

261. It is relative to many conditions of time and place and circumstance. The constitution has not ordained that the forms of business shall be cast in imperishable moulds. There is no question here of the impairment of the obligation of a contract by later legislation. The act assailed by the appellants was in existence for many years before the bond in suit was written. Principal and surety in writing it became subject to the statutes then in force, and by these they must abide.

The judgment of the Supreme Court of Mississippi is accordingly

Affirmed.

NEW JERSEY v. DELAWARE.

No. 13, original. Argued January 9, 10, 1934.—Decided February 5, 1934.

1. The boundary between Delaware and New Jersey within a circle of twelve-miles about the town of New Castle, is the low-water mark of the Delaware River on the East, or New Jersey, side; and below the circle it is the *Thalweg* or main channel of navigation in Delaware River and Delaware Bay. Pp. 363, 385.
2. Delaware's title to the river bed within the circle is derived as follows:

(1) From a feoffment, describing the Delaware territory within the circle, including the river, its islands and soil, made by the Duke of York to William Penn, August 24, 1682, when the present territory of Delaware, having been taken over from the Dutch, was governed as a dependency of the Government and Colony of New York under governors commissioned by the Duke. P. 364.

(2) Letters patent, March 22, 1682/3, from the Crown, granting to the Duke of York the identical lands and waters described in the deed of feoffment, and inuring to the feoffee by virtue of a covenant for further assurance contained in the deed of feoffment. P. 365.

(3) Confirmation of the title by practically uninterrupted possession of the Delaware territory on the part of Penn and his successors, as Proprietaries and Governors, from the date of the feoffment to the Revolution. P. 368.

- (4) Succession of the State of Delaware to dominion over the same territory. P. 370.
3. Early Acts and Resolutions of the legislature of the State of Delaware attacking the right of the Penns to the vacant and uncultivated lands within the State and for that purpose declaring that the right of soil was at the date of the Treaty of Paris in the British Crown and passed by that Treaty to the citizens of the State, had no effect, either as an estoppel or as a practical construction, upon the ancient boundaries of the Colony and State as laid down originally by the letters patent of 1683. P. 371.
 4. The letters patent of 1683 were not surrendered. P. 373.
 5. The Crown had power to grant away the soil beneath navigable waters as an incident to a grant or delegation of powers strictly governmental. P. 373.
 6. Acquiescence by Delaware in wharfing out by riparian proprietors from the New Jersey side, did not affect her sovereign title to the river bed within the circle. P. 375.
 7. Acts of dominion by New Jersey over the river bed beyond the low-water mark, within the twelve mile circle, such as service of process, assessments for taxation, the making of deeds, etc., could not serve to alter the boundary, not having been acquiesced in by Delaware. P. 376.
 8. The compact between New Jersey and Delaware of March, 1905, relating to riparian rights, service of process, and rights of fishery, did not affect the boundary. P. 377.
 9. When New Jersey and Delaware became independent States, the title to the soil of the river below the circle and to the soil of the bay, had not been granted but still was in the Crown of England; and the division of these waters is to be determined by the principles of international law. P. 378.
 10. The modern rule of international law divides boundary rivers between States by the main channel of navigation, if there is one, rather than by the geographical center, and applies the same doctrine of equality to estuaries and bays in which the dominant sailing channel can be followed to the sea. P. 379.
 11. The doctrine of *Thalweg* is applicable between States of the Union, where the boundary in question has not been fixed in some other way—as by agreement, practical location, prescription; and it applies even as between States that existed before the doctrine became fully established in international law. Pp. 380, 383.
 12. Delaware's claim that there is not, or was not in 1783, any definite channel of navigation down Delaware Bay, and her contention that

the geographical center should be made the boundary in the river, below the circle, to avoid a sharp and inconvenient turn where the river meets the bay,—are rejected. Pp. 379, 384–385.

Final Hearing on the report of William L. Rawls, Esq., Special Master, in a suit to establish the boundary between the two States. Leave was granted to file the bill of complaint in this case on June 3, 1929 (279 U.S. 825), and it was filed on June 4, 1929. The defendant's answer was filed on October 7, 1929, and on January 6, 1930 (280 U.S. 529), the Special Master was appointed and the case referred to him. His report was filed October 9, 1934, and the cause was argued on exceptions to that report.

Messrs. Duane E. Minard and George S. Hobart, with whom *Mr. Wm. A. Stevens*, Attorney General of New Jersey, was on the brief, for plaintiff.

Mr. Clarence A. Southerland, with whom *Mr. Percy Warren Green*, Attorney General of Delaware, and *Mr. Reuben Satterthwaite, Jr.*, were on the brief, for defendant.

MR. JUSTICE CARDOZO delivered the opinion of the Court.

Invoking our original jurisdiction, New Jersey brings Delaware into this court and prays for a determination of the boundary in Delaware Bay and River.

The controversy divides itself into two branches, distinct from each other in respect of facts and law. The first branch has to do with the title to the bed or subaqueous soil of the Delaware River within a circle of twelve miles about the town of New Castle. Delaware claims to be the owner of the entire bed of the river within the limits of this circle up to low water mark on the east or New Jersey side. New Jersey claims to be the owner

up to the middle of the channel. The second branch of the controversy has to do with the boundary line between the two states in the river below the circle and in the bay below the river. In that territory as in the river above, New Jersey bounds her title by the *Thalweg*. Delaware makes the division at the geographical centre, an irregular line midway between the banks or shores.

The Special Master appointed by this court in January, 1930 (280 U.S. 529) has now filed his report. As to the boundary within the circle, his report is in favor of Delaware. To that part of the report exceptions have been filed by New Jersey. As to the boundary in the bay and in the river below the circle, his report is in favor of New Jersey. To that part exceptions have been filed by Delaware. The two branches of the controversy will be separately considered here.

First. The boundary within the circle.

Delaware traces her title to the river bed within the circle through deeds going back two and a half centuries and more.

On August 24, 1682, the Duke of York delivered to William Penn a deed of feoffment for the twelve mile circle whereby he conveyed to the feoffee "ALL THAT the Towne of Newcastle otherwise called Delaware and All that Tract of Land lying within the Compass or Circle of Twelve Miles about the same scituate lying and being upon the River Delaware in America And all Islands in the same River Delaware and the said River and Soyle thereof lying North of the Southermost part of the said Circle of Twelve Miles about the said Towne." On October 28, 1682 there was formal livery of seisin of the lands and waters within the twelve mile circle. John Moll and Ephriam Herman, attorneys appointed in the deed of feoffment, gave possession and seisin "by delivery of the fort of the sd Town and leaving the sd William Penn in quiet and peaceable possession thereof and allso

by the delivery of turf and twig and water and Soyle of the River of Delaware." "We did deliver allso unto him one turf with a twigg upon it a porringer with River water and Soyle in part of all what was specified in the sd Indentures or deeds."

By force of these acts there was conveyed to the feoffee any title to the river bed within the circle that then belonged to the feoffor. New Jersey insists, however, that the feoffor, the Duke of York, was not then the owner of any territory west of the easterly side of the Delaware River, and hence at the time of the feoffment had no title to convey. Letters patent from Charles II, dated May 12, 1664, had granted to the Duke full title to and government of a large territory in America, embracing much of New England and in particular "all the land from the west side of Connecticut River to the east side of Delaware Bay," not including, however, lands or waters to the west. True the Duke had gone into possession of lands westward of the grant, including land within the circle, and through his delegates and deputies was exercising powers of government. His acts in that behalf were the outcome of conflicts with the Dutch. What is now the State of Delaware had been subject to the government of the Dutch until 1664, when with the victory of the English arms it became an English colony. From that time until August 24, 1682, the date of the deed of feoffment, Delaware was governed (with the exception of a brief period from July, 1763, to February 9, 1764) as a dependency of the Government and Colony of New York through governors commissioned by the Duke of York and Albany. Upon the delivery of the deed to Penn, the Duke was the *de facto* overlord of the land within the circle, though title at that time was still vested in the Crown.

The deed of feoffment had in it a covenant for further assurance at any time within seven years. At the in-

stance of Penn and with little delay, the feoffor took steps to carry out this covenant and thus rectify his title. On March 22, 1682/3, letters patent under the Great Seal of England were issued to the Duke of York for the identical lands and waters described in the deed of feoffment from York to William Penn.¹ There is no doubt that these letters were delivered to the Duke. The Special Master has found upon evidence supporting the conclusion that they were afterwards delivered to Penn from whom they passed to his descendants. The Master also found, and again upon sufficient evidence, that the letters patent so delivered "were never thereafter surrendered, nor was the grant of lands and waters thereby made ever abandoned nor was its validity ever impaired by any act or proceeding." By force of this grant there passed to the Duke of York a title to the land within the circle which inured by estoppel to the grantee under the feoffment.

The applicable principle in such circumstances is among the rudiments of the law of property. The covenant generating the estoppel is commonly one of warranty or seisin. *Irvine v. Irvine*, 9 Wall. 617; *Van Rensselaer v. Kearney*, 11 How. 297, 323, 325; *Tefft v. Munson*, 57

¹ The following is the description:

"All that the Towne of Newcastle otherwise called Delaware and the fort therein or thereunto belonging scituate lying and being between Maryland and New Jersey in America And all that Tract of land lying within the Compasse or Circle of twelve miles about the said Towne Scituate lying and being upon the River of Delaware and all Islands in the said River of Delaware and the said River and Soyle thereof lying North of the Southermost part of the said Circle of twelve miles about the said Towne And all that Tract of Land upon Delaware River and Bay beginning twelve miles South from the said Towne of Newcastle otherwise called Delaware and extending South to Cape Lopen."

Powers of government and other proprietary and seignorial rights were granted to the Duke along with ownership of the fee.

N.Y. 97; *Vanderheyden v. Crandall*, 2 Denio 9; aff'd 1 N.Y. 491; *White v. Patten*, 24 Pick. 324.² The effect is the same where the covenant is one for further assurance. *Taylor v. Debar*, 1 Chan. Cas. 274 (1676); *Lamb v. Carter*, 14 Fed. Cas. 991; 1 Sawy. 212; *Wholey v. Cavanaugh*, 88 Cal. 132; 25 Pac. 1112; *Hope v. Stone*, 10 Minn. 114; *Norfleet v. Russell*, 64 Mo. 176. To enforce that conclusion we do not need to wander far afield and consider other deeds than the specific one in question. There exists for our enlightenment the opinion of the Chancellor in an historic litigation where the relation between the feoffment of August, 1682, and the later patent from the Crown, was the very point at issue. A dispute had arisen between Lord Baltimore and Penn as to the title to part of the Delaware territory. On May 10, 1732, after Penn was in his grave, there was an agreement between his sons and Baltimore for the settlement of the boundaries between Pennsylvania, Delaware and Maryland. Three years later a bill was filed in Chancery for the specific performance of the agreement of May, 1732, to which suit the Attorney General was made a party as the representative of the Crown.³ The Duke of York had become King under the name of James II on February 6, 1685, and George II sat upon the throne when the cause in Chancery was heard. The Lord Chancellor, Hardwicke, gave judgment for the Penns. *Penn v. Lord Baltimore*, 1 Ves. Sen. 444; also Ridg. t. H. 332. In his opinion he holds that the effect of the letters patent is to make the deed of feoffment good either by force of an estoppel or by converting the feoffor into a trustee for

² Compare, however, as to covenants of seisin, *Doane v. Willcut*, 5 Gray 328; *Allen v. Sayward*, 5 Me. 446.

³ The Attorney General filed two answers in the cause, neither of which asserted any beneficial title in the Crown, but merely prayed that the court might "Preserve all such Rights Title and Interest of in or to the Premises as shall appertain or belong to his Majesty."

the feoffee. The objection is urged upon him that an estoppel will not prevail against the Crown. The Chancellor makes it plain that he is not favorably impressed. "For the Duke of York, being then [i.e., at the date of the feoffment] in nature of a common person, was in a condition to be estopped by a proper instrument." At the same time, he is diffident about declaring a technical estoppel, nor is there need to go so far. If his Majesty was not estopped, he was in any event a trustee of the title for the use of the feoffee, which will bring about a like result. "The Duke of York . . . while a subject was to be considered as a trustee; why not afterwards as a royal trustee?" "His successors take the legal estate under the same equity; and it is sufficient for plaintiffs if they have an equitable estate." So Lord Baltimore must make performance in accordance with the contract. True, the decree for performance will be "without prejudice to any prerogative, right, or interest in the Crown." This again is by virtue of the deference owing to the Crown by the keeper of his conscience. "Being liberated from the restraints of the lord chancellor, we are at liberty to say, that the duke, at the date of the deeds, being a subject, was, in this respect, only 'a common person,' and as much bound by estoppel as any other subject." Per Sergeant, Arbitrator, in the case of *Pea Patch Island*, 30 Fed. Cas. 1123, 1151.

In the meantime Penn had proceeded to organize a government for the Delaware territory. On October 29, 1682, he issued a summons to persons of note in the community to meet him at the Town of New Castle on November 2 for the holding of a General Court to settle the jurisdiction of the Territory. At that Court he announced his title derived from the Duke of York, and instructed the Magistrates that until laws were enacted by a proper assembly they should take for their guide the laws that had been provided by his Royal Highness for the Province

of New York, promising that they should be governed thereafter by such laws and orders as they should consent to by their own deputies and representatives. A general assembly having been summoned, an Act of Union was passed, December 7, 1682, whereby the three counties of Delaware territory were annexed to Pennsylvania. In the same month was enacted an Act of Settlement providing for a Provincial Council and Assembly and reciting the letters patent to Pennsylvania and the deeds of release and feoffment from the Duke of York. Following the establishment of this government, Penn and his successors as Proprietaries and Governors, and the Assembly and Council of the Province, together with the Assembly of the Lower Counties subsequently established, continued to exercise the power of government in all its plenitude over Pennsylvania and the Delaware territory. This continued until the Revolution except for a brief interruption during the reign of William and Mary.

There were, it is true, intermittent challenges both of the proprietary interest of Penn and his successors and of their governmental powers. As to these last, the most serious challenge was one that followed the accession of William and Mary in February, 1689, after the deposition of James II as the result of the "Glorious Revolution." Penn, who had been a favorite of royalty during the reign of James, was for a time under a cloud. In 1692, he was removed from the Government of Pennsylvania, including the New Castle country, and his place given to a successor. But he was soon restored to power, and, it seems, to the royal confidence. In August, 1694, there was an Order in Council by which he was reestablished in his former office. In the same month letters patent issued under the Great Seal of State restoring him in the most formal way to the administration of the government of the "said province and territories," and revoking any other appointment inconsistent therewith.

This patent, it would seem, had settled for all time the validity of his exercise of governmental powers, however much it may have left in doubt his title to the land. Mutterings of uncertainty, however, continued to be heard as to his rights and powers in both aspects. In 1701, he had correspondence with the Board of Trade which showed itself restless on the subject of his ownership. At intervals during the reign of Anne and afterwards he was required to sign a declaration that the approval by the Crown of his governmental acts, such as the appointment of a deputy, was not to be construed in any manner to diminish "her Majesty's claim of right to the said three lower counties." But the claims of right thus reserved were never admitted by Penn to be valid, nor were they ever pressed by the Crown. Not even the petitions of jealous rivals, egging the Crown on, were of avail to wake it into action. Thus, in 1717, the Earl of Sutherland applied for a grant of the three Lower Counties, asserting that he was ready to prove that the title was in the Crown. The Attorney General issued a summons to Penn to be present at a hearing, but Penn, who had suffered a stroke of apoplexy, was unable to appear, and the proceeding was allowed to lapse. A like fate awaited similar petitions submitted in later years. Reservations of the royal claims might continue to be made by cautious scriveners. By the time of the Revolution they were little more than pious formulas. A title, good of record when reinforced by the patent of 1683, had been confirmed by a century of undisturbed possession. When the Treaty of Paris was signed in 1783, the land within the circle was part of the territory of Delaware, and the title was in the Penns or in persons claiming under them.

The Declaration of Independence had made Delaware a state with boundaries fixed as of that time. Nothing that was done by her legislature thereafter has had the

effect of cutting down her territorial limits, however much it may have affected the private ownership of the Penns and their successors. Nothing thereafter done has had the effect of adding to the territory then belonging to New Jersey. Even so, a word must be said as to resolutions and statutes that became a law in Delaware shortly after the treaty of peace, since they are much relied upon by New Jersey as marking the true boundary. The legislation is directed to the disposition of unappropriated lands. A resolution of January 16, 1793, recommends to the citizens of Delaware "to take up no Warrants, and to accept of no Patents or Deeds whatever, from John Penn the Younger and John Penn, or either of them, or their Agents or Attornies." A statute of February 2, 1793, visits the penalty of a fine on inhabitants refusing to abide by these recommendations and accepting any grants of vacant or uncultivated lands except from persons acting under the authority of the state. Another statute (February 7, 1794) recites in an elaborate preamble that "the right to the soil and lands within the known and established limits of this state, was heretofore claimed by the crown of Great Britain," that by the treaty of peace between his Britannic Majesty and the United States of America, his Majesty "relinquished all rights, proprietary and territorial within the limits of the said United States, to the citizens of the same, for their sole use and benefit; by virtue whereof the soil and lands within the limits of this state became the right and property of the citizens thereof," and that "the claims of the late and former pretended proprietaries of this state, to the soil and lands contained within the same, are not founded either in law or in equity."

We do not yield assent to the contention that the effect of these acts was to establish a new boundary between Delaware and New Jersey either as a result of estoppel or through practical construction. There is no element of estoppel. The declarations in respect of title were not

addressed to New Jersey, nor did action follow on the faith of them. There is not even a sufficient basis for a claim of practical construction. The declarations were framed *alio intuitu*, with an eye to private titles, not to public boundaries. In the economic unrest and disturbance of the day, the inhabitants of Delaware were ready to disavow the claims of the Penns and others to the ownership of vast areas of uncultivated land. This is far from meaning that there was a disavowal of the grants whereby the colony of Delaware had derived its form and being. What the legislation had in view was enlargement, not restriction, of the domain of common ownership. The truth, indeed, is that for the purpose of an inquiry into the boundaries between colonies or states, questions of private ownership are of secondary importance. The Penns' title may have been misjudged, or may even have failed for reasons not now apparent, and yet it does not follow that the boundaries of New Jersey had thereby been enlarged or those of Delaware curtailed. Such a result could not be wrought without successfully impeaching the letters patent of 1683 whereby a seigniory in the new world was conveyed by Charles to James. The effect of those letters was to define the territorial limits of the province or colony of Delaware, whether Penn and his successors took anything thereby or not. The colony of Delaware as defined by this patent was the one that declared its independence in 1776 and that succeeded in 1783 to any fragment of ownership abiding in the Crown. In resuming the title to uncultivated lands, its people had no thought of modifying the ancient boundaries, of relinquishing a foot of soil above the waters or below. The later history of the controversy between the states makes this abundantly clear, if it could otherwise be doubtful. What concerns us now is more than a question of *meum* and *tuum* between one man and another. Our concern

is with the meaning of an instrument of government, a patent of jurisdiction, which was to generate a state.

The letters patent of March, 1683, being basic to the defendant's title, there must be another word of reference to the contention for the complainant that the letters were surrendered in April, 1683, a month after they were granted. The Special Master, as we have already stated, has made a finding to the contrary, and has summarized the evidence. There would be no profit now in repeating the analysis. Not only does the Master find that there was no surrender of the patent, he finds that the original patent is in evidence before him. His holding that there was no surrender is in line with Lord Hardwicke's judgment in *Penn v. Lord Baltimore*. His holding that the original letters are extant and in the custody of Delaware is in line with the judgment of the arbitrator, rendered eighty-five years ago, in the case of *Pea Patch Island, supra*. We see no adequate reason for rejecting his conclusion.

Assuming the existence of the patent, New Jersey makes the claim that in its application to the river bed it is void upon its face in that the Crown was without power to grant away the soil beneath navigable waters. The objection will not hold. The letters patent to the Duke of York and the grant from York to Penn were not for private uses solely, but for purposes of government. There is high authority for the view that power was in the Crown by virtue of the *jus privatum* to convey the soil beneath the waters for uses merely private, but subject always to the *jus publicum*, the right to navigate and fish. *Commonwealth v. Alger*, 7 Cush. 53; *People v. N.Y. & S. I. Ferry Co.*, 68 N.Y. 71, 76; *People v. Steeplechase Park Co.*, 218 N.Y. 459, 473; 113 N.E. 521; *Shively v. Bowlby*, 152 U.S. 1, 13; Hale, *De Jure Maris*, p. 22. Never has it been doubted that the grant will be upheld

where the soil has been conveyed as an incident to the grant or delegation of powers strictly governmental. *Martin v. Waddell's Lessee*, 16 Pet. 367, 410; 413; *Massachusetts v. New York*, 271 U.S. 65, 89, 90. In such circumstances, "the land under the navigable waters passed to the grantee as one of the royalties incident to the powers of government; and were to be held by him in the same manner, and for the same purposes that the navigable waters of England, and the soils under them, are held by the Crown." *Martin v. Waddell's Lessee*, *supra*, p. 413. The grant from Charles II to York was upon its face an instrument of government. The feoffments from York to Penn were in furtherance of kindred ends. Penn had no thought of using his title to the soil as an obstruction to navigation or to any other common right. In a letter to one of his commissioners he writes as early as April, 1683, concerning boundary negotiations with the Province of New Jersey: "Insist upon my Title to ye River, Soyl and Islands thereof according to Grant. . . . Whatever bee ye Argument, they are bounded Westward by the River Delaware, yn they cannot go beyond low water mark for land. They have ye Liberty of ye River, but not ye Propriety." The title to the soil, which was subject to the *jus publicum* while it was vested in the King and his grantees, is subject to the same restrictions in the ownership of Delaware. The patent and the deeds under it are not void for want of power.

Delaware's chain of title has now been followed from the feoffment of 1682 to the early days of statehood, and has been found to be unbroken. The question remains whether some other and better chain can be brought forward by New Jersey. Unless this can be done, Delaware must prevail. But down to the Peace of 1783 at the end of the Revolution, New Jersey has no chain to offer. Up to that time, if not afterwards, her reliance is less upon

the strength of her own title than on the weakness of her adversary's. The supposed defects have already been reviewed in this opinion, and have been found to be unreal. There is still to be considered whether events during the years of statehood have worked a change of ownership. New Jersey argues that they have, though not even during those years does she build her claim of title upon instruments of record. Her claim is rather this, that through the exercise of dominion by riparian proprietors and by the officers of government, title to the subaqueous soil up to the centre of the channel has been developed by prescription. The Special Master held otherwise, and we are in accord with his conclusion.

The acts of dominion by riparian proprietors are connected with the building of wharves and piers that project into the stream. The structures were built and maintained without protest on the part of Delaware, and no doubt with her approval. There is nothing in their presence to indicate an abandonment by the Sovereign of title to the soil. By the law of waters of many of our states, a law which in that respect has departed from the common law of England, riparian proprietors have very commonly enjoyed the privilege of gaining access to a stream by building wharves and piers, and this though the title to the foreshore or the bed may have been vested in the state. *Yates v. Milwaukee*, 10 Wall. 497; *Scranton v. Wheeler*, 179 U.S. 141, 157, 158; *Shively v. Bowlby*, *supra*, at pp. 24, 55; *Brookhaven v. Smith*, 188 N.Y. 74; 80 N.E. 665; *United States v. Dern*, 289 U.S. 352, 357. New Jersey in particular has been liberal in according such a license (*State v. Jersey City*, 25 N.J.L. 525), and so, it seems, has Delaware (*Harlan & Hollingsworth Co. v. Paschall*, 5 Del. Ch. 435; *State v. Reybold*, 5 Harr. 484, 486), though in Delaware, unlike New Jersey, title to the foreshore is in the riparian proprietor. From acquiescence in these improvements of the river front there can

be no legitimate inference that Delaware made over to New Jersey the title to the stream up to the middle of the channel or even the soil under the piers. The privilege or license was accorded to the owners individually and even as to them was bounded by the lines of their possession.

Apart from these acts of dominion by riparian proprietors, there are other acts of dominion by New Jersey and its agents which are relied upon now as indicative of ownership. They include the service of process, civil and criminal; the assessment of improvements for the purpose of taxation;⁴ and the execution of deeds of conveyance to the United States and others. Of all it is enough to say that they are matched by many other acts, equally indicative of ownership and dominion, by the Government of Delaware. The Master summarizes the situation with the statement that "at no time has the State of Delaware ever abandoned its claim, dominion or jurisdiction over the Delaware River within said twelve-mile circle, nor has it at any time acquiesced in the claim of the State of New Jersey, thereto, except as modified by the . . . Compact of 1905."

The truth indeed is that almost from the beginning of statehood Delaware and New Jersey have been engaged in a dispute as to the boundary between them. There is no room in such circumstances for the application of the principle that long acquiescence may establish a boundary otherwise uncertain. *Vermont v. New Hampshire*, 289 U.S. 593, 613; *Indiana v. Kentucky*, 136 U.S. 479, 509,

⁴The complainant points for illustration to the construction of important works for the use of the Dupont Co. 4,400 feet below low water level, and taxation of these works like other property in New Jersey. At that time controversy was flagrant between the two states. No inference of ownership can be drawn from dominion exerted in such conditions.

511; *Massachusetts v. New York*, *supra*, p. 95. Acquiescence is not compatible with a century of conflict. Only a few instances will be mentioned among many that are available. In 1813, the Delaware Assembly ceded to the United States an island in the Delaware River, east of the main channel and within the twelve mile circle, for the erection of a fort. A controversy arose between the United States as holder of the Delaware title and Henry Gale who claimed under New Jersey. In 1836, Gale brought ejectment in the United States Circuit Court against Beling, a tenant. Mr. Justice Baldwin charged the jury that Penn had no title, but the charge makes it plain that he had no knowledge of the letters patent of 1683, and that they were not in evidence before him. Later an arbitration was agreed upon between Humphrey, who had succeeded to the New Jersey title, and the Government of the United States, represented by the Secretary of War. In that proceeding the award was in favor of the Government. The opinion by the arbitrator, which was announced in January, 1849, is a careful and able statement of the conflicting claims of right. See the case of *Pea Patch Island*, *supra*. But the controversy would not down. In 1877, New Jersey began a suit in this court to establish the disputed boundary. It slumbered for many years, and finally in April, 1907, was discontinued without prejudice. 205 U.S. 550. If a record such as this makes out a title by acquiescence, one is somewhat at a loss to know how protest would be shown.

The complainant builds another argument upon a compact with the defendant which was ratified by the parties in March, 1905, and approved by Congress in January of 1907. 34 Stat. c. 394, p. 858. We are told that by this compact the controversy was set at rest and the claim of Delaware abandoned. It is an argument wholly without force. The compact of 1905 provides for the en-

joyment of riparian rights, for concurrent jurisdiction in respect of civil and criminal process, and for concurrent rights of fishery. Beyond that it does not go. "Nothing herein contained shall affect the territorial limits, rights, or jurisdiction of either State of, in, or over the Delaware River, or the ownership of the subaqueous soil thereof, except as herein expressly set forth."

This opinion, though it has summarized many facts and arguments, has perforce omitted many others, important in the view of counsel. We content ourselves with the statement that they have not been overlooked. Omission is the less serious in view of the able and comprehensive report submitted by the Special Master. All that matters most in this keen but amicable controversy is there set forth at large, and there and in the supporting documents the student of our local history can live it over when he will.

We uphold the title of Delaware to the land within the circle.

Second. The boundary below the circle in the lower river and the bay.

Below the twelve mile circle there is a stretch of water about five miles long, not different in its physical characteristics from the river above, and below this is another stretch of water forty-five miles long where the river broadens into a bay.

The title to the soil of the lower river and the bay is unaffected by any grant to the Duke of York or others. The letters patent to James do not affect the ownership of the bed below the circle. Up to the time when New Jersey and Delaware became independent states, the title to the soil under the waters below the circle was still in the Crown of England. When independence was achieved, the precepts to be obeyed in the division of the waters were those of international law. *Handly's Lessee v. Anthony*, 5 Wheat. 374, 379.

International law today divides the river boundaries between states by the middle of the main channel, when there is one, and not by the geographical centre, half way between the banks. *Iowa v. Illinois*, 147 U.S. 1, 7, 8, 9; *Keokuk & Hamilton Bridge Co. v. Illinois*, 175 U.S. 626, 631; *Louisiana v. Mississippi*, 202 U.S. 1, 49; *Arkansas v. Tennessee*, 246 U.S. 158, 169, 170; *Arkansas v. Mississippi*, 250 U.S. 39; *Minnesota v. Wisconsin*, 252 U.S. 273, 282. It applies the same doctrine, now known as the doctrine of the *Thalweg*, to estuaries and bays in which the dominant sailing channel can be followed to the sea. *Louisiana v. Mississippi*, *supra*; and compare 1 Halleck International Law, 4th ed., p. 182; Moore, Digest International Law, vol. 1, p. 617; *Matter of Devoe Manufacturing Co.*, 108 U.S. 401; *The Fame*, 8 Fed. Cas. 984, Story, J.; *The Open Boat*, 18 Fed. Cas. 751, Ware, J. The *Thalweg*, or downway, is the track taken by boats in their course down the stream, which is that of the strongest current. 1 Westlake, International Law, p. 144; Orban, Etude de Droit Fluvial International, p. 343; Kaeckenbeck, International Rivers, p. 176; Hyde, Int. Law, p. 244; Fiore, Int. Law Codified, § 1051; Calvo, Dictionnaire de Droit International. Delaware makes no denial that this is the decisive test whenever the physical conditions define the track of navigation. Her position comes to this, that the bay is equally navigable in all directions, or at all events was so navigable in 1783, and that in the absence of a track of navigation the geographical centre becomes the boundary, not of choice, but of necessity. As to the section of the river between the bay and the circle, the same boundary is to be accepted, we are told, as a matter of convenience.

The findings of the Special Master, well supported by the evidence, overcome the argument thus drawn from physical conditions. He finds that "as early as Fisher's Chart of Delaware Bay (1756) there has been a well-

defined channel of navigation up and down the Bay and River," in which the current of water attains its maximum velocity; that "Delaware River and Bay, on account of shoals, are not equally navigable in all directions, but the main ship channel must be adhered to for safety in navigation"; that the Bay, according to the testimony, "is only an expansion of the lower part of the Delaware River," and that the fresh water of the river does not spread out uniformly when it drains into the bay, but maintains a continuing identity through its course into the ocean. "The record shows the existence of a well-defined deep water sailing channel in Delaware River and Bay constituting a necessary track of navigation, and the boundary between the States of Delaware and New Jersey in said bay is the middle of said channel."

The underlying rationale of the doctrine of the *Thalweg* is one of equality and justice. "A river," in the words of Holmes, J. (*New Jersey v. New York*, 283 U.S. 336, 342), "is more than an amenity, it is a treasure." If the dividing line were to be placed in the centre of the stream rather than in the centre of the channel, the whole track of navigation might be thrown within the territory of one state to the exclusion of the other. Considerations such as these have less importance for commonwealths or states united under a general government than for states wholly independent. Per Field, J., in *Iowa v. Illinois*, *supra*, p. 10. None the less, the same test will be applied in the absence of usage or convention pointing to another. *Iowa v. Illinois*, *supra*. Indeed, in 1783, the equal opportunity for use that was derived from equal ownership may have had a practical importance for the newly liberated colonies, still loosely knit together, such as it would not have today. They were not taking any chances in affairs of vital moment. Bays and rivers

are more than geometrical divisions. They are the arteries of trade and travel.

The commentators tell us of times when the doctrine of the *Thalweg* was still unknown or undeveloped. Anciently, we are informed, there was a principle of co-dominion by which boundary streams to their entire width were held in common ownership by the proprietors on either side. 1 Hyde, *International Law*, p. 243, § 137. Then, with Grotius and Vattel, came the notion of equality of division (Nys, *Droit International*, vol. 1, pp. 425, 426; Hyde, *supra*, p. 244, citing Grotius, *De Jure Belli ac Pacis*, and Vattel, *Law of Nations*), though how this was to be attained was still indefinite and uncertain, as the citations from Grotius and Vattel show.⁵ Finally, about the end of the eighteenth century, the formula acquired precision, the middle of the "stream" becoming the middle of the "channel." There are statements by the commentators that the term *Thalweg* is to be traced to

⁵ Grotius has this to say (*De Jure Belli ac Pacis*, Book 2, c. 3, § 18): "In Case of any Doubt, the Jurisdictions on each side reach to the Middle of the River that runs betwixt them, yet it may be, and in some Places it has actually happened, that the River wholly belongs to one Party; either because the other Nation had not got possession of the other Bank, 'till later, and when their Neighbours were already in Possession of the whole River, or else because Matters were stipulated by some Treaty."

In an earlier section (§ 16, subdivision 2) he quotes a statement of Tacitus that at a certain point "the Rhine began . . . to have a fixed Channel, which was proper to serve for a Boundary."

Vattel (*Law of Nations, supra*) states the rule as follows: "If, of two nations inhabiting the opposite banks of the river, neither party can prove that they themselves, or those whose rights they inherit, were the first settlers in those tracts, it is to be supposed that both nations came there at the same time, since neither of them can give any reason for claiming the preference; and in this case the dominion of each will extend to the middle of the river."

the Congress of Rastadt in 1797 (Engelhardt, *Du Régime Conventionnel des Fleuves Internationaux*, p. 72; Koch, *Histoire des Traités de Paix*, vol. 5, p. 156), and the Treaty of Lunéville in 1801. Hyde, *supra*, pp. 245, 246; Kaeckenbeck, *International Rivers*, p. 176; Adami, *National Frontiers*, translated by Behrens, p. 17. If the term was then new, the notion of equality was not. There are treaties before the Peace of Lunéville in which the boundary is described as the middle of the channel, though, it seems, without thought that in this there was an innovation, or that the meaning would have been different if the boundary had been declared to follow the middle of the stream. Hyde, *supra*, p. 246. Thus, in the Treaty of October 27, 1795, between the United States and Spain (Article IV), it is "agreed that the western boundary of the United States which separates them from the Spanish colony of Louisiana is in the middle of the channel or bed of the River Mississippi." Miller, *Treaties and other International Acts of the United States of America*, vol. 2, p. 321.⁶ There are other treaties of the same period in which the boundary is described as the middle of the river without further definition, yet this court has held that the phrase was intended to be equivalent to the middle of the channel. *Iowa v. Illinois*; *Arkansas v. Tennessee*; *Arkansas v. Mississippi*, *supra*. See, e.g., the Treaty of 1763 between Great Britain, France and Spain, which calls for "a line drawn along the middle of the River Mississippi." The truth plainly is that a rule was in the making which was to give fixity and precision to what had been indefinite and fluid.

⁶ See also the treaties collected in the Argument of the United States before the International Boundary Commission in the Chamizal Arbitration of 1910 between the United States and Mexico.

Nys traces the concept of the *Thalweg* to a period earlier than the Treaty of Munster, 1648. *Droit International*, v. 1, p. 426.

Opinion of the Court.

There was still a margin of uncertainty within which conflicting methods of division were contending for the mastery. Conceivably that is true today in unusual situations of avulsion or erosion. Hyde, *supra*, pp. 246, 247. Even so, there has emerged out of the flux of an era of transition a working principle of division adapted to the needs of the international community. Through varying modes of speech the law has been groping for a formula that will achieve equality in substance, and not equality in name only. Unless prescription or convention has intrenched another rule (1 Westlake, *International Law*, p. 146), we are to utilize the formula that will make equality prevail.

In 1783, when the Revolutionary War was over, Delaware and New Jersey began with a clean slate. There was no treaty or convention fixing the boundary between them. There was no possessory act nor other act of dominion to give to the boundary in bay and river below the circle a practical location, or to establish a prescriptive right. In these circumstances, the capacity of the law to develop and apply a formula consonant with justice and with the political and social needs of the international legal system is not lessened by the fact that at the creation of the boundary the formula of the *Thalweg* had only a germinal existence. The gap is not so great that adjudication may not fill it. Lauterpacht, *The Function of Law in the International Community*, pp. 52, 60, 70, 85, 100, 110, 111, 255, 404, 432. Treaties almost contemporaneous, which were to be followed by a host of others, were declaratory of a principle that was making its way into the legal order. Hall, *International Law*, 8th ed., p. 7. International law, or the law that governs between states, has at times, like the common law within states, a twilight existence during which it is hardly distinguishable from morality or justice, till at length the *imprimatur* of a court attests its jural quality. Lauter-

pacht, *supra*, pp. 110, 255; Hall, *supra*, pp. 7, 12, 15, 16; Jenks, *The New Jurisprudence*, pp. 11, 12. "The gradual consolidation of opinions and habits" (Vinogradoff, *Custom and Right*, p. 21) has been doing its quiet work.⁷

It is thus with the formula of the *Thalweg* in its application to the division between Delaware and New Jersey. We apply it to that boundary, which goes back to the Peace of Paris, just as we applied it to the boundary between Illinois and Iowa, which derives from a treaty of 1763 (*Iowa v. Illinois*; *Keokuk & Hamilton Bridge Co. v. Illinois*; *Arkansas v. Tennessee*; *Arkansas v. Mississippi*, *supra*), or to that between Louisiana and Mississippi (202 U.S. 1, 16), which goes back to 1812, or between Minnesota and Wisconsin (252 U.S. 273), going back to 1846. Indeed, counsel for Delaware make no point that the result is to be affected by difference of time. In requests submitted to the Master they have asked for a finding that "there was in 1783 no well defined channel in the Delaware Bay constituting a necessary track of navigation and the boundary line between the States of Delaware and New Jersey in said bay is the geographical center thereof." The second branch of the request is dependent on the first. This is clear enough upon its face, but is made doubly clear by the exceptions to the report and by

⁷"International law, as well as domestic law, may not contain, and generally does not contain, express rules decisive of particular cases; but the function of jurisprudence is to resolve the conflict of opposing rights and interests by applying, in default of any specific provision of law, the corollaries of general principles. . . . This is the method of jurisprudence; it is the method by which law has been gradually evolved in every country resulting in the definition and settlement of legal relations as well between States as between private individuals." The case of the Eastern Extension Australasia and China Telegraph Co., Ltd., decided November 9, 1923, by the British-American Arbitral Tribunal under the Convention of August 18, 1910, Nielsen's Report, pp. 75, 76, quoted by Lauterpacht, *supra*, p. 110.

the written and oral arguments. The line of division is to be the centre of the main channel unless the physical conditions are of such a nature that a channel is unknown.

We have seen that even in the bay the physical conditions are consistent with a track of navigation, which is also the course of safety. Counsel do not argue that such a track is unknown in the five miles of river between the bay and the circle. The argument is, however, that the geographical centre is to be made the boundary in the river as a matter of convenience, since otherwise there will be need for a sharp and sudden turn when the river meets the bay. Inconvenient such a boundary would unquestionably be, but the inconvenience is a reason for following the *Thalweg* consistently through the river and the bay alike instead of abandoning it along a course where it can be followed without trouble. If the boundary be taken to be the geographical centre, the result will be a crooked line, conforming to the indentations and windings of the coast, but without relation to the needs of shipping. *Minnesota v. Wisconsin, supra*. If the boundary be taken to be the *Thalweg*, it will follow the course furrowed by the vessels of the world.

The report will be confirmed, and a decree entered accordingly, which, unless agreed to by the parties, may be settled upon notice.

Within the twelve mile circle, the river and the subaqueous soil thereof up to low water mark on the easterly or New Jersey side will be adjudged to belong to the State of Delaware, subject to the Compact of 1905.

Below the twelve mile circle, the true boundary between the complainant and the defendant will be adjudged to be the middle of the main ship channel in Delaware River and Bay.

The costs of the suit will be equally divided.

It is so ordered.