts

were then set between January 5 - 14, and April 27 - May 23, 1751.

The stones to replace the posts were then set in the fall of 1751,

except for the 30-mile stone and the first Middle Point stone, both

set in 1760.

The stones used on the western line for marking each one-mile interval were set under the direction of Charles Mason and Jeremiah.

Dixon. These were made from colitic limestone and were quarried, cut, and carved in Portland, Dorset, England, and then carried to the colonies as ballast on the ship "Betsy Lloyd." The usual dimensions of the monuments were $3\frac{1}{2}$ - 5 feet long, though rarely much more than 4 feet and a cross-sectional width of a 12-inch square. The top is a rather flat pyramid. Every fifth milestone is a crownstone bearing the coat of arms of the Calverts on the west side and those of the Penns on the east side, whereas the other milestones have carved into them "M" for Maryland on the west side and "P" for Pennsylvania on the east side. The original white oak posts set by Mason and Dixon were placed between June 26 and July 13, 1764, while the stones were set between December 17 and 23, 1765, for Sussex County.

The dates mentioned for each oak post being placed before the stones are exact, taken from the journals of Mason and Dixon. The dates of the setting of each stone had to be determined through interpolation from their journal. The first 20 arrived at the Nanticoke River residence of a Mr. Twifords along the line. The next 30 arrived at the bridge over the Choptank River in northern Kent County, on the line. These shipments were landed on 17 December,

1765. The 50th stone was set on 1 January, 1766. So, through some measuring of distances to be travelled, numbers of stones for each run, etc., I have put approximate dates for each laying.

My appreciation is forever indebted to the following personnel who have accompanied me in my journeys to locate these stones: John Ford of Elkton, Maryland, and Paul Bishop and Jim Grulke, both of Seaford, Delaware.

Bob Grincewich

Bob Grincewich Seaford, Delaware



Buller archives



The Historical Society of Delaware

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Old Town Hall,

Wilmington, Del.,

January3, 1930.

Honorable C. Douglass Buck,
Dover, Delaware,
Sir:

Last week on request of Judge Conrad I sent you a copy of the Society's Publication, "The Boundaries of Dela-ware". I have since found these photographs of the markers of 1849, and thought they might interest you. Please accept them with my compliments.

anna T. Lincoln





DELAWARE - MARYLAND LINE SURVEY STONE NO. 1

LOCATION:

Go south on Rt. 14 from the intersection with Rt. 58 for 300 ft.

Go west for 500 ft. and find this stone 22 ft. south of the Fenwick

Island lighthouse.





CONDITION:

Northeast corner chipped. Leaning slightly toward the west. Generally in fair condition. It is 3 ft. out of the ground.

REMARKS: U.S.C.G.S. set in top of marker stone.