

miles down the river, but that piece of water is included in estimate for improvements. The study of the river was made at an excellent time, the river being nearly at its lowest. As a summary, the Brazos during our measurement contained, from Waco to Richmond, in round numbers, 398 miles of water practicable for light-draft boating and 16 miles of shoals and rapids."

The report, in addition to the above, gives a detailed report of the measurements of each reach and step, made with the care, if not the authority, of a Government official. Professor Hurwood's estimate of cost may be too low, but his measurements have stood the test of expert examination.

The data is submitted with the hope that in making your report upon the improvements at the mouth of the Brazos you will make favorable mention of the Brazos navigation as far as Waco.

S. L. JONES,
Secretary Waco Commercial Club.

Col. HENRY M. ROBERT,
*Chairman Board of Engineers
for the Examination of the Mouth of the Brazos.*

APPENDIX P.

RECEIVERSHIPS BRAZOS RIVER CHANNEL AND DOCK COMPANY.

George W. Angle and Frank Caldwell, September 5, 1890, to March 27, 1891.
George W. Angle and Gustav Wilke, March 28, 1891, to February 2, 1892.
George W. Angle, February 2, 1892, to March 25, 1896.

APPENDIX Q.

STENOGRAPHER'S REPORT OF A HEARING AT THE HOTEL VELASCO, VELASCO, TEX., JANUARY 11, 1897, BY THE BRAZOS RIVER BOARD.

Present: Col. H. M. Robert, Corps of Engineers; Mr. Stehman Forney, assistant Coast and Geodetic Survey; Mr. Robert Moore, civil engineer; Mr. Jay Stone, secretary and stenographer; Mr. L. L. Foster, manager Brazos River Channel and Dock Company; Col. Guy M. Bryan, of Quintana, Tex.; Mr. L. R. Bryan, banker and lawyer, of Velasco, Tex.; Mr. J. P. Bryan, of Quintana, Tex.; Col. Mordella Munson, of Oystercreek, Tex.; Mr. H. K. Davis, of Hearne, Tex.; Mr. J. L. Hudgins, of Velasco, Tex.; Mr. H. L. Brown; Capt. A. H. Ahm, captain of the light-house station at Velasco, Tex.; Mr. J. M. Moore, of Velasco, Tex.

Colonel ROBERT. This hearing is given by the Brazos River Board (which was appointed under the provisions of the act of Congress of June 3, 1896), at the personal request of citizens of this locality and other parts of Texas, and we would be very glad to listen to anything bearing upon the subject under investigation or matters having relation to it that any gentleman present desires to express.

Col. GUY M. BRYAN. Gentlemen: It will perhaps be interesting to you to know something of what has been thought in the past of the improvement of the mouth of the Brazos River. In the beginning J. F. Austin, the founder of Texas, thought that deep water could be obtained there, and directed the town of Quintana to be laid off there, in 1835, in view of these contemplated improvements. During the Republic of Texas some of the prominent men of Texas—the Whartons, Branch T. Archer, T. J. Green, and others—formed a company and laid off Old Velasco for the purpose of availing themselves of the advantages of the mouth when improved as contemplated.

In 1851-52, Senator Thomas J. Rusk, ex-Secretary of the Treasury, Robert J. Walker, and ex-Senator T. Butler King, of Georgia, came to Austin when the legislature was in session, to obtain a charter for a southern Pacific railroad through Texas. T. Butler King came to the mouth of the Brazos and, with the aid of the pilot of the place, thoroughly examined the bay and river and returned to Austin satisfied of the natural advantages, and with improvements, that deep water could be obtained, and that it was the point on the Gulf to make a terminal of the road. Years afterwards I met Mr. King in New York and he told me that eventually one of the largest cities of the United States would be built at the mouth of the Brazos; that it was the only river of its magnitude in the United States that emptied directly into the

Gulf with one mouth; that all the other rivers of its size emptied into bays or by several mouths.

Several of the wealthy stockholders of the International Railroad, viz, W. E. Dodge, Walter Phelps, Galusha A. Grow, Moses Taylor, and others, formed a company to improve the mouth, and in 1872 these gentlemen came from Houston to Columbia, where a steamboat was waiting for them. They came to the mouth and spent some time in examining it, and decided that in three months they would commence building jetties, and that they would make it the Gulf terminus of their road. But shortly afterwards a financial crisis spread over the country, and some difficulties arising with the settlement of railroad claims and differences arising among the directors of the international road induced them to abandon their project, but in the meantime they had bought thousands of acres of land on and near to the Brazos. I was one of the directors of this company, and was with them on their trip from Houston to the mouth, and know from conversation with them that they were entirely satisfied that deep water could be obtained at the mouth. It is a matter of great public interest that this country should be developed. If you go back into the interior a few miles you will find the richest country in the world. The valley of the Nile does not surpass it. It stretches from Oyster Creek across to the Colorado. The valley of the Brazos is exceedingly fertile and rich, and as you go into the interior it is well populated, has extensive towns and farms, and all their produce will come here.

All that country up there is interested in the development of the mouth of the Brazos. It is the nearest point for the Pacific Coast and for that immense territory which lies intermediate. The Northwestern States are now exceedingly interested in getting their grain off from the Gulf ports. The grain market has increased wonderfully at Galveston, and they have not the capacity to handle it. There is no hostile feeling toward Galveston, but Galveston is not adequate to handle the commerce. This country is settling up and the production will constantly increase, and we must have a vent for it by way of the Gulf. I need not say to you, gentlemen, that water transportation is so much cheaper than rail, and we have now to depend almost entirely on rail. All the products which now go by rail will go by water, because everybody wants to go where transportation is cheapest, and that is what will happen here if the Brazos is improved. I see that Waco has already had a meeting of its chamber of commerce and that it has appointed a committee to meet you. All the people in this surrounding country are largely interested in this matter.

I have been reared in this country, have lived here many years, and know thoroughly the peculiarities of the country. I have traversed it in childhood and in manhood over and over again, and everyone who is familiar with it will agree with me in what I have said as to its fertility. I would state in addition that one reason why all the people I have talked to and who are interested in the matter desire the Government to take charge of the improvement is that private companies are liable to financial vicissitudes, as has been evidenced in the case of the present company. There is not that reliance on private enterprise as in the efforts of the United States Government. Private companies may come and go, but the United States go on forever, and if it is a worthy enterprise the Government completes the work. That is the reason why confidence will be insured if the Government takes charge of the work.

Mr. CORNHILL. I think that you are familiar with the circumstances attending the surveys made by Captain Howell.

Mr. BRYAN. The Secretary of War, in answer to a request of this company, that was interested in the development of the mouth of the Brazos, so as to make it a terminus for the international route, gave an order to Mr. Howell, who was the engineer of the Louisiana and Texas coast, to make a survey at the mouth of the Brazos and state the practicability of improving it. He was directed to give details. When he came down with those gentlemen from Houston to examine the mouth of the Brazos, Mr. Grow, who was with them, presented to the gentlemen who were on board of the train the report of Mr. Howell, which contained a map of the mouth of the river. He stated that he had had experienced men to make the survey, and they reported strongly in favor of the survey, reporting, also, that it could be done at comparatively little expense, provided that the information he had obtained as to the procurement of material was correct. This report was spread out and we all looked at the map, and it was a subject of great interest to us, because it was made at the instance of the Secretary of War and Mr. Howell was the Government officer who was charged with making important surveys.

Colonel ROBERT. Do you recollect the depth of water that was obtained?

Mr. BRYAN. No, sir; I do not recollect what that specified. Mr. Howell reported that they could get good water, but I do not recollect whether he stated how much; but he stated that by building jetties it could be accomplished sufficient for all commercial purposes. His headquarters was in New Orleans.

Colonel MUNSON. There is very little I can say in addition to what my friend, Mr. Bryan, has said in reference to the action of these gentlemen who were charged with the work in making the surveys, except that I am perfectly satisfied that the Brazos is the great river of Texas. I am satisfied that practical work can be done, and that commerce can be brought to the mouth of the Brazos from the interior. I have personally examined it, not as an engineer, but for my own information. The falls of the Brazos is the great obstruction, to begin with. I can not understand or explain why this phenomena presents itself, but I have twice gone over the ground to learn about those falls. I have examined the river up to Waco, for my own satisfaction. I do not understand what peculiarity brings about this change at the falls, but to me it is a great curiosity. Just at the edge of the prairie at the falls there appears to have been at some time a great convulsion. Great rocks are piled up there to the westward. Sitting on my horse at the bottom of the falls and looking up, the incline was in that direction [pointing], and toward the east there is a deep and dry valley from the edge of the prairie for 5 or 6 miles that was the bed at some time of a deep river. The public road runs out at the edge of it.

In the bed of that river I saw immense trees growing, and riding along that margin you are just on the edge of the tops of those trees. Along the edge of that prairie I am satisfied that an active man with a spade could have turned the water from its present bed of the Brazos River into this old channel. It was but a step or two from the old channel to where it terminated there. There is the finest location there for manufacturing places that I ever saw. The old bed is wide and deep, but I have no idea what the convulsion could be that brought about this great change. You get to the foot of it, and sitting on your horse looking up you see great boulders piled one upon another. Very little work will turn the river back into its old bed. For manufacturing purposes or anything of that kind, it is the finest water power in the world. This was the only obstruction that we saw. After you have reached the foot of the falls you will find that it is not low water. I can scarcely find anything to express adequately to your mind the condition of things. The bed of the river seems to be a succession of boulders. Sometimes there would be 8 or 10 feet of water, and at others the water would just cover the rocks. I think that a man understanding anything about dynamite could blast out the whole of it in a short while. I have no doubt that with a little money it would be the great water course of the United States. You could improve to Waco easily, and the only obstruction is the falls, and that could be removed, I believe, with a little skill and money. It is the river of Texas. There is no mistake about it. I speak of my own motion and from my own observation. The examination was made to satisfy myself, but not as an engineer.

Colonel ROBERT. Do you know how far those falls are up the river?

Colonel MUNSON. I don't know, sir; it was a very dry season when I came down.

Colonel ROBERT. Have you any idea how far to the falls it is from the mouth of the river?

Colonel MUNSON. I can not tell the distance.

Colonel ROBERT. Can you give any idea about where they are located?

Colonel MUNSON. Just below the little town of Marlin.

Mr. BRYAN. Colonel Munson's remarks about the river remind me of a circumstance. After the passage of the Santa Fe indemnifying act, when the United States gave Texas \$10,000,000 for our claim to Santa Fe east of the Rio Grande, the Texas legislature appropriated some of the money for improving the rivers, the Brazos among others. The county judge of Fort Bend County, Judge Cook, and myself made an effort to get an appropriation from the legislature for the Brazos River. We had a couple of men and took a skiff from Richmond, which is on the river in the county just above this. We sounded the river at every bar from Richmond down to tide water. It was, as Colonel Munson says, a succession of falls, and then it would be a bar. It was very deep at times and then there would be obstructions caused by driftwood. There were snags in the river, and the debris floating down the river would catch around them and make a bar.

Mr. CORTHELL. I would like to ask Colonel Munson or Mr. Bryan to give a history of the navigation of the Brazos River up to the falls, or any incident that they are familiar with connected with that matter.

Mr. BRYAN. There were two boats that ran regularly up the Brazos as far as Washington called the *Brazos* and the *Washington*. That was in 1848, 1849, and 1851. One year they made trips regularly to Washington.

Mr. MOORE. Is Washington below the falls?

Mr. BRYAN. Yes, sir; it was the seat of government when I came to Texas. It is about 250 miles from the mouth of the river.

Mr. CORTHELL. Are you familiar with the fact that captains and masters of vessels used the mouth of the Brazos and the Gulf there as a harbor of refuge and anchorage grounds?

Mr. BRYAN. In the days of the Texan republic a French fleet came up there and

anchored at the mouth of the river and communicated with the governor of the city. The commander said that it was the best anchorage that he found in the Gulf of Mexico. That is authentic, as it is an incident which I recollect. It is historical.

Mr. MOORE. What year was that?

Mr. BRYAN. I don't recollect; but it was in the days of the republic.

Colonel MUNSON. France had a little fleet on this coast when I was a small boy. My parents had a summer home at the mouth of the Brazos. The Frenchmen would very often come ashore. The commander, as I remember him, was a very convivial, cordial gentleman, and he was very kind to the early settlers here. I was present on one occasion and heard him remark to a number of gentlemen that the Gulf near here was the best holding ground off the coast of Texas, and that it was the best he ever saw. He made the remark that he rode in a hurricane there; that a ship would part its cable, but that it would never drag its anchor. The solution was that the bottom was of soft mud and holds the anchor.

Mr. FOSTER. I have heard it said that a great many coaster vessels were lost on the coast of Texas prior to the opening of this bar, and that since then it has been a harbor of refuge for all vessels that ply along the coast.

Mr. BRYAN. When Colonel Giddings was in Congress there was a petition sent to Congress to clean out the Brazos on account of its being a harbor of refuge for coasting vessels. When they leave Galveston going westward, and coming eastward from the west of this place, there is no safe place for them to enter. Pass Cavallo, the entrance into Matagorda Bay, is unsafe to enter, and it is the same with Aransas. I live at Quintana, at the mouth of the Brazos, and a great many of these coasters come in there when the weather is threatening, for the purpose of refuge. They come in and stay until the weather changes, and then go out. Particularly is this the case of vessels going westward from Galveston. As a place of refuge alone it is a very important matter, and if there is deep water all the naval and other vessels can come in there. You can see for yourself what the mouth of the river is. You can see that it is landlocked and would be a perfectly safe harbor. In fact, if we can get deep water, it is the safest harbor on the Texas coast. I met a friend in Houston whom I knew before the war. He was a banker in New York. He made a great deal of money here, and has made a great deal more since in New York. His name is Swinson. He asked me what we were doing at the mouth of the Brazos, and when I told him, he said that that was the place for a large town. He told me that he crosses the Atlantic frequently, and has become intimately acquainted with a captain of one of the ships. In conversation he spoke of the Brazos' mouth, and found that the captain knew more of it than he did. The captain said that it was the best port on the Gulf.

Mr. J. L. HUDGINS. I don't know that I could say anything to advantage, but I have been here a long time and have watched the progress at the mouth of the river for the last fifty years. We always did a great deal of shipping until after the Brazos Canal was cut, and after that the water shoaled up on the Brazos Bar. I came in on 11 feet of water once. It stayed so until the war. During the war these passes were blocked, but the blockade runners came here within twelve days of that time. I went down there myself and helped to block the river with live-oak timber.

A VOICE. Did the putting in of this live oak have any effect on the bar?

Mr. HUDGINS. I think myself that this timber should be removed from there. It was put in to stop the Federals at the time of the war. The principal point where it was put in is 2 miles above here. We whipped the Yankees with it, anyhow. I have always known that whenever they wanted to improve this place all they would have to do was to put jetties out and they could have deep water. The Brazos River needs cleaning out from here to Columbia. There are some bad spots there, and it is caused by driftwood getting into the bottom. I can not say anything of the river in the way of science, but speak only from my own experience. I have no education and deal only with common sense. The canal here was dug to get the sugar out of this country.

Colonel ROBERT. When was that canal made?

Mr. HUDGINS. That canal was commenced in 1851 and finished in 1855.

Colonel ROBERT. How much water did they have there?

Mr. HUDGINS. We left 4 feet. During the war there were no boats running and there was no navigation for about five years. The trouble is, you can not get the banks to hold; they cave in and the result is the river fills up with mud.

Mr. CORTHELL. Were those live oaks that were put in there brought up to the surface of the river?

Mr. HUDGINS. They were sunk as fast as we put them in.

Mr. CORTHELL. Did you bring any troops up there?

Mr. HUDGINS. No, sir.

Colonel MUNSON. My brother had charge of the party that made the dam there and he has told me repeatedly that for about 60 feet he could not fill in the river, because the current was so strong. Above that the water was in such shape that

vessels could pass. He said that there was a space there where the current was so strong that the logs would be washed away and brought up to the surface. The current is very strong and concentrated at that point.

Colonel ROBERT. Were those logs driven in as piles?

Mr. HUDGINS. No, sir; they just rolled them in, and they were so heavy that they sunk.

A VOICE. I was there at the time the dam was built, and the current left an opening of 30 to 50 feet.

Colonel ROBERT. Is there any gentleman present here who has any views that he would like to present to the Board bearing on the subject of the improvement at the mouth of the Brazos River? If so, we would be glad to hear him.

Mr. BROWN. I live up in the interior of the State, in the cotton belt. What we want is cheap shipping for our cotton. I was told by Colonel Giddings that if this improvement was a success we would be able to have our cotton taken for \$1.25 a bale cheaper than by shipping it to Galveston. Our business is to raise cotton and cotton-seed products. We only raise enough breadstuffs for our living. We want some return for our crops if we can get it. I have been here at times, and have talked with captains of vessels, and they told me that they could go to sea from here at from \$600 to \$800 less a cargo than from New Orleans. The charges were so much less. It would be a great benefit to the agricultural interests of the State if we had an outlet for our products independent of Galveston. The wharf company there is a great monopoly. I live near Washington, in the cotton belt, between the Brazos and the Colorado.

Colonel ROBERT. Do you expect to get your cotton away from here by railroad?

Mr. BROWN. Yes, sir; there are plenty of railroads pointing this way. All they want to know is that this improvement is going to be made a success. There will be no question as to getting roads.

Mr. FOSTER. A question has been raised here with reference to the ownership of the water frontage, and Colonel Robert wanted some light on the subject as to whether or not the same condition which is now found at Galveston would be found in any case of the improvement. You know the fact that under the recent compromise, the town of Quintana owns part of the frontage.

Mr. BRYAN (L. R.). I think the syndicate claims all the frontage elsewhere, but by decree recently given by the court, which is now in session at the county seat, the people of Quintana own the frontage there.

Mr. ROBERT MOORE. How long a frontage is that?

Mr. BRYAN (L. R.). I suppose it is as far as from our town to the river there [pointing], about 1,000 feet on the east side. Then there is another front there which is about 2,000 feet long. Just above that there is another tract of about 4,000 or 5,000 feet that is not owned by the syndicate. Above the mouth of the bayou there is about 6,000 feet not owned by the syndicate.

Colonel ROBERT. Mr. Moore, you are treasurer of the Brazos River Channel and Dock Company, I believe?

Mr. J. M. MOORE. Yes, sir.

Colonel ROBERT. Is this syndicate that owns the land here the same that owns this water frontage?

Mr. MOORE. It is virtually the same company. The Brazos River Channel and Dock Company owns the front. In point of fact, the Brazos River Channel and Dock Company, the Texas Land and Immigration Company, and the Velasco Terminal Railway Company are, as I understand it, of one interest.

Colonel ROBERT. I wanted to know whether these interests are all identical, and whether the company which wants to sell these improvements are also the landed interest.

Mr. J. M. MOORE. I presume that it is.

Mr. BRYAN (J. P.). I know that the surveys are made separate. The Brazos River Channel and Dock Company only runs back 300 feet, but back of that is the Texas Land and Immigration Company. I own some of the land around here and I know that the frontage on the river is separate and distinct from the back land.

Mr. J. M. MOORE. They are different companies, but in point of fact, they are the same interest.

Mr. BROWN. They claim this frontage under an act of Congress, which is to be a matter of litigation.

Mr. BRYAN (J. P.). I think you are mistaken. This land is claimed under an act of the legislature for the benefit of Aransas Pass, and under its charter they claim the right to condemn where it is arable 150 feet and where it is not arable 300 feet, and in consequence of that they have laid off 300 feet separate from the other.

Mr. BRYAN (L. R.). I am not interested in the company, but I am a citizen of Velasco and president of the bank in which Mr. Moore is the cashier. All these interests are practically one. As I understand it, all that the Brazos River Channel

and Dock Company own was procured by them by purchase before they commenced this work. They claim the right to condemn, but they have never undertaken to condemn anything, whether they have the right or not. They have some of the frontage, but there are other frontages there that are owned by private parties. I own some of it myself. There is nothing here whereby they can exercise a monopoly. I think that this being a cotton port it is necessary to bring about competition and that this company can afford to give wharfage and other facilities and they can all afford to make concessions. It is to our interest to build up this community. The company owns large landed interests here and it is to their interests to afford facilities in order to develop the harbor. The opening up of the Brazos River to the commerce of the country is the important point to be considered. I got up a pamphlet which was addressed to the people of the Brazos Valley and the Velasco Board of Trade which goes into the history of this thing and contains an estimate of the cost of improving the river by Mr. G. Y. Wisner, civil engineer of Detroit, Mich., and also several reports on the river by professional men. It also contains a report of a survey made by Mr. R. B. Talfor, the United States assistant engineer of Galveston, in 1875.

These reports were made at my instance, and embrace an estimate of the cost of opening the channel from Waco to the mouth of the river for 4 feet of water. Recognizing the fact that in a new State like ours people had an erroneous idea of the cost of improving the Brazos River, I addressed a letter to Mr. Wisner with a report upon the subject by Professor Harwood, of the Waco Board of Trade, and I also made a copy of the survey which was made under the direction of one of your Board of Engineers in 1884 or 1885, and requested Mr. Wisner to state in a practical way what would be the cost of opening up the channel from Waco to the mouth for 4 feet of water. He replied that there was such a wide discrepancy between the two reports that it was hard to arrive at a just estimate. He said that if Captain Talfor's survey was correct it would cost \$2,500,000, and that if Professor Harwood's survey was correct, it would cost \$2,000,000. The people thought that it would cost from ten to fifty millions to make the Brazos navigable to Waco. The impression is that there is from 400 to 500 miles of river to improve. You will find in that pamphlet, of which I spoke, that there was over 300,000 bales of cotton raised in the counties fronting on the Brazos River in 1891.

If you will take the map of Texas it will be seen by anyone familiar with the general physical characteristics of the State that the State is divided into three belts. The eastern belt is the timber belt, the central the agricultural belt, and the western part the grazing belt. The Brazos River runs through the center of the agricultural belt, and it runs through the black-land counties of Texas, which are famous for the production of cotton and sugar. The crops of cotton are enormous, and the sugar crops are so great that that particular section is known as the "sugar bowl" of the United States. Mr. Foster, I believe, has the statistics which will give you an idea of the fertility of this valley; and this section will be enormously increased in value if we can get 4 feet of water from Waco to the mouth of the river. If we can have at least that depth the river will be navigable to vessels that will carry at least 500 bales of cotton each. I have seen vessels loaded with 800 or 1,000 bales of cotton that only draw 2½ feet of water. They used to take rafts on the Ohio River and come down the Mississippi River with them to New Orleans, and I do not see why we can not do the same thing.

Mr. FOSTER. Is not the ownership of this land pretty well disseminated?

Mr. BRYAN (L. R.). The land is pretty well distributed around here and is owned by various parties in the State. These gentlemen here will have no monopoly of the general benefits which will accrue, and they do not own all the stocks and bonds of the company. The benefit will come, as has been stated by Colonel Bryan, when the question of the improvement is taken out of the hands of the private corporation and placed under the control of the Government, so that all the different interests will share in the development. There are many gentlemen present here to-day who live at a distance but who are much interested in this matter. They have no interest in this company here. It has just been said to me by a gentleman of the State, that in four counties, Brazoria, Fort Bend, Matagorda, and Marion, we have what is called the "sugar bowl" of Texas, producing enormous crops of sugar, besides cotton and other products. Before the war they contained the great bulk of the wealth of the State. Since then they have not had the facilities for commerce, nor proper rail nor water transportation, and we had no increase in population here until this enterprise was opened up. We believe that with the opening of this port that this part will be what it was once before, the garden spot and the richest part of the State.

Colonel ROBERT. You spoke of the falls in the Brazos River. Does anyone know their height?

Mr. BRYAN (L. R.). You will find about that in the pamphlet of which I spoke.

Colonel ROBERT. Are they 30 or 40 feet?

Mr. MUNSON. No, sir; just a few feet.

Colonel ROBERT. What is your idea of the difference of level of those falls? Is it a question of 20 or 30 or 60 or 80 feet? Can you give us some idea?

Mr. MUNSON. I could not with any certainty, but I am satisfied that there is not a very great difference of level.

Mr. DAVIS. Speaking of boats navigating the river, I have lived at Hearne fifteen years. I understand that boats used to navigate 5 or 6 miles above there. Speaking in regard to railroads coming in here, there is an uncertainty with regard to private parties having control of the improvements, and as to their being able to maintain them, and we feel that the only way to have a substantial enterprise is by the Government taking charge. Several railroads have already been projected, and the competitive point for all of them is the mouth of the Brazos River. All the cotton resources up our way look to this point here as the outlet for their products. One of these roads is the Fort Davis, Hearne and Brazos Railroad; another is the San Antonio and Gulf Shore Railroad. The Rock Island Railroad will compete for the business of the Brazos Valley. This is the great cotton country. All the new railroads which originate in this county have this place for their objective point. I have been up to Waco and the people there think that it is feasible to make the river navigable from Waco to the mouth.

Mr. FOSTER. As you are familiar with the railroad rates, I would ask what would be your opinion on this subject of rates throughout the entire State of Texas should the Brazos be opened to navigation?

Mr. DAVIS. I should think it would at least lessen the rates to the extent that has been stated here. If it would a dollar and a quarter on a bale of cotton, it would lessen the cost of marketing it to an enormous figure in favor of the producer.

Mr. FOSTER. Would not the opening of the Brazos have a modifying effect on all rates within 100 miles on either side of the river?

Mr. DAVIS. Yes, sir.

Mr. FOSTER. Would that benefit be confined to the Brazos River?

Mr. DAVIS. No, sir; it would affect other parts of the State.

Colonel ROBERT. Are there any other gentlemen here from this vicinity or elsewhere on the river valley that would like to say something? If so, we will be glad to hear them.

Mr. DAVIS. Everybody up our way is interested in Velasco. They think that this port will be eventually opened, but they have waited so long that they got the "blues." But they think that if the Government will take hold of it, it will certainly be a success.

Mr. BRYAN. Several of the leading roads of the State sent their representative man here to examine the mouth of the Brazos. They are desirous of coming here, but just as Captain Davis says, there was a want of confidence in the private corporation. The "International," the "Katy," and another route sent their representatives here to examine into the practicability of getting deep water. The company would do it, but they were not satisfied with having the improvements under private ownership. My belief is that if the Government would take hold all the great roads of the State would make terminals here.

Mr. DAVIS. They are pointing this way, but they are watching to see if the development will be made before they go to the enormous expense involved. The reducing of transportation rates would make an enormous addition to the wealth of our producers. There were over 3,000,000 bales of cotton raised last year and the difference in rates would make a saving of something like \$7,000,000.

Mr. FOSTER. Do you refer to the whole crop of Texas?

Mr. DAVIS. I mean between the radius of 100 miles of the river—central Texas, through which the Brazos runs, and which is the cotton belt.

Mr. FOSTER. You maintain that this reduction in rates on cotton that comes by way of Velasco would affect the whole cotton crop of the State, including that which goes by the way of Galveston as well?

Mr. DAVIS. Yes, sir; because it would be competitive against Galveston. I don't think it would all come this way, but the competition would affect the rates elsewhere.

Mr. BRYAN (L. R.). Captain Ahm, of the life-saving station, says that prior to the improvements at the mouth of the Brazos River the wrecks were two or three in a month, and since then there have been only two or three a year.

Captain AHM. I am captain of the life-saving station here. Prior to the building of the jetties here wrecks were very frequent. Since then they have been reduced, so that where we formerly had four or five we have one now, perhaps even less. Before the improvement the harbor was a hard one, but now it is quite different. Unless there is mismanagement a vessel can now come safely into the river.

Colonel ROBERT. How many wrecks do you think there would be in a year?

Captain AHM. About a dozen a year. During the years 1888 and 1889 there were more than a dozen.

1876 REPORT OF THE CHIEF OF ENGINEERS, U. S. ARMY.

Mr. ROBERT MOORE. In the case of these wrecks, what caused their failure to enter the harbor?

Captain AHM. Before this work had been started the channel would change, and there would always be uncertainty of water over the bar.

Colonel ROBERT. These wrecks are not from passing vessels?

Captain AHM. They were from vessels taking refuge here or vessels coming in here.

The hearing was then adjourned.

APPENDIX R.

LETTER OF PRESIDENT OF BRAZOS RIVER CHANNEL AND DOCK COMPANY.

WASHINGTON, D. C., *February 15, 1897.*

SIR: By direction of the executive committee of the Brazos River Channel and Dock Company I make the following additional statement to the Board concerning the ownership by this company of property upon the banks of the Brazos River.

If our right to charge tolls as provided by the act of Congress should be taken from us by the United States exercising its option of taking over our jetties and auxiliary works, we should be unable to establish a monopoly at the mouth of the Brazos River similar to that existing at Galveston even were we inclined so to do.

First. Because our charter is obtained from the State of Texas whose laws provide that "all rate, tolls, or charges made by any corporation formed under this act (the act to establish channel and dock companies) shall be subject to the right of the legislature from time to time to alter, revise, change, or amend," whereas the Galveston Wharf Company is not so subject to the control of the Texas legislature or other authority.

Second. Because we have no exclusive ownership of the water front at the Brazos River (see map heretofore submitted) whereas the Galveston Wharf Company owns the entire water front at Galveston as we are informed.

Third. Because the establishment of unreasonable tolls would restrict that commerce which is absolutely necessary for the success of the port.

Inasmuch, however, as it has been suggested that at some time we or our successors might attempt thus to establish a monopoly and to exact unreasonable charges, we announce our willingness to accept the following conditions of any purchase or taking over of our jetties and auxiliary works by the Government:

First. That 1 mile of land upon the water front, 300 feet in width on the east side of the Brazos River, within 6 miles of the shore end of the east jetty, shall be conveyed to the United States or to the State of Texas or to the county of Brazoria or to the city or town which may be incorporated, embracing the present town of Velasco for the purpose of the construction of public wharves and docks, which shall be free to the general public for all time, or, at the option of such public owner, a portion of said land not exceeding one-half thereof may be located upon the west side of the river within 6 miles of the shore end of the west jetty, said land to be subject only to the right of laying railroad tracks upon a strip 50 feet in width farthest removed from the Brazos River; or this company will indemnify and save harmless such public owner from any expense of taking said land by the right of eminent domain.

Second. That the United States Government may make such further regulation as to wharfage dues as it may deem necessary.

Respectfully,

ABNER TAYLOR,
President Brazos River Channel and Dock Company.

COL. HENRY M. ROBERT,
Chairman of Brazos River Board, Washington, D. C.