

In the
Supreme Court of the United States

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SUPREME COURT, U. S.

STATE OF MISSISSIPPI,)
)
Petitioner,)
)
vs.)
)
STATE OF ARKANSAS,)
)
Respondent.)

C.3
No. 48 Original

Washington, D. C.
December 5, 1973

Pages 1 thru 30

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STATE OF MISSISSIPPI,

Petitioner,

v.

STATE OF ARKANSAS,

Respondent

Wednesday, December 5, 1973

BEFORE :

APPEARANCES:

WILLIAM H. DREW, ESQ., Special Counsel to the
Attorney General, State of Arkansas, P.O. Box 744,
Lake Village, Arkansas, 71653, for the Respondent.

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Mitchell E. Ward, Esq.,
for the Petitioner

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In Rebuttal

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William H. Drew, Esq.,
for the Respondent

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P R O C E E D I N G S

MR. CHIEF JUSTICE BURGER: We will hear arguments now in Number 48 Original, State of Mississippi against the State of Arkansas.

Mr. Ward, you may proceed whenever you are ready.

ORAL ARGUMENT OF MITCHELL EMMETT WARD, ESQ.,

ON BEHALF OF THE PETITIONER

MR. WARD: Mr. Chief Justice, and may it please the Court:

The State of Mississippi has filed this original action asking the Court to make a judicial determination of a disputed boundary line between the two States.

The uncertainty of the boundary line is due to the fact that it is located in an abandoned bend of the Mississippi River which formerly was the boundary but which has now been cut off by the action of U.S. Engineers in making a neck cut-off in 1935.

When the two States were admitted to the Union, the acts admitting the States to the Union made the river the common boundary.

In the area in question, the river looped westward and southward and then eastward around a long neck of land which was located in Mississippi, known as Potter Point, Mississippi, and this map depicted in the Arkansas-Mississippi Refuge Quadrangle was attached to the Special Master's Report,

the Honorable Clifford O'Sullivan.

Q Which map is it?

MR. WARD: That's the map -- Appendix A.

Q Thank you.

MR. WARD: The black line on this map shows the location of the river when it was surveyed by the Surveyor General of the United States.

It is the contention of Mississippi that from about 1823-30, the time of the original GLO surveys, that the river migrated slowly and imperceptibly caving into the Arkansas bank and adding accretions to Carter Point, Mississippi, until such time as it moved approximately 2000 feet to the west, its location in 1935.

In the year 1935, the United States Engineers made a cutoff across the neck of Carter Point, which is shown on this exhibit, Appendix A, thus diverting the flow of the river from its old channel around Carter Point and creating a new channel. Within a matter of some three months, all navigation left the old channel and adopted the new channel through Tarpley Point.

Q Mr. Ward, I take it, the only argument here is over Luna Bar. Is that right?

MR. WARD: It was that area around Luna Bar. Luna Bar actually created the problem.

Q Is this a very valuable piece? There is a lot of

talent exercised here on a --

MR. WARD: Yes. By now, it has probably close to a thousand acres of land -- all of this land shown in Spanish Moss Bend has filled in. There have been numerous problems in the enforcement of criminal law, the State of Mississippi arresting residents of the State of Arkansas on this bar, with the attendant confusion about which State has criminal jurisdiction.

It is the contention of the State of Arkansas that this gradual migration did nottooccur but that in the year 1872 the river, Mississippi River, suddenly jumped, caved into the Arkansas bank, went overbank, scoured out a completely new channel behind the mainland Arkansas bank, and then reentered the Mississippi channel at a lower area there, thus creating an island, which they say is Luna Island and not Luna Bar.

The Special Chancellor -- I mean the Special Master resolved this conflict in favor of Mississippi and we are here today on exception to his report.

We are not sure just what the position of the Supreme Court is at this time about the weight to be given or the finality to be given to the finding of a Special Master.

We do note that in Rule 92 of the Supreme Court Rules that they say that where applicable the Federal Civil Rules will be given effect. And in Rule 53 of the Civil Rules, it is provided that the finding -- factual findings, of a master

will not be disturbed unless clearly erroneous.

Actually, we are in agreement with -- Mississippi and Arkansas are in agreement with the basic law, which is the law of the thalweg, and we are really here arguing a point of fact as to whether the finding of the -- the report of the Master should be approved on that finding.

We both agree that the law is that if the river migrates slowly and imperceptibly and the thalweg continues to cave into a bank, that where that thalweg is the boundary line between States, that that changes -- does not change the State boundary, but the boundary follows the deepest line of navigation or sailing line or thalweg, used interchangeably, and it remains the State line wherever it may be. We agree on that.

And we further agree that if the river suddenly abandons its old bed and carves out a new bed, in a very short period of time by an evulsive action that this freezes the State line in the line of navigation, the sailing channel, where it was located prior to the evulsion after that reach of the river has ceased to be a flowing stream.

Q Am I correct in assuming that there really isn't any argument on the law at all between the two States, it is the application of --

MR. WARD: The application of the law.

There is one other point of law which I think we are in agreement on, and that is this: that in the brief below

Arkansas conceded that Mississippi had made a prima-facie case, and that the burden of proof rested upon them to establish the 1872 evulsion. This was quoted -- I did not argue it in my brief because it was quoted by the Special Master and was not controverted by Arkansas.

That is the law, anyway, as I understand it to be because an evulsion is an extraordinary thing and not the ordinary thing that would happen.

Fortunately, we were able to find numerous maps and charts, directions for navigation, reports to Congress, involving this sector of the river, over -- approximately 200 of them. So we have a fairly complete historical picture of this.

From the time that Mississippi and Arkansas were admitted to the Union -- there are numbers of maps, particularly the old Western Pilot which gave directions to navigators and which included maps of this sector of the river, which stated that the sailing vessels when they go through Spanish Moss bend should go over and hold hard against the bank of the Mississippi River, thus fixing the sailing line against the concave high bank of the Arkansas River from 1820 up until 1860. The largest years in gap in this period of time is only nine years, so we have a graphic depiction of the fact that from 1820 to 1860 there seems to be no question but what the sailing line, the thalweg, the channel of navigation, was hard against the Arkansas bank.

Also, during that time, there was no evidence of a detached bar, as we call it, or point bar, or an island as Arkansas calls it. There was no evidence of any detached land mass appearing off of Carter Point,

The maps all, however, did show that attached to Carter Point there was building and continued to build a sand bar accretion formation.

And in 1863 -- and we now move into the war years -- Lloyd's 1863 map of the Mississippi River which was drawn up for the purpose of showing these very things, island, sand bars, further fortifications and mines that had been placed out, was printed, and this 1863 map goes into great detail showing a very decided sand bar formation attached to the distal end of Carter Point, Mississippi, with no land mass formation out in the river.

Following the end of the Civil War, and during the efforts to reconstruct the South, the United States sent a General Humphreys down to make an inspection and report, particularly on the condition of the levees along the Mississippi River, the levee being, as you know, an earthen embankment that is thrown up, at that time parallel with and quite close to the bank line, for the purpose of trying to contain the Mississippi waters when it was in flood.

This report that Mr. -- that General Humphreys made in 1866 to Congress and a subsequent report that he made to

Congress in 1869, reported that the bank was caving badly in this bend, that the levees had fallen into a state of disrepair and that breaks were evident in the levees in several places all in this Spanish Moss bend area.

Then, in 1872, the State of Arkansas also became concerned with this and they appointed a surveyor named Douglas to make surveys of existing levees and to make recommendations for new levees to take the place of the gaps in the old levees.

This is the first historical proof of the existence of this land mass known as Luna Bar in a situation where it has become detached from Carter Point.

Mr. Douglas surveyed in great detail the Arkansas bank there. He showed farms, he showed forests, he showed slews, he showed the levees in place and levees which had been breached. Luna Bar, he did not designate its site, but in the river over against the Mississippi shore he showed an eye at formation, detached from the shore, utterly devoid of any cultural civilization, which would indicate we have no report of Mr. Douglas, but it would certainly indicate by leaving it blank that he did not consider it a part of Arkansas.

The most important thing about Douglas' survey, however, is the fact that he locates with great detail the then existing levee system with its breaks which coincide to the

reports that General Humphreys made to Congress in 1866 and 1869.

The engineering witnesses introduced by -- the engineering witness-- and it was the only engineering witness introduced by Mississippi -- was able to overlay subsequent surveys right up until the present time. And you can see the old levees prior to 1860 in place, you can walk them, both sides concede they are there. You can walk them along the bank on the Arkansas side. There is no levee formation whatsoever on Luna Bar which is some -- that is the crest of it is some 2,000 feet to the east.

Q Mr. Ward, does your opposition agree with you on that? Wasn't there some testimony somewhere that there is evidence of an old levee on Luna Bar?

MR. WARD: No, I think not. There was some testimony of an old house site --

Q And an old cistern --

MR. WARD: Cistern, that's right. Then the witness Putnam said he thought he saw a chimney. On his second visit back he could not locate the chimney. No one was able to locate any habitation on Luna Bar. The witness, Dr. Durham, even went so far as to get a metal detector and go -- they assumed there were houses there because there were china-berry trees. In our part of the country, they do plant china-berry trees around house sites. So they saw some china-berry trees also brought in

by birds.

Q Is there any habitation there now?

MR. WARD: No, sir.

Q But you are still arresting people on Luna Bar for something.

MR. WARD: Mississippi is arresting people on Luna Bar.

Q On what kind of charges?

MR. WARD: A game violation. There has not been one -- this really started these series of suits: Mississippi making these arrests. And I think that's what really precipitated the litigation, and we thought it well to bring it to an end in a proper way.

Q Hunters?

MR. WARD: Hunters, yes, sir. One instance, the hunter from Missouri came down with an Arkansas license and was arrested and tried in Mississippi and another one, I believe, had an Arkansas license and was also arrested.

Q So it was those episodes --

MR. WARD: Yes, sir.

Q -- that motivated this litigation to get the matter settled.

MR. WARD: When I started the litigation down in the lower courts, one suit was filed in District Court at Greenville, another suit was filed in the chancery court of

Arkansas, and we were getting litigation all over the place, and Mississippi decided it wanted to bring it to a head and have some definite adjudication of where the line was.

Q These were geese or ducks?

MR. WARD: Deer mostly. There is very good goose and duck, but mainly deer -- and turkey.

Q Who is the owner of the property in litigation?

MR. WARD: Carter Point is owned by a lumber company and a synthetic company. The Arkansas bank, right north of Carter Point, is owned by Chicago Mill and Lumber Company which is not involved in this suit. The land owners to the west -- various ones -- Dr. Walls who is now dead, a Mrs. Smith, Arkansas Land and Cattle Company. And then there are further owners -- other owners further downstream who have not yet become involved in any of the litigation.

Q Wouldn't the suit as to the historical movement of the river unsettle private titles as well as the boundaries between the States?

MR. WARD: Yes. On Duke v. Durfee, they recognize that private litigants can settle their titles one by one if they finally get an unappealable decree, but it is difficult crossing State lines to get personal service on landowners and to make a decree which you feel confidence in. Also that might resolve the question of taxes, the question of criminal jurisdiction, and recently there has been a good bit of oral

activity in Washington County, which is immediately adjacent to that. There has always been a good bit in Arkansas. I am not quite sure about this particular county.

But at any rate the Douglas 1872 survey was the first historical evidence of this situation being there. Also in 1872, Louisiana, since they were getting the water when the water flowed through the breach levees. In Arkansas, they flowed downstream and came into what is known as a ten cell botton.

And Louisiana also sent a Captain Richardson up to make an investigation report and he made a report in 1872 to the Louisiana Levee Commissioner reiterating the same situation found in Umphrey's reports. In addition to the breaks that he found and shown on Douglas report, he found an additional break of 200 feet in the levee.

The important thing about all of these reports, it seems to me, is this, one, no mention was ever made of an evulsion taking place in 1872 whereby the river jumped into Arkansas and caved through the land and came back out.

The geological witnesses, Dr. Kolb from Mississippi, Dr. -- Mr. Spillers and Dr. Durham from Louisiana, all conceded that in their experience as geologists and all of the geological literature there had never been any mention or ever any history of any such phenomenon taking place as Arkansas claims to have happened here.

In fact, Dr. Kolb said, "I had to coin a phrase," and he called it an outside evulsion and said, "I never heard of it. I just made it up." Mr. Spillers made one. He said, "I call it reoccupying an old channel." He admitted that there was no such accepted phrase in geologic literature and he said he had to coin the phrase too.

So, with all of this work done in this particular narrow sector of the river, it seems to be incredible that if this phenomenon took place it had never happened before and has never happened since, when they were concerned with the integrity of the levees, when they were concerned with trying to protect the backland of Arkansas from flooding that they would have swept this remarkable situation under the rug.

Q Mr. Ward, there was testimony by a forester with respect to the existence of three rather mature trees, one a red mulberry tree, I think, and the other a large walnut tree, and, as I remember, the species of the third tree was not identified, which Arkansas says tends to support their theory. Where were those -- it wasn't clear to me where those trees -- where the forester testified he found those trees or tree stumps and what the significance of them would be.

MR. WARD: Mississippi takes the position that those are stumps of trees that had been severed from their bowl in years past and had floated in over some flood in preceding years.

In substantiation of that position, which we think is a valid one, the -- if the Court please -- one of the -- the old mulberry tree was found on the lower end of Luna Bar. The other two trees were found about the center -- west center portion of Luna Bar. The remarkable thing about it was that these witnesses pinpointed -- and they are on the exhibits -- they pinpointed the location of these three stumps, which they said they thought were stumps of trees in place.

Q And they testified they were deeply rooted there, didn't they?

MR. WARD: Yes. One of them was rooted, one was bent over and was not rooted. One had moss on the roots, so it couldn't have been. Mr. Putnam first said it was rooted then I called his attention to the fact there was moss on the roots and he said, well, you wouldn't have moss on roots.

But the complete refutation to that, in our opinion, is this, that the witness Smith -- all of these maps were blown up to a common scale of one foot equal 20,000 feet, one to 20,000. It is possible by getting your benchmarks, your levees, and so on, and lining them up, to overlay, and transparent overlays were made of all of these exhibits, to put one exhibit transparency over the other and locate various geographical points.

The mulberry stump and the other two stumps which they said were of ancient age. In 1894, the soil was then --

in one place, was 10 feet lower, in another 15 feet lower, and another place 20 feet lower. So between 1894 and 1970, when Mr. Putnam went on Luna Bar, there had been a filling, so that the elevation had been increased from 1894 -- I'd say had been filled -- in layman's -- I'd say had been increased as much as 20 feet, 15 feet, 10 feet. So these stumps they would have been hanging in the air if they had been there in 1894. In the meantime, the river had come in and deposited and these stumps had obviously floated in, a phenomenon that's accepted up and down the river, had floated in on some subsequent rise and had attached there.

While you have raised the question of forests, we found, with the exception of these dead trees, which we didn't find, we never could have located them -- they found them.

Q If, in fact, trees of that age had grown in that spot, then your theory would be erroneous, wouldn't it?

MR. WARD: No, sir. It would have been impossible because they grew in an area which by subsequent maps -- the 1882 survey of the Mississippi River Commission -- we call it the MRC survey -- the 1894 survey -- the subsequent surveys show that this area was in the bed of the river.

Q My question was if those trees had, in fact, grown where they were found and of that age, then all your evidence is wrong, isn't it?

MR. WARD: No, sir. I wouldn't agree to that because --

Q Well, in other words, it couldn't have been the bottom of the river or the trees wouldn't have grown there. Assume with me, if you will, contrary to what you strenuously represent to be the facts, that the trees, in fact, did grow in those spots for 84 years, 100 years, whatever it was -- year old trees. And had they grown there, then your theory as to the historic facts would be mistaken, wouldn't it?

MR. WARD: Yes. I would have to assume, first, that the land was at that elevation and that all of these subsequent maps were all wrong. And that was a point that Judge O'Sullivan made that all of the witnesses for Arkansas found fault with these ancient maps wherever they did not agree with their theory, and that was the way they washed the maps out because they said it doesn't agree with our theory, our theory being that they washed in and their theory being that they grew. I can't get over the fact that there was moss on one of the roots which would be evidence that --

Q I just want to be sure I understand the significance of the evidence. So, is your answer yes that if the trees had grown there your theory would be mistaken? And all the maps would be mistaken, and all the evidence upon which you rely?

MR. WARD: Yes, sir, and all the maps and all the work of the Mississippi River Commission and all of the reports to Congress, and so forth.

Q I just wanted to be sure I understood the significance.

MR. WARD: In 1882, -- and this would bear on the question that has just been asked -- in 1882, the Mississippi River Commission made the first definitive controlled survey of the Mississippi Valley. This was done with great care. It was tied in with trigometry. It was tied in with longitude and latitude, and they got the elevations.

My time is running short. I do want to save a minute, but those surveys showed this was just a dry sand bar with no vegetation it.

MR. CHIEF JUSTICE BURGER: Mr. Drew.

ORAL ARGUMENT OF WILLIAM H. DREW, ESQ.,

FOR THE RESPONDENT

MR. DREW: Mr. Chief Justice, and may it please the Court:

The State of Arkansas will agree with the State of Mississippi on the law. Apparently, there is no contest of the law involved. It will be merely a factual situation that if Luna Bar, or Luna Island, is the product of an accretion then, of course, the evidence is that the river and the thalweg was west of it. If it, however, did not imperceptibly move, then the theory of the State of Mississippi -- and it being in the State of Mississippi -- would be incorrect.

To go a little further, the State of Arkansas conceded

in its inception that the State of Mississippi raised a prima-facie presumption that the river did migrate. It did not concede that the river did, in fact, migrate across.

By the testimony of Mr. Kolb, Dr. Kolb, and the witnesses for the State of Mississippi, we conceded that they raised the prima-facie presumption that under normal circumstances and accepted principles there is a westward migration of the river in a bendway of this type.

However, the accepted situation we do not necessarily agree occurred at that time. In fact, we think the evidence is quite to the contrary.

We agree that there are many recorded maps, and one particular map of -- Defendant's Exhibit No. 8 -- which was an ownership map of Washington County, Mississippi, in 1871. This map does not bear out the contention of the State of Mississippi in any way. Appendix -- the map of 1863, Lloyd's map -- I believe it's the ninth exhibit in Judge O'Sullivan's report -- there is an accretion to the northern side of Carter Point, but this is not the location of Luna Bar or Luna Island. It is to the north and completely distant by two to three miles.

In 1871, all of the maps -- and we commence with the Government Land Office survey of 1823 on the Arkansas bank -- 1830 on the Mississippi bank. From those points on, there is no divided channel in Spanish Moss Bend. This goes through

the Humphreys and Abott map of 1861 which was the general reconnaissance map used by General Grant in the conquest of Vicksburg. There is the divided channel all the way through in 1871, based upon the maps from the Library of Congress and the Senate and the other maps, and also the defendant's exhibit No. 8 of Washington County.

In 1872, there is a divided channel, apparently based upon the maps of Mr. E. A. Douglas who was apparently commissioned to show the breaches in the levee and to get Congressional assistance in this area.

Immediately west of Luna Bar there is about a mile, or so, of levees that are breached, the report of Mr. -- of General Humphreys is that this levee was breached there, but the waters were not going to the tin soil bottoms, but were passing back to the main channel of the river.

Mr. Smith, on behalf of the State of Mississippi, deduced that the caving in the bank above Columbia was in Spanish Moss Bend. Historically, Columbia was the first county seat of Chicot County. It did, in fact, wash into the river and caved away and the county seat was subsequently -- was afterward removed. Columbia no longer exists even in any way because it all went into the river, and it is some several miles south of there.

Be that as it may, in 1872, the map of Mr. Douglas, if we will take the -- and assume that the projectile-like

little marking over there is the Mississippi bank, or is Luna Bar, would be its first appearance. However, in 1873, there isn't any question as to the appearance of Luna Bar or Luna Island. Major Suter, commissioned by Congress, made a reconnaissance of the river. He was making this reconnaissance due to the vast flood damage and to make a report to Congress for assistance therein.

Major Suter, in his map of reconnaissance, which would be Defendant's Exhibit No. 12, clearly set forth a bar in the river. He clearly wrote legend, Spanish Moss Bend in the eastward channel, and chose the thalweg of the river in the western channel. In going through his entire report, he meticulously has put the legend of the name of the bend, even when crowded for space, where it apparently originally was.

Q Mr. Drew, when you refer to these various defendant's exhibits, those are Arkansas exhibits and they are not attached to the Master's Report, but they are here in the file, I take it?

MR. DREW: Yes, Your Honor.

So we know that the island came into existence in 1872. The first hydrographic survey of the river took place in 1879-82. The actual geological survey of the -- the surveying and all -- took place in '71. The map, and whatever else shown thereon, continued on through '82, and at that point

it shows a divided channel,

The Court's attention is called to the testimony of Dr. Kolb and Mr. Smith, and particularly so, sir, with reference to the elevations of the island, Mr. Guyer had made a survey line across the island which crosses the north side, and is clearly in an accretion area, reference line A to B, C, and I believe it goes to D on to Carter Point.

All of the elevations alluded to by Dr. Kolb and Mr. Smith were based upon the elevations of that reference line and not to the highest recorded elevations of the island itself.

If the Court -- please the Court to look at Exhibit No. -- I believe it is Appendix A to the Master's Report -- you will note that the original survey lines of 1823 on the Arkansas bank, 1830 the Mississippi bank, are shown therein with heavy pencil.

At the south distal end is the island itself, the accretions being the portion to the north. The reference line crossed over onto the northern portion of the island and not through the high area.

Based upon the physical maps and what they pictorially show, there was no accretion to the distal end of Carter Point, Exhibit D-8. Ownership of Washington County completely shows Carter Point in its original position. The other exhibits that were made about that time also reach that same conclusion, and, therefore, we know that the island did come into existence

in the year 1872, based upon Mr. Douglas' map followed by Major Suter's.

Thereafter, there is a divided channel at all times, but every Mississippi River survey from 1880, the first, all the way through the present time, there is a divided channel around the island.

The State of Arkansas employed Dr. Kolb, excuse me

--

Q Divided channel right up to the present time -- the actual navigable river is down through the Tarpley Cutoff has been since --

MR. DREW: Mr. Justice Stewart, the river eastward of that point, approximately five miles there was a channel dredged through Carter Point that navigation did adopt. However, the river is still active in Carter Point -- I mean in Spanish Moss Bend and has always been.

I think the testimony will be that only a small portion of the island was out at one time during this suit. At other times, they had walked across those channels. But there is still a major stream going through and it still flows.

Q Tarpley Cutoff and then 1938.

MR. WEBB: Navigation is in Tarpley Cutoff --

Q And the Leland Cutoff below it since --

MR. WEBB: And the Leland Cutoff. However, it does not concede that the river is inactive in that area at all.

It is very active.

Q Is the river boundary, then -- the boundary between the two States now fixed, or not?

MR. WEBB: Sir, the boundary between the two States -- I would say it is not fixed except for the evulsion that would have taken place in 1872 fixing the channel, in the eastern channel --

Q It has been fixed since 1872?

MR. WEBB: Yes, sir.

Q But if you are wrong, it isn't fixed yet?

MR. WEBB: That is correct, sir. Yes, sir.

Dr. Durham and Mr. Spillers made an extensive geological investigation of the island itself. The strata of the soil, sir, its level across -- the same stratas run uniformly throughout its length. That is inconsistent with an accretion which would have bending waves of layers of soil therein as it accreted and moved outward.

Both Dr. Durham and Mr. Spiller also made investigation as to the pre-existing channels that lie westward even of Luna Island itself.

The present channel of the western channel -- they made an extensive study therein and found the low-lying cypress stumps that grew in place that are lying now in the bottom of that bed, and also are lying east of the western migration of the river itself.

The evidence -- the physical evidence there concludes that there is, or was, a low-lying area in there. However, had the river migrated westward as contended by the State of Mississippi, these cypress stumps that are lying east of this westward migration, that by ring count are over 250 years old, would have been erased. The State of Mississippi said well, they could have floated in and landed there.

We could give you a description of logs floating. The roots are up. When you saw them off they flop up. They don't sink downward. However, there was testimony by experienced foresters, these trees were trees that grew in place. Their knees, their root systems, and all, are there. Now, this is in the western channel, and not on the island itself.

On the island itself, in the higher elevation which will be in that south-central part on Exhibit Appendix A. The higher elevation that is recorded much higher than is shown by the State of Mississippi. There are three stumps of antiquity there, or ancient, that were located by Mr. Putnam who is now deceased and Mr. Thompson, both experienced foresters; both testified these stumps are from trees that grew at that spot they examined them. The carbon dating of that stump, by Dr. Iddings, which was that the tree at the time of its death was 550 years plus or minus 180.

As I understand the carbon dating, the longer the

half life is computed the smaller the figure. The time element involved in having established a tree of antiquity much greater than the 100-year period that would be involved herein, it was not run any longer. This particular tree was the red mulberry stump, sir, that was 84 years old by ring count at the time of its death. Even without the carbon dating, we know that from the surveys thereafter the 1882 survey the tree mess was there gone, this tree, if growing there at that time, had been dead at least by that time which was prior to the Government's survey.

The other two trees, one a red mulberry and the other a black walnut, the black walnut was flagged and left in place by Mr. Thompson. The ring count thereon was 112 years old. There was no attempt to carbon date it. It also had been dead longer than the period of time involved and was of age there. The other was the red mulberry, with 112 years or some, exactly, I do not recall.

Had the river moved imperceptibly westward, as contended by the presumption raised by the State of Mississippi, these stumps could not have existed. Further, we have the testimony of Mr. Richard Proctor, who is an elderly man that I have known all of my life, since I was born and raised within two miles of this spot. Mr. Proctor testified, and, if you will note, his testimony came in as not solicited but a voluntary thing, that on this island he was asked a question and he

remembered going up on the island and going into a cistern and taking a drink.

We further had the testimony of Dr. -- I am sorry his name escapes me -- the gentleman with the stereopics who could see. Judge O'Sullivan could not; however, he contended he found evidence of human habitation in the aerial photographs of 1930.

Q What kind of vegetation, and particularly trees, are on the island -- are on Luna Bar today?

MR. DREW: At this time, sir?

Q Yes.

MR. DREW: At this time, sir, on the highest elevation on the very top it is a field. There are approximately 800 acres of land adjacent on the accreted areas that have soft timber and willows that our foresters valued at \$500 an acre greater at the stump. There are other species of trees, hard wood, that this is quite valuable land, sir.

Q Any red mulberries or black walnuts?

MR. DREW: Yes, sir.

Q There has been talk in the papers here about primary growth and secondary growth and climax growth, which is very unfamiliar to me --

MR. DREW: The climax series of trees are all on the higher elevation surrounding the field. On the lower elevation, there are only trees of the primary species.

Q But on the higher elevations, are there red mulberries --

MR. DREW: There are only trees of the secondary and primary species on the highest elevations.

This was one of the things that one of the foresters called the Court's attention to. Not the tree itself and the present living tree and its age, but the complete variety of trees that are now growing there, is inconsistent with trees with newly formed lands as contended by the State of Mississippi.

The Mississippi River Commission itself, in the historical study for the Tarpley Cutoff, made a survey, a historical study which is Defendant's Exhibit No. 32, wherein the State of Mississippi -- the Mississippi River Commission itself, made the historical study and a map showing the accretions and whatnot, from 1880 to date. Their historical study also does not support the presumption of the State of Mississippi.

Further, Dr. Fisk, in the geological investigation of the Mississippi River alluvial valley and its ancient courses, from Cape Gerardo, Missouri, to Donaldsville, Missouri, which was Defendant's Exhibit No. 30, completely supports the contention of the State of Arkansas, completely supports Dr. Durham and Mr. Spillers. It completely negates the presumption of the State of Mississippi.

In its geological investigation, Dr. Fisk shows the area of the island we were just discussing with the secondary and the primary trees thereon as Ancient Course No. 10. In the hierarchy of the years on the ancient courses, they fixed them by centuries, 10th Century, 11th, 12th, up to the present time, however, they go back to antiquity.

Dr. Fisk also shows that the higher elevation from which the red mulberry, the walnut and all these others were taken, as well as the type forestation, has to be in Channel No. 10 or in existence more than several hundred of years.

We had the Defendant's Exhibit No. 39 which is a county map of Chicot County, prepared by Mr. W. A. Mala, who at that time was the county surveyor, who shows clearly the Luna Island bar area as being within the State of Mississippi.

It is the contention of the State of Arkansas that the report by Honorable Mr. Judge O'Sullivan is erroneous in that it adopts the depth or the elevation theory of the State of Mississippi on a reference line without regard to the true elevation of the island from where the physical facts of antiquity were discovered. Secondly, the map area does not support the contentions in any way, in fact, negates it.

We believe that the State of Arkansas has completely negated the presumption raised by Dr. Kolb or by Mr. Smith with physical, factual, evidence that makes the fact that this would be a part of Mississippi an impossibility.

We thank you very much, sir.

MR. CHIEF JUSTICE BURGER: Thank you, Mr. Drew.

Mr. Ward, do you have anything further?

REBUTTAL ORAL ARGUMENT OF MITCHELL E. WARD, ESQ.

ON BEHALF OF THE PETITIONER

MR. WARD: I can't agree with everything that Mr. Drew has said. For instance, the exhibit by the Master here shows the old channel completely clogged off and filled with sand, which the Court has before it.

The question of forests here. It is not trees that control. It is the question of the forest. It is the type of the forest. The testimony is that this was an alluvial forest and that the growth of trees there is an alluvial forest of the primary species. They are still there, forty years old.

MR. CHIEF JUSTICE BURGER: Thank you very much, gentlemen.

The case is submitted.

(Whereupon, at 1:48 o'clock, p.m., the case in the above-mentioned matter was submitted.)