

IN THE  
**SUPREME COURT OF THE UNITED STATES.**

No. 33 Original.

THE STATE OF ARKANSAS,  
Plaintiff,

vs.

THE STATE OF TENNESSEE,  
Defendant.

**REPORT TO THE SUPREME COURT OF THE  
UNITED STATES  
by  
GUNNAR H. NORDBYE, SPECIAL MASTER.**

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The above-entitled proceeding was commenced in the Supreme Court of the United States on October 13, 1967, by the State of Arkansas on a motion for leave to file a complaint, statement in support of the motion, and a proposed complaint against the State of Tennessee. Subsequently, the Supreme Court granted the motion of the State of Arkansas for leave to file its complaint. Thereafter, the State of Tennessee filed its answer and counterclaim. On January 15, 1968, the undersigned, a Senior United States District Judge of the District of Minnesota, was appointed Special Master by the Supreme Court with authority, among other things, to take such evidence as



may be necessary and to submit such report to this Court as may be appropriate. Thereafter, the Special Master qualified by filing in the above Court the required oath of office and heard evidence at Memphis, Tennessee, which was submitted by the parties in support of the complaint, the answer, and the counterclaim. On September 7, 1968, a personal inspection of a part of the area in controversy was made by the Special Master accompanied by counsel for the parties, the approximate route taken and stops made being noted by lines and numbers on a photo of Joint Exhibit A, said photo being attached hereto as Appendix A-1, and to which reference will be made hereafter.

The Special Master makes the following report to this Court:

The dispute between the States of Arkansas and Tennessee involves the location of the boundary line as to a certain area between the two States along the Mississippi River. The area consists of some 5,000 acres of land, mostly uncultivated and uninhabited, but in parts heavily wooded. The parties are in accord as to the area in dispute, but the State of Arkansas contends that these lands, with the exception of a small segment, lie in Crittenden County, Arkansas. The State of Tennessee asserts that all the lands lie within the boundaries of the County of Shelby, Tennessee. An enlarged aerial photo map known as Joint Exhibit A presents the identifiable landmarks which outline the disputed area. The parties also are in accord that since the time of the admission of these two States into the Union, although they were admitted at different times—Tennessee in 1796 and Arkansas in 1836—the State line between them in this area is the thalweg, that is, the steamboat channel of the Mississippi River as it flows westwardly and southwardly between these States, making a left-hand bend around the area commonly known as Cow Islands Nos. 47 and 48, said islands being located in the

State of Tennessee. The bend around Cow Islands has been known as Cow Island Bend or the Bendway Channel.

We commence with the survey of the river made by the General Land Office during the years 1825 to 1836, a copy of which was introduced in evidence as Defendant's Exhibit 22 and represents the migrations of the river during that eleven-year period (See page 8, Defendant's Exhibit 10, Rodgers Report, Item 2).<sup>\*</sup> This map reflects that Cow Islands lie south and east of the river, with portions of Sections 3, 4, 8 and 17 therein being partially submerged by the flow of the river as shown on that survey. On the opposite Arkansas shore to the north and west of the river in Crittenden County, portions of Sections 20, 21, 29, 30 and 31 are shown partially submerged, together with the nearby sections of 19, 25 and 36, the three latter sections being unaffected at that time by the flow of the river. In the 1877-1878 map (Defendant's Exhibit 33, Plaintiff's Exhibit 2), the Cow Island bend of the river was surveyed again and a map was published by the Mississippi River Commission in 1889. This map reflects a marked recession caused by the river in the riparian shore line of the State of Arkansas. The fractional sections of 29 and most of 31 in Crittenden County had been eroded away and there were noticeable decreases in the areas of Sections 29 and 36 in said county. The Cow Islands' accretions in Tennessee, however, in the north and west were substantial. Por-

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<sup>\*</sup> Mr. O. S. Rodgers was called as an expert witness by the State of Tennessee and established the bases for the report identified as Defendant's Exhibit 10. Mr. Austin B. Smith was called as an expert witness by the State of Arkansas and by his testimony established the bases for the report identified as Plaintiff's Exhibit A. These two witnesses are competent, experienced and well-qualified civil engineers. They are experts in this particular field and well-acquainted with the area with which we are concerned. However, in the Special Master's opinion, the testimony given by Mr. Rodgers was more convincing and more helpful. He had an unusual practical grasp and knowledge of the questions involved herein.

tions of Crittenden County, Sections 29, 30 and 31 had accreted to these islands. The 1877-1878 survey also reflected a bar accreting to the Arkansas shore line and extending westerly to a point near Scanlan's Landing. This bar will be referred to hereafter as "Scanlan's Landing Bar." In the 1877-1878 survey map, the thalweg of the river as shown admittedly depicts the then boundary line between these two States (See also page 15, Defendant's Exhibit 10, Rodgers Report, Item 3).

Another map which reflects the Bendway Channel in the river is the survey map of 1904, Defendant's Exhibit 34 (See also page 19, Item 4, Defendant's Exhibit 10, Rodgers Report). The 1904 map depicts the further erosion of the Arkansas westerly bank of the river and the increasing accretions to Cow Islands. A map of the Mississippi River Commission outlines the river in the years 1912-1915 (Defendant's Exhibit 35). The 1912-1915 map also demonstrates the steady and increased erosion of the Arkansas shore and the comparable accretions being built on and to Cow Islands. The migration of the river northwardly and westerly continued until about 1912. At or about this time, a scour across Cow Islands had increased so that a portion of this land had become an island. During this period, and even later, the island has been referred to as Hog Pond Bar Island, and sometimes Armstrong's Bar, but hereafter it will be referred to as Cow Islands Point Bar. The scour across Cow Islands became the locale of the subsequent avulsion in the river which occurred during 1913 to May, 1915, when the river shortened its path and a channel burst through the scour area, leaving Cow Islands Point Bar to the north and west, and resulting in the main shipping channel after May, 1915, in the new Pointway Channel, although the old channel commonly called Cow Island Bendway Channel or Bendway Channel remained from time to time from 1913 to 1915 as an alternate route for shipping depending upon the



depth of the water. The navigation lights on the Bendway Channel were discontinued after May, 1915.

When the avulsion occurred and a part of Cow Islands lying in the State of Tennessee was severed completely from the Tennessee shore, the ownership of the island and its accretions admittedly remained in the State of Tennessee, and there is no dispute that up to this time the boundary line between the two States continued to remain in what was then known as the Bendway Channel. That the State line was in the thalweg of Bendway Channel and that Scanlan's Landing Bar did not build down and around Cow Island Bend is supported by Defendant's Exhibit 45, a map prepared under the direction of the United States Corps of Engineers as of May, 1917, and Defendant's Exhibit 46, a map prepared under the direction of the Mississippi River Commission as of December, 1918, and March, 1919 (This map, however, reflects Scanlan's Landing Bar a distance north and east of Cow Islands Point Bar).

The dispute between the parties arises primarily as to the effect of the migrations of the river northward and westerly after the avulsion causing a reactivation of a part of the downstream end of Cow Island Bendway Channel and as to the alleged growth and accretions of Scanlan's Landing Bar.

The fact that in 1921 the County Engineer of Crittenden County, Arkansas, a Mr. Bond, produced Defendant's Exhibit 8 as a map of that county lends strong support to the position of the State of Tennessee in this proceeding. This map purports to show the areas owned by various individuals in Crittenden County. It is an official county map and clearly reflects the abandoned Cow Island Bendway Channel with Cow Islands Point Bar (the severed portion of Cow Islands) being still in existence and completely separated from the Arkansas mainland. And it

is with no less significance that this map reflects no evidence of Scanlan's Landing Bar upon which the State of Arkansas so strongly relies as a bar extension from the Arkansas shore to which accretions were allegedly attached as reflected in Plaintiff's Exhibits 7 and 11, base maps of 1912-1915 with certain later additions.

It was in 1929 that the United States engineers made another survey in this area which was identified by the maps known herein as Defendant's Exhibits 38-1 and 38-2. These maps outline Scanlan's Chute in Cow Island Bendway Channel, which the State of Tennessee contends is a part of the former route of the Mississippi River and asserts that it marks a large portion of the present boundary line between these two States. It is along the Cow Island Bendway Channel through Scanlan's Chute, some time in the early 1930's, that a Mr. Hurley, of the Memphis District Corps of Engineers, as party chief of a patrol boat, made a boat trip through this area as delineated by the red line on these exhibits. The boat in which he made the trip was 127 feet long and 15 feet wide, and it will be noted that the trip extended through Scanlan's Chute and then through Frog Chute, the waterway later known as Ike Chute, 96 Chute, and to the then present channel of the Mississippi River. The water level at the time the trip was made was some 20 feet, and it is the red line on Defendant's Exhibits 38-1 and 38-2 designating Mr. Hurley's route, which the State of Tennessee contends denotes the then Cow Island Bendway Channel which, with erosions and gradual accretions thereafter, constitutes the present boundary line between these two States. The October 1929 aerial photographs, Defendant's Exhibits 56-A, 56-B and 56-C, which have been fastened together so as to constitute one exhibit, clearly illustrate the route of Scanlan's Chute and the other westerly chutes of the boundary line in the terrain as reflected in these two maps, Defendant's Exhibits 38-1

and 38-2. These exhibits reflect no evidence as to the existence of Scanlan's Landing Bar.

In the year 1937, the United States engineers prepared a map of this area which has been identified herein as Defendant's Exhibit 39. This map clearly depicts the abandoned Cow Island Bendway Channel from its up-river end to the lower or down-river end through 96 Chute to the then main channel of the river. The State line between Arkansas and Tennessee is indicated as being along this channel, with a notation that the State boundary is indefinite. However, the land south of Cow Island Bendway Channel is noted on the map as being in Shelby County, Tennessee. Similar notations as to the abandoned Cow Island Bendway Channel and the State line will be found on Defendant's Exhibit 5, a map prepared by the United States engineers, edition of 1939, as well as on the photo map of 1948-1949 prepared in the office of the District United States engineers and noted herein as Defendant's Exhibit 40.

It is well recognized that a channel of the thalweg of a river may change by a slow, gradual and imperceptible process of erosions and accretions. Under such a change, the boundary follows the thalweg of the river and when the water becomes stagnant and erosion and accretion no longer occur, the boundary becomes fixed in the middle of the old channel. And this is the process which establishes the abandoned Bendway Channel as the boundary line between these two States. In other words, the boundary line by movement of this river, from the earliest data available, moved westerly and northwesterly and by a process of erosion and accretion up to the latter part of 1912 was located close to the right descending bank of the Mississippi River in the Cow Island Bendway Channel. And when the avulsion occurred in 1913 to 1915, notwithstanding subsequent migrations of the river northerly and westerly in 1924 and 1929 and in other

years, the State line continued in the Cow Island Bendway Channel, which with its erosions and accretions, primarily by reason of the subsequent migrations of the river, ultimately became fixed and stagnated, and the abandoned channel, the result of the avulsion of 1913-1915, is now clearly visible and impressed in the earth's surface. The absence of maps of the river subsequent to the avulsion and during the later migration of the river presents difficulty in tracing and recording the course of the river with changes from time to time in the navigation routes, but that the Bendway Channel, with its erosions and accretions, continued to remain the boundary line between the two States is based upon the clear weight of convincing testimony. Regardless of the subsequent formation of Frog Chute, Ike Chute and 96 Chute in the channel, no lands accreted to the Arkansas side of the river and the channel remained extant. The certificate of survey of one R. L. Cooper in 1953 reflects the evidence of the channel in the earth's surface from Harris Light, a navigation light, to the lower end of Ike Chute (Defendant's Exhibit 42).\*

Here we have, therefore, a classic example of the situation referred to in **Arkansas v. Tennessee**, 246 U. S. 158, 173, 38 S. Ct. 301, 304, where the court said,

“ \* \* \* It is settled beyond the possibility of dispute that where running streams are the boundaries between States, the same rule applies as between private proprietors, namely, that when the bed and channel are changed by the natural and gradual processes known as erosion and accretion, the boundary follows the varying course of the stream; while if the stream from any cause, natural or artificial, suddenly leaves its old bed and forms a new one, by the process known

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\* Although this map was received in evidence for a limited purpose, as being a public record of the State of Tennessee, the Special Master adopts it as being illustrative of a portion of the present boundary line between these two States.

as an avulsion, the resulting change of channel works no change of boundary, which remains in the middle of the old channel, although no water may be flowing in it, and irrespective of subsequent changes in the new channel.”

And again, at page 175 of 246 U. S., 38 S. Ct. 301, 305,

“\* \* \* An avulsion has this effect, whether it results in the drying up of the old channel or not. So long as that channel remains a running stream, the boundary marked by it is still subject to be changed by erosion and accretion; but when the water becomes stagnant, the effect of these processes is at an end; the boundary then becomes fixed in the middle of the channel as we have defined it, and the gradual filling up of the bed that ensues is not to be treated as an accretion to the shores but as an ultimate effect of the avulsion.”

See also **Nebraska v. Iowa**, 143 U. S. 359; **Missouri v. Nebraska**, 196 U. S. 23; **Arkansas v. Tennessee**, 269 U. S. 152; **Hogue v. Stricker**, 69 F. 2d 167; **Uhlhorn v. U. S. Gypsum Co.**, 366 F. 2d 211.

The evidence weighs heavily in support of a finding that the new land south and west of Scanlan's Chute in Cow Island Bendway Channel consisted of accretions to the Tennessee side of the river's thalweg and to Cow Island's Point Bar. True, there is evidence that at one time Scanlan's Landing Bar extended westerly from the Arkansas shore, and this bar is evident on some of the earlier maps (See Defendant's Exhibit 35, 1912-1915 map). The State of Arkansas places considerable weight on the outline of this bar as it appears on Defendant's Exhibit 36. The main map of this exhibit was made in the year 1877, but it is contended that in 1913 someone had superimposed the outline of Scanlan's Landing Bar thereon and extended the bar to a point almost as far

west as the westerly side of Cow Islands Point Bar. Defendant's Exhibit 36 was introduced by the State of Tennessee for the purpose of establishing certain bank lines, but Tennessee disputed the accuracy of the delineations of Scanlan's Landing Bar. In any event, it seems quite evident from the entire record that this bar was a sandy protrusion from the Arkansas shore which from time to time was inundated by a rise in the river and whatever its location and extension may have been into the year 1913 before the avulsion took place, it is fair to find from the weight of the evidence that it eroded away and that there is no convincing basis in the record that this bar by accretions built up an area attached to the Arkansas shore as reflected in Plaintiff's Exhibits 7 and 11. Rather, it is reasonable to find from the record that to whatever extent Scanlan's Landing Bar at one time constituted a bar, the map records outside of the delineation on Defendant's Exhibit 36 do not sustain Arkansas's position as to the alleged growth of the bar and the claimed accretions thereto. Indeed, it is difficult to believe that this bar could have had any permanence being located on the outside rim of the swift moving river. The theory advanced by the State of Arkansas that after the avulsion the river's westerly migration continued and that Scanlan's Landing Bar grew and accreted downstream, moving the State line so that the boundary line between the two States became fixed at an area called Smith's Scour (by the witness Austin B. Smith) is contrary to the clear weight of the record herein. With that finding, it is not necessary to discuss Plaintiff's Exhibits 7 and 11 and other exhibits of the plaintiff which illustrate Arkansas's position as to the boundary line of the two States being fixed at the dead thalweg of the Bendway Channel allegedly located at so-called Smith's Scour, with the area of Tennessee's land being limited by the witness Austin B. Smith to a cone-shaped partition in Arkansas's territory.



Due weight and consideration has been given to the Notices to Masters and Pilots by the United States Light House Service, Defendant's Exhibit 20, and to the United States Service Light List, Defendant's Exhibit 2, and to the location of the navigation lights on the banks of the river during the years with which we are concerned, although the deductions made from their location may not at all times be entitled to the exactness with which they are accorded in some of the testimony. They are undoubtedly helpful in determining the general course taken by the vessels on the river during any particular period. The evidence fully sustains a finding that the boundary line between these two States became fixed in this abandoned channel as reflected in the two maps appearing as Appendices A-1 and A-II attached hereto.

In sum, therefore, it may be stated that the old abandoned Cow Island Bendway Channel, known today as Scanlan's Chute, in its up-river end, then as Frog Chute, Ike Chute, in its westerly area, and as a drain or creek between Ike Chute and 96 Chute in its down-river end, constitutes the boundary line between these two States; that after the 1913-1915 avulsion, migrations of the river northerly and westerly have resulted in the channel becoming fixed with slow erosions and gradual accretions which have attached to the severed Tennessee lands, but at no time have these accretions formed, or attached to, any lands in the State of Arkansas.

It is not necessary to discuss in detail the evidence regarding the alleged exercise of dominion and sovereignty of Arkansas as to the lands in question. There is evidence that as to certain parcels of land in the disputed area taxes thereon have been paid to the State of Arkansas by a limited number of individuals. And it is readily evident that certain individuals, mainly those who are residents of Arkansas, have considered that these lands belonged to Arkansas rather than Tennessee. Hunters and

fishermen living in the State of Arkansas have procured Arkansas licenses to carry on such activities. Others have procured Tennessee licenses. There is evidence that officials of the State of Arkansas in enforcing the game and fishing laws have patrolled these lands in behalf of the plaintiff. Tennessee game wardens also have considered this area their territory. Some crop raising and timbering have been carried on by Arkansas residents. But there is a total lack of evidence that the State of Tennessee as a sovereign State has ever recognized or acquiesced in the claim of sovereignty of these lands by the State of Arkansas or its residents. On the contrary, litigation in the courts of Tennessee by individuals living in that State have asserted claims to a portion of these lands and have obtained favorable decrees from the Tennessee courts. **Brown v. Brakensiek**, 48 Tenn. App. 543, 349 S. W. 2d 146; **Russell v. Brown**, 195 Tenn. 482, 260 S. W. 2d 257. And see record in **Farris v. Moore**, Defendant's Exhibit 50. See also pp. 1096-97 of the Record, where there is testimony that a court of Arkansas acquiesced in the claim of Tennessee's dominion and sovereignty over a certain part of the disputed area when a case of trespass was involved. Moreover, the maps of the United States engineers, and even the maps used by the officials of Crittenden County, Arkansas, strongly negate the claims of plaintiff as to dominion and sovereignty as to these lands as against the State of Tennessee. Clearly, therefore, Arkansas cannot claim a right to these lands by any basis of prescription. The lands in question lie across the river from the main area of the State of Tennessee and it is argued that no action has been taken by that State to determine the ownership of this area, although the avulsion cut off a large portion of Cow Islands from its mainland over fifty years ago. But with the meanderings of the river since that time and with the recognition given to the State of Tennessee by the maps of the United States

engineers and others as being the owner of these lands, any delay in instituting an action to determine the exact boundary between the two States by the State of Tennessee does not lend any weight to the claim of the State of Arkansas of title to these lands by adverse possession or sovereignty therein as against this defendant.

### JUDGMENT AND DECREE.

It follows from the foregoing proposed Findings of Fact that the Special Master recommends that a judgment and decree be entered providing as follows:

1. That the boundary line between the States of Arkansas and Tennessee in the area in controversy be fixed in the middle of the old abandoned Cow Island Bendway Channel as partially reflected in the 1953 survey of one R. L. Cooper (Defendant's Exhibit 42, attached to the decree in **Brown v. Brakensiek**, in the Chancery Court of Shelby County, Tennessee), said abandoned channel extending from its upper or up-river end to the lower or down-river end of Ike Chute as far as that survey goes, thence downstream in a southerly direction passing down the middle of a water drain or creek now running between the lower end of Ike Chute and the upper end of 96 Chute, thence continuing downstream in a southerly direction down the middle of 96 Chute and coming out of 96 chute on a continuing straight line to the point where it joins the present navigation channel of the Mississippi River, all as indicated by a broken line marked "State Line" on the annexed reduced copy of the 1965 aerial photograph of the area in controversy, Joint Exhibit A, marked Appendix A-1, and also as reflected by a broken line marked "State Line" on a reduced copy of Defendant's Exhibit 39, the 1937 map of the United States engineers and hereto annexed as Appendix A-II.

2. That a Commissioner be appointed by this Court to engage and supervise a competent surveyor to survey the boundary line as recommended herein, and that said boundary line as reflected in said survey be established by an appropriate decree as the boundary line between these two States.

3. That the costs herein be divided equally between the parties.

Dated this 29th day of July, 1969.

GUNNAR H. NORDBYE,  
Special Master.