

# BOSTON SOCIETY OF CIVIL ENGINEERS

Volume 48

OCTOBER, 1961

Number 4

## NOTES ON WATERFRONT PROPERTY LINES

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(Presented at a meeting of the Surveying and Mapping Section, B.S.C.E., held on  
October 26, 1960.)

THE current plans for redevelopment of the City of Boston bring into focus a title problem which has existed in this Commonwealth for a good many years, i.e., that titles to tidelands filled after 1847 are not, generally speaking, freely marketable. Therefore, in any case in which the title attorney suspects that his locus may consist of filled tidelands, he must at a minimum ascertain the facts as to this matter and if he does determine that his locus was once tidal, he must attempt to ascertain whether it was filled before 1847. In view of the fact that a substantial portion of downtown Boston was once tidal, it may be reasonably anticipated that these difficult determinations must be made with respect to many redevelopment areas. However, it should not be thought that the City of Boston has a monopoly on the problem, for many areas in surrounding cities and towns also consist of filled tidelands.

In general the filling of such tidelands has been under authorizations granted by the General Court or by public bodies to whom the General Court has delegated this power. In 1941 the Supreme Judicial Court in *Commissioners of Public Works vs. Cities Service Oil Company*, 308 Mass. 349, suggested that such licenses are revocable. This suggestion is what has made necessary the more extensive examination of the titles to filled tidelands than that which the conveyancing bar generally feels is necessary for non-tideland titles. To put it another way, it is not common practice to examine titles to non-tidal properties back of 1890. On the other hand, it is essential that titles to filled tidelands be examined back to the first half of the nineteenth century, if not before, in order to determine whether the land has been filled under a revocable license, and to determine other circumstances which might

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give rights to conflicting claims. There are at least three results of the *Cities Service Case*:

A. The examination of titles to filled tidelands, which titles are ultimately found to be good, is far more painstaking and hence more expensive than that of non-tidal titles.

B. Even if the title to filled tidelands is found not to depend upon a license which is revocable, it may well be that the evidence which leads to this conclusion is so obscure that the title cannot be said to be good and merchantable of record.

C. Many titles to filled tidelands are removed from commerce unless and until an act of the General Court is obtained which cures the defect, even though the land in question may have been filled and built upon for decades.

It is my understanding that the power to cure these defects is lodged only in the General Court and that no other state agencies (not even Redevelopment Authorities) have the power to cure them.

There follow notes prepared by the writer in connection with remarks which he made to the Boston Society of Civil Engineers, Surveying and Mapping Section, at its meeting on October 26, 1960. These notes will show the great dependence which the title attorney must place on the surveyor in the examination of titles to filled tideland. Whether the title is good or bad depends not only upon what is found in the Registry of Deeds, but also upon what existed on the ground many years ago and also upon the locations of the ancient harbor lines. It is obvious that only the surveyor can give the title lawyer this essential information.

I cannot conclude these prefatory statements without referring to the debt which I owe to my late good friend, Louis A. Chase, who, until his death, was a devoted member of the Surveying and Mapping Section of your Society and who introduced me to the law involved in this field. As a facet of his great professional knowledge, Louis A. Chase knew as much of the law of this difficult subject as did almost any title lawyer.

#### A. THE BASIS OF MASSACHUSETTS RIPARIAN TITLES

##### 1. *Title of the Crown*

"At the time of the settlement of Massachusetts and the other English colonies in America, the only source of title to the vacant and unsettled lands of this portion of the continent, claimed by the crown of England by right of discovery, was a grant from the king. It was not merely the

only source of legal title to the soil, but the only source of authority for exercising limited powers of government, in and over the lands thus granted." *Comm. vs. City of Roxbury*, 9 Gray 451, 478 (1857)

2. *Indian Titles*

"The theory universally adopted, acted upon, and sanctioned by a long course of judicial decisions of the highest authority, was, that the Indians found upon this continent had no legal title to the soil, as that term was understood at the common law and among civilized nations, no fee in the land, but only a temporary right of occupancy, for which it was perhaps equitable to make them some allowance." *Comm. vs. City of Roxbury*, 9 Gray 451, 478 (1857)

3. *Grant to Massachusetts Bay Colony*

"All the lands were first granted by the crown to the Governor and Company of the Massachusetts Bay in New England, and by them were parcelled out to individuals, and, at a later period, to bodies of proprietors, as tenants in common." *Porter vs. Sullivan*, 7 Gray 441, 443 (1856)

4. *Power of General Court*

"But in 1634 the general court, consisting of the governor, deputy governor, and assistants, and all the freemen of the company, (which had power by the charter to make laws and ordinances for the government of the colony and its inhabitants), declared that none but the general court had power to choose and admit freemen, to make laws, to elect or remove high officers and define their powers and duties, to raise moneys and taxes, or 'to dispose of lands, viz. to give and confirm proprietries.' 1 Mass. Col. Rec. 117." *Boston vs. Richardson*, 13 Allen 146, 149 (1866)

5. *Incorporation of Towns*

"Of course, all the early records of the colony are filled with acts prescribing the bounds of each township; but such acts, intended solely to fix the limits of jurisdiction, are never used as instruments for granting land." *Porter vs. Sullivan*, 7 Gray 441, 444 (1856). "This fixing of town lines merely determined the limits of municipal jurisdiction. It neither conferred any right of property nor restrained any such right. A man might well own upland in one town, and the flats appurtenant, although in another town. Rights, either private rights of property or common rights, depended on other considerations." Same, (450)

6. *Right of Town to Grant Land*

"And on March 3, 1635-6, it was 'ordered that the freemen of every town, or the major part of them, shall only have power to dispose of their own lands and woods, with all the privileges and appurtenances of the said towns, to grant lots, and make such orders as may concern the well ordering of their own towns, . . .'" *Lynn vs. Nahant*, 113 Mass. 433, 448 (1873). "The lands within the limits of a town which had not been

granted by the government of the Colony either to the town or to individuals, were not held by the town as its absolute property, as a private person might hold them, but, by virtue of its establishment and existence as a municipal corporation, for public uses, with power by vote of the freemen of the town to divide them among its inhabitants, yet subject to the paramount authority of the General Court, which reserved and habitually exercised the power to grant at its discretion lands so held by the town." Same, (448)

#### 7. Ordinance of 1641-1647

"This is commonly denominated the ordinance of 1641; but this date is probably a mistake. It is found in the Ancient Charters, 148, in connection with another on free fishing and fowling, and marked 1641, 47. That on free fishing, etc., is taken in terms from the 'Body of Liberties,' adopted and passed in 1641, leaving the date 1647 to apply to the other subject respecting ownership in coves, etc., about salt water. . . .

"The whole article, as it stands in the Ancient Charters and in the edition of the colony laws of 1660, is as follows:

'Sect. 2. Every inhabitant who is an householder shall have free fishing and fowling in any great ponds, bays, coves and rivers, so far as the sea ebbs and flows within the precincts of the town where they dwell, unless the freemen of the same town, or the general court, have otherwise appropriated them: provided, that no town shall appropriate to any particular person or persons, any great pond, containing more than ten acres of land, and that no man shall come upon another's propriety without their leave, otherwise than as hereafter expressed.

'The which clearly to determine; Sect. 3. It is declared, that in all creeks, coves, and other places about and upon salt water, where the sea ebbs and flows, the proprietor, or the land adjoining shall have propriety to the low water mark, where the sea doth not ebb above a hundred rods, and not more wheresoever it ebbs further: provided, that such proprietor shall not by this liberty have power to stop or hinder the passage of boats or other vessels, in or through any sea, creeks, or coves, to other men's houses or lands.

'Sect. 4. And for great ponds lying in common, though within the bounds of some town, it shall be free for any man to fish and fowl there, and may pass and repass on foot through any man's propriety for that end, so they trespass not upon any man's corn or meadow. [1641, 47.]'" *Comm. vs. Alger*, 7 Cushing 53, 67, 68 (1851)

"The views, we believe, that the courts of this state have constantly taken of the construction of the colony ordinance, are these: That it vested the property of the flats in the owner of the upland in fee, in the nature of a grant; but that it was to be held subject to a general right of the public for navigation until built upon or inclosed, and subject also to the reservation that it should not be built upon or inclosed in such manner as to impede the public right of way over it for boats and vessels." Same, (79)

## B. FRESH WATER TITLES

1. *Rivers*

## (a) Riparian Owners Own to Thread of Fresh Water Streams.

"The most satisfactory analogy would seem to be that presented by a fresh-water stream or river where the line of division between opposite proprietors is the thread of the stream . . . . In such a case each proprietor owns an equal share of the bed of the stream in proportion to his line on the margin and in front of or adjacent to his upland. . . . The principle of division between them is, as in the case of flats, that of equality, and the division is effected by drawing lines at right angles from the termini of the side lines on the shore to and at right angles with the thread of the stream. . . . By the thread of the stream is meant the centre line from one bank to the other, not when swollen by floods, or diminished by drought, but in its ordinary and natural condition. This may or may not coincide with the channel. That is immaterial. And it is immaterial also whether there is one channel or more than one. . . ." *Tappan vs. Boston Water Power Company*, 157 Mass. 24, 30, 31 (1892)

## (b) Division of Flats Between Private Owners of Land on Tidal River from which Tide Fully Recedes.

". . . we think the demandants are respectively entitled to recover so much as falls within straight lines drawn from the termini on its banks of the side lines of their respective marsh lands, at the ordinary stage of the water, to and at right angles with the centre line of the stream." *Tappan vs. Boston Water Power Company*, 157 Mass. 24, 31 (1892)

2. *Great Ponds*

". . . a grant bounded by a great pond or lake which is public property extends to low water mark." *Paine vs. Woods*, 108 Mass. 160, 170 (1871)

"In the present case, it appeared that the land in question was flowed, and the pond raised to an artificial height, in winter only, and that in summer the pond was allowed to remain at its natural level. Applying to this case the rules already stated, the conclusion is that the deeds, under which the complainant claims title, bounding him 'to' and 'on the pond,' extended to low water mark of the pond in its natural state; and that the fact that the deeds were made during the season when the pond was temporarily raised by the dam cannot affect the extent of their operation." Same, (172)

## C. PRIVATE OWNERSHIP IN TIDAL FLATS

1. *Extent of Private Ownership*

"The inner and outer limits of proprietorship under the colonial ordinance and the laws of the Commonwealth are well settled. The inner line is that of high water at ordinary tides . . . . The outer line, as determined by repeated decisions of this court, is that of extreme low water, if within

one hundred rods, because it is often necessary to the enjoyment of the rights granted by the ordinance to have a wharf extend to low water mark when the tide ebbs the lowest." *Wonson vs. Wonson*, 14 Allen 71, 82 (1867)

"... a natural and original creek, in which the tide ebbed and flowed, and from which it did not ebb entirely at the time when from natural causes it ebbed the lowest, would constitute a boundary of the flats, ..." *Attorney General vs. Boston Wharf*, 12 Gray 553, 558 (1859)

2. *Effect of Natural and Artificial Changes in Flats*

"The change came gradually from natural causes, when there were no marks or boundaries to show exactly what was the line of mean low water in 1640, or at any later date. Upon the doctrines applying to accretion and erosion and to the elevation and subsidence of land affecting the water line along the shore of the sea under conditions like these, the line of ownership follows the changing water line." *East Boston Company vs. Commonwealth*, 203 Mass. 68, 75 (1909)

"Whatever increase, therefore, happened from natural causes, or from a union of natural and artificial causes, within that distance, must be to the benefit of the owner of the upland, or of him who owned the flats to which the increase was attached. This increase is of necessity gradual and imperceptible. No man can fix a period when it began, no testimony can mark the exact margin of the channel on any given day or year. The ancestor being seised of the estate, of which all the flats now demanded are part, and having the right by law to all such additions as should be made by the gradual retiring of the waters, he must supposed to have been seised of all which now exists, for no one can show any parcel of which he was not seised." *Adams vs. Frothingham*, 3 Mass. 352, 362, 363 (1807)

D. WHARFING AND FILLING

1. *Development of the Law as to Wharfing and Filling*

- (a) "The object of the ordinance of 1641, from which the right to flats originated, was to give the proprietors of land adjoining on the sea convenient wharf-privileges, to enjoy which to the best advantage, it is often necessary to extend their wharves to low-water mark at such times when the tides ebb the lowest." *Sparhawk vs. Bullard*, 1 Metcalf 95, 108 (1840)
- (b) From 1647 to 1837, when the first Harbor Line was established, a private owner had the absolute right to enclose and fill his flats out to the line of his ownership established by the ordinance of 1647.
- (c) Chapter 229 Acts of 1837. Established Harbor Line in Boston Harbor. Under this statute (other Harbor Line statutes were similar) the littoral owner could build wharf or could fill, only to the line of his ownership or to Harbor Line, whichever was closer to shore.
- (d) From 1647 to 1866 no license from General Court or elsewhere was required for filling privately owned flats situated within the ap-

plicable Harbor Line. After Harbor Lines were established, licenses from the General Court were required (1) to fill privately owned flats outside of Harbor Line and (2) to fill Commonwealth flats whether within or outside of Harbor Line.

- (e) Chapter 149 Acts of 1866. Board of Harbor Commissioners must approve method of filling and structures in tidewaters. License from General Court still required to fill privately owned flats outside Harbor Lines and for filling Commonwealth flats. Compensation for tidewater displacement to be paid for all licenses thereafter granted.
- (f) April 30, 1836. Revised Statutes, Chapter 119, Section 12. First statute limiting rights of action of Commonwealth: establishes twenty year limit, for actions to recover real property. Note that adverse possession could run against Commonwealth in tidelands until May 27, 1867, Chapter 275 Acts of 1867. Thus adverse maintenance of fill, a pier or a dock for twenty uninterrupted years: from April 30, 1836 to May 27, 1867 gave rise to fee simple (or perhaps irrevocable easement).
- (g) Prior to 1869 any owner who had filled in flats by virtue of a license acquired a title by legislative grant which was indefeasible, see *Treasurer and Receiver General vs. Revere Sugar Refinery*, 247 Mass. 483 (1924)
- (h) Chapter 432 Acts of 1869. "All authority or license . . . to build any structure upon ground over which the tide ebbs and flows . . . shall be revocable at any time, at the discretion of the legislature, and shall expire at the end of five years from its date, except where and so far as valuable structures, fillings or inclosures, . . . shall have been actually and in good faith built or made under the same." Now embodied in G.L. (Ter. Ed.) C. 91 S. 15
- (i) Chapter 236 Acts of 1872. General Court turned over to the Board of Harbor Commissioners the authority to grant licenses to fill flats whether publicly or privately owned. Also provides that licenses not recorded within one year shall be void: this provision now appears in G.L. (Ter. Ed.) C. 91 S. 18. Failure so to record renders license void. *Tilton vs. City*, 311 Mass. 572 (1942)
- (j) Chapter 284 Acts of 1874. Requires payments for licenses granted to fill Commonwealth tidelands at rates fixed by Governor and Council; this payment in addition to tidewater displacement charge.
- (k) From 1869 to 1941 it was the general opinion of the Bar that licenses after acted upon in good faith were irrevocable and equivalent to fee simple titles, see 8 *Attorney General's Opinions* 220.
- (l) *Com'rs. of Public Works v. Cities Service Oil Company*, 308 Mass. 349 (1941). The Supreme Judicial Court in a dictum suggested that licenses to fill tidewaters may be revocable by the General Court even as to valuable structures built in good faith.  
"We are of opinion, however, that . . . the exception as to valuable

structures does not apply in the event that the General Court, in the exercise of its discretion, sees fit to revoke the authority or license, but, on the contrary, that it is an exception relating to the provision that the authority or license shall expire in five years from its date." *Com'rs. Public Works vs. Cities Service Oil Company*, 308 Mass. 349, 363, 364 (1941)

- (m) Chapter 748, Acts of 1911, Licenses with respect to Boston Harbor cease in the event of non-use; provision now contained in G.L. (Ter. Ed.) C. 91 S. 16.
  - (n) Under certain legislation the owners of flats were *ordered* to fill them to abate menaces to health, see: Chapter 304 Acts of 1873, Chapter 197 Acts of 1878, Chapter 238 Acts of 1881, and Chapter 144 Acts of 1883. Would not the right to maintain such filling be indefeasible?
2. *Mechanics of Examining Titles to Wharves and Filled Land*
- (a) Determine primitive mean high water and primitive extreme low water lines from ancient plans.
  - (b) Examine title in Registry of Deeds back to time before wharfing or filling took place.
  - (c) Run all owners in chain of title in Office of Counsel to Senate to ascertain existence of Legislative Acts permitting filling or wharfing. Such grants up to Chapter 432 of Acts of 1869, gave title in fee simple. *Treasurer & Receiver General vs. Revere Sugar Refinery*, 247 Mass. 483 (1924); *Bradford vs. McQuesten*, 182 Mass. 80 (1902).
  - (d) Run in card files in Waterways Division, Department of Public Works, all owners of upland for licenses from Harbor and Land Commissioners, Director of Port of Boston and other administrative agencies which from time to time had authority to grant licenses.
  - (e) Determine what Harbor Lines have been established. Note that such lines did not give title but to the contrary limited right to fill or wharf. *Commonwealth vs. Alger*, 7 Cush. 53 (1851)
  - (f) Ascertain extent of filling and wharfing.
    - I. On or before May 27, 1847: since twenty years possession up to May 27, 1867 gave title. Revised Statutes, Chapter 119 Section 12 and Chapter 275, Acts of 1867. *Nichols vs. City of Boston*, 98 Mass. 39 (1867)
    - II. On date first Harbor Line was established: since before Harbor Lines were established no licenses were required for filling and wharfing out to closer to shore of (a) Primitive Extreme Low Water line, or (b) 100 rod mark.
    - III. On April 23, 1872, since before passage of Chapter 236 Acts of 1872 no licenses were required for filling and wharfing out to the closer to shore of (a) Harbor Line, (b) Primitive Extreme Low Water Line (c) 100 rod mark.

- (g) Determine whether licenses granted after April 23, 1872 (Chapter 236 Acts of 1872) have been properly recorded; otherwise they are void. Often it is necessary to run Commonwealth on the grantor schedules and to run owners on the grantee schedules to be assured whether licenses have been properly recorded.
  - (h) Determine whether all licenses granted after June 21, 1869 were exercised within 5 years. Otherwise, they are void. (Chapter 432 Acts of 1869).
  - (i) Determine whether special acts may exist under which General Court has waived its right to revoke a specific license. See Chapters 773, 774, 775 and 776 Acts of 1957; Chapters 799 and 803, Acts of 1960; Chapter 566 Acts of 1961.
  - (j) Plot the several lines established by the above considerations.
3. *Land Court problems with respect to wharfing and filling*
- (a) Consequence of Land Court Registration to Harbor Line.  
G.L. (Ter. Ed.) C. 185 S. 46 provides: "Every petitioner receiving a certificate of title in pursuance of a decree of registration, and every subsequent purchaser of registered land taking a certificate of title for value and in good faith, shall hold the same free from all encumbrances except those noted on the certificate, and any of the following encumbrances which may be existing:  
"First, liens, claims or rights arising or existing under . . . the statutes of this Commonwealth which are not by law required to appear of record in the Registry of Deeds in order to be valid against subsequent purchasers or encumbrances of record. . . ."  
Are not rights of Commonwealth with respect to tidelands, including rights to revoke licenses within above exception? If so, does registration give any protection to a private owner?
  - (b) If upland title is registered should licenses be registered or recorded. Note that license may be to fill land below low water line, title to which is not registered.

#### E. SIDELINES OF FLATS

1. G.L. (Ter. Ed.) C. 240 S. 19 provides: "One or more persons holding land or flats adjacent to or covered by high water may apply by petition to the land court for the settlement and determination of the lines and boundaries of their ownership therein."
2. "The underlying principle is simply the adoption of such methods of division as will give to each parcel a line at low water proportional to its line at high water." *Bodwell vs. Bradstreet*, Davis: Land Court Decisions p. 34.
3. Where the general course of shore at primitive mean high water is substantially a straight line the flats before the shore are ordinarily to be divided by straight lines at right angles to general lines of coast. See figure 1.

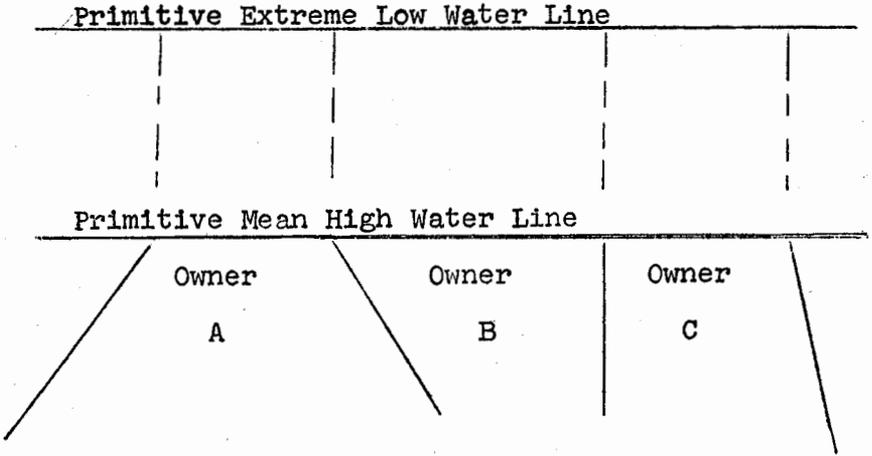


FIGURE 1

4. "On each side of the cove there is a headland, the proprietors of which are entitled to have a division of their flats by diverging lines, giving to each proprietor a greater width of flats at low water than at high water." *Gray vs. DeLuce*, 5 Cush. 9, 13 (1849). See figure 2.

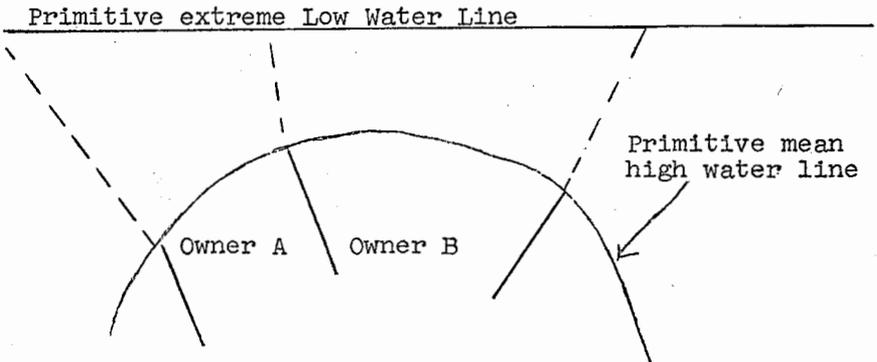


FIGURE 2

5. The flats in a shallow cove are to be divided by running a base line across the mouth of the cove, and dividing the flats by lines at right angles to these base lines. *Gray vs. DeLuce*, 5 Cush. 9, (1849). See figure 3.
6. The same rule applies to division of flats in a cove if the line of primitive extreme low water is almost entirely outside of, and nowhere more than a few feet inside the base line. *Stone vs. Boston Steel & Iron Company*, 14 Allen 230 (1867). See figure 4.
7. "Let us suppose that a line drawn across the mouth of the cove were 100

rods in length; and that the circular line of the cove at high-water mark were 200 rods in length. Then each proprietor of a lot abutting on the cove would be entitled to run his lines from the two corners of his lot in a direction to low-water mark, so as to include a piece of flats which would be at the mouth of the cove one half of the width of the lot at

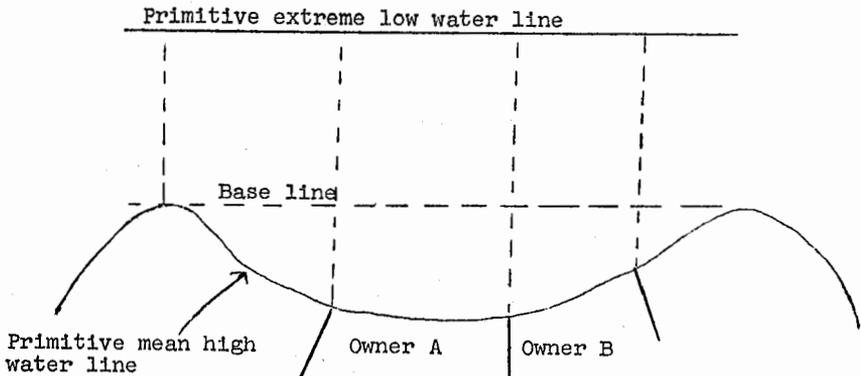


FIGURE 3

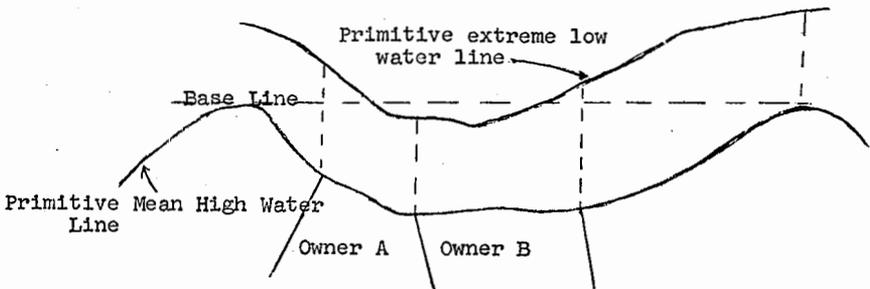


FIGURE 4

high-water mark; and thus by converging lines the whole cove might be divided without any intersecting lines." *Rust vs. Boston Mill Corporation*, 6 Pick. 158, 167, 168 (1828). See figure 5.

8. A creek from which the tide never ebbs running through a cove is a boundary, notwithstanding the foregoing rules. *Attorney General vs. Boston Wharf Company*, 12 Gray 553 (1859).
9. The owners of flats may, of course, change the foregoing boundary lines. *Adams vs. Boston Wharf Company*, 10 Gray 521 (1858).
10. "Where the mouth of the cove narrows and broadens again, a base line should be drawn across the narrowest part. Toward this base line proportionately divided as above provided the side lines should, of course, converge. Beyond the base line they should so diverge as to 'give each

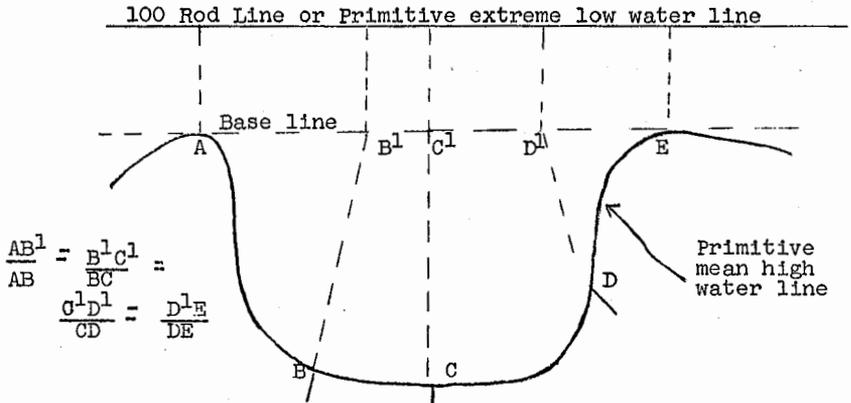


FIGURE 5

owner his due proportion.'” *Bodwell vs. Bradstreet*, Davis: Land Court Decisions 34, 36. See also division of Patten’s Cove, Land Court Misc. 1061. See figure 6.

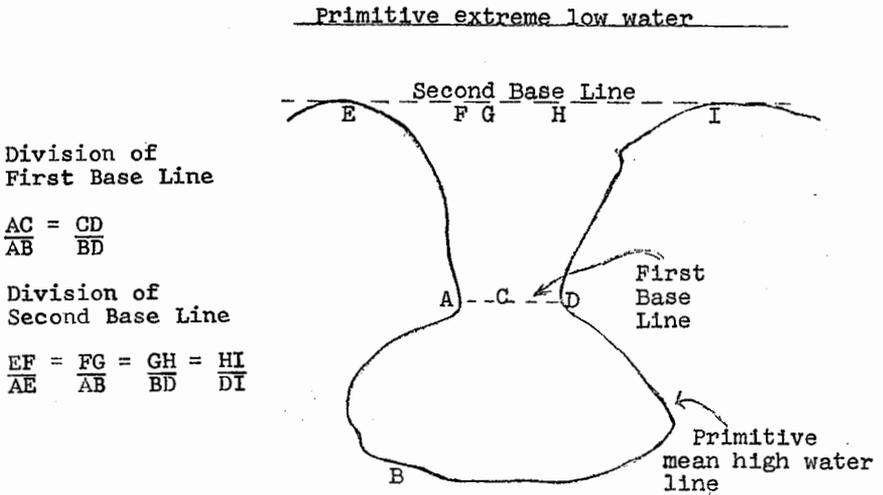


FIGURE 6

F. INTEREST OF U. S. A.

By the Submerged Lands Act, U. S. Code, Title 43, Chapter 29, enacted in 1953, the Federal Government released to the several states all its right, title and interest to the tidelands seaward to a line three geographical miles distant from the coast line of each state and, to the State’s boundary at the time of its admission to the Union, if such boundary lay seaward of the three mile mark.