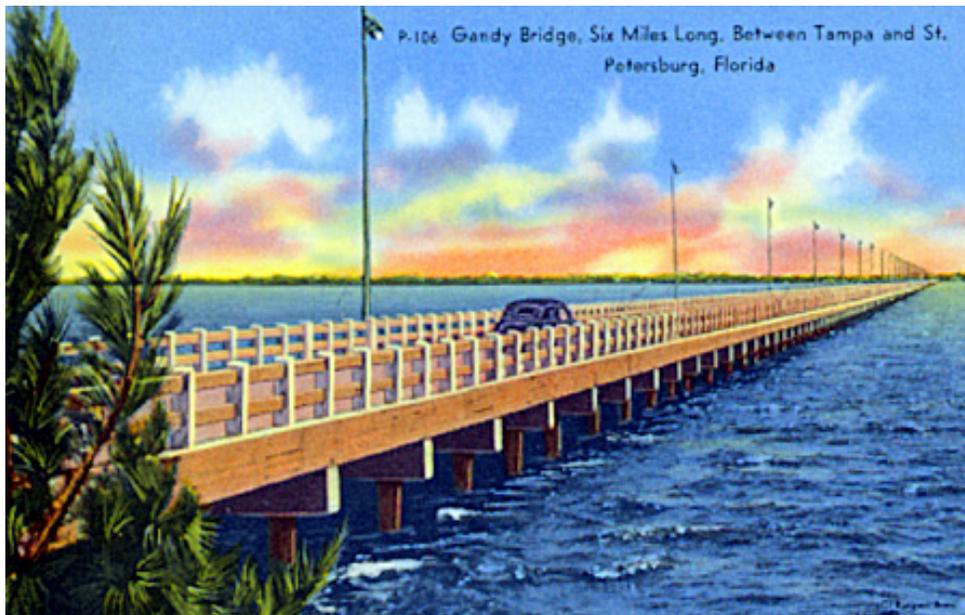


He Laughed at the Word "Impossible"

by Karl H. Grismer



A small group of men sat around a table on which was spread out a large map of Pinellas Peninsula and surrounding country. With a pair of calipers, they carefully measured the distance by all possible routes between St. Petersburg and Tampa.

"Can't you see the answer?" asked one of the men. "Can't you see that a bridge across Old Tampa Bay is almost indispensable? Look how much distance it would cut off. Nearly fifty miles by land--by bridge it would only be nineteen or twenty miles. Think what that would mean to this section of the state!"

The others were frankly skeptical. "Sure, it would be a fine thing," said one. "But it will never be built during our lifetime. Why it would cost millions and how could you hope to get your money back? It's foolish to think of such a thing. Forget it."

The advocate of the bridge listened to the arguments of his friends. He heard them say how hopelessly visionary such a project was and how it could never be put through. He paid attention to all that they had to say--and then promptly disregarded their advice. He refused to "forget" the bridge idea.

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"Perhaps you gentlemen are right," he said. "Perhaps the bridge is just a foolish dream. But I don't believe it. And I never will be satisfied until the bridge is built."

All that was twenty years ago. The bridge enthusiast was George S. Gandy, of Philadelphia. He had come to St. Petersburg upon the solicitation of his friends who wanted him to invest in a proposed electric railway. Giving the assistance which was requested, he turned his attention to other things and within a short time conceived the idea of spanning Old Tampa Bay with a bridge.

An impossible idea, of course. And whenever Gandy mentioned it, everyone gave him the laugh. He received no encouragement whatsoever. Even the most optimistic St. Petersburg boosters clearly saw that the idea was ridiculous. A few jeered at Gandy behind his back and considered him just a little "off."

But, strange as it may seem, that bridge which Gandy dreamed of twenty years ago is today an actuality.

Across the waters of Old Tampa Bay it extends-five and three-quarters miles of it, a slender finger of sand and concrete and steel that binds together the shores of Pinellas and Hillsborough Counties. The longest automobile toll bridge in the world-one of the greatest engineering feats ever performed in Florida-built at a cost of approximately three million dollars. Within a few weeks it will be opened to the public and the distance between St. Petersburg and Tampa, the two largest cities of the West Coast, will be reduced from 43 to 19 miles.

Gandy Bridge is the work of a dreamer-unquestionably. Only a dreamer of the most pronounced type could have conceived such a project and only a dreamer could have believed that it would some day be completed. And yet-the Gandy Bridge of today, almost ready for the onrush of traffic, is irrefutable evidence that dreams sometimes come true.

However, there was nothing dream-like about the struggle which Gandy had to make his dream materialize. Only by keeping everlastingly wide awake, ready at all times to get down and plug, was he able to see the solid structure take form before his eyes. Only through sheer perseverance was he able to convince others of the feasibility of his idea and get the assistance needed to assure its completion. He worked untiringly for years and finally, lo, and behold, his dream was a dream no longer.

To those who know anything of Gandy the man, he is one of those fellows who laugh at the word "impossible." He has a long list of achievements to his credit and many of those achievements represent the completion of ideas which once were branded as absurd.

George Gandy started making his own way in the world when still a youngster. He had to leave school after completing a grammar school course and from then on the only education he received was in the school of life. He started work as an office boy in the firm of Henry Disston & Sons, saw manufacturers of Philadelphia, and he remained with the firm for eleven years, working up to a position of responsibility.

In 1882, when thirty-one years of age, Gandy became secretary and treasurer of the Frankford and Southwark Railway Company, then operating the longest traction line in Philadelphia. Those were the days of horse-cars and the funny little dummy engines, shortly followed by the advent of electric trolley cars. Gandy was one of the pioneers who witnessed and was a factor in the evolution of modern urban transportation.

During the next twenty years Gandy was associated in an executive capacity with a number of Philadelphia transportation companies and was instrumental in building a number of trolley lines, including the Holmesburg and Tacony, Doylestown and Willow Grove, and the Fairmont Park roads.

Gandy's ability to see ahead was demonstrated in connection with the construction of the trolley line to Willow Grove. He realized that Willow Grove was ideally situated for an amusement resort and that the only thing needed to get it started was a transportation link with Philadelphia. Others scoffed at the idea but Gandy went ahead, regardless. The line was built and the results more than justified his predictions.

Transportation matters did not occupy Gandy's attention exclusively while in Philadelphia. He also was active in construction work, building the People's Theatre and Textile Hall, as well as more than two hundred residences.

Gandy first came to St. Petersburg in 1902 with F. A. Davis, a publisher of Philadelphia, who was the founder of St. Petersburg's first electric light plant and who was then trying to finance the trolley company. Davis succeeded in interesting him in the city, even though it then had less than 2,000 inhabitants, and for a number of years he was associated with the various Davis companies, serving as president of the St. Petersburg & Gulf Electric Railway Company, the St. Petersburg Investment Company, and the St. Petersburg Electric Light & Power Company. Later he resigned from all the companies because he was not satisfied with the method of financing the various projects.

Gandy's foresight was shown against when in 1912 he purchased property at the corner of Central Avenue and Fifth Street in St. Petersburg and constructed the Plaza Theatre and office buildings. At the time of construction, the Plaza Theatre was the finest in Florida. Many believed that Gandy would lose heavily in building such an expensive structure in such a small city and for a year or two the Plaza was referred to as "Gandy's White Elephant." It turned out, however, to be an excellent investment and now is worth many times what it cost him.

As might have been expected from his long experience in transportation work, Gandy began figuring on a short-cut route from St. Petersburg to Tampa shortly after his arrival. He looked with disgust upon the long, round-about route, then fifty-two miles in length, which connected the two cities. He saw that if Tampa Bay could be spanned, the cities could be made almost next-door neighbors. The bridge idea came into his mind and from that time he worked unceasingly to make the bridge a reality.

It was clear, however, even to an optimist like Gandy, that the time for the construction of the bridge was not ripe in 1903, when he first conceived the idea. The St. Petersburg-Tampa section of the state had not developed far enough to make the bridge a paying proposition. Gandy decided, however, that unless someone got ahead of him and built the bridge before Tampa and St. Petersburg were sufficiently large to support it, he would build the bridge himself.

The pessimistic attitude of everyone with whom Gandy talked about the bridge did not deter him from going ahead with his plans. He continued to study the situation and visited Old Tampa Bay regularly, making the trip with his sons in a sailboat, and obtained a general knowledge of those waters.

In 1915, twelve years after he conceived the bridge idea, Gandy decided that the time had come to begin actual work. Gangs of surveyors were engaged to determine the shortest line averaging the shallowest depths between the two shores, and during the two years following many surveys were made and the necessary rights of way were obtained in Pinellas and Hillsborough Counties.

Late in 1917, a company was formed and the necessary state and federal rights to cross the bay were obtained, the latter after nine months of delay caused by competitive opposition. This opposition came from a St. Petersburg company known as the Tampa, Atlantic & Gulf Railroad, which filed plans with the government for a bridge, the line of which crossed the proposed line of the Gandy Bridge, which was then called the Tampa and St. Petersburg Bridge.

Gandy was not frightened by the prospect of another individual or company preventing him from carrying out his long cherished plans. The opposition merely made the fight more interesting. Gandy gathered his forces together and proceeded to prove to the powers that be that he, and he alone, had the ability and the perseverance to put the project through.

Going to the strongest civic organizations in St. Petersburg and Tampa, Gandy so effectively presented his case and so vividly portrayed the advantages his proposed bridge would bring to the two cities, that he won their endorsements. They wrote to the Board of Engineers of the War Department urging that Gandy's project be given preference and that he should be given permission to span the bay.

In a similar way, Gandy won the support of the leading business houses and banks of both St. Petersburg and Tampa. He also obtained the backing of such public men as Senator Duncan U. Fletcher, Representative Herbert S. Drane, State Legislator Sam D. Harris and State Senator John S. Taylor. It wasn't long before the Board of Engineers was deluged with scores of letters and telegrams, all pleading Gandy's cause.

There came the day when Gandy appeared in person before the august body of War Department engineers. The engineers told him bluntly that the main reason why they were withholding permission to build the bridge was that so many of the endorsements bore the stamp of a single individual. The endorsements were so near alike, they said, that it looked as though they had been written by the same person.

This criticism did not discourage Gandy in the slightest. Instead of hedging, he boasted of the fact that he had almost dedicated some of the endorsements.

"They bear the stamp of one man, you say," he almost shouted, banging the table with his clenched fist. "You bet they do. And I'm the man. And if that bridge is ever built, by myself or anyone else, it will be by some fellow who gets behind it like I have and never quits."

Gandy's outspoken admission of what he had done turned the trick for him. The engineers were favorably impressed and without further hesitation, they granted him the right to go ahead. The grant was finally made on February 11, 1918.

About this same time, a number of bills permitting construction work and granting a 400-foot right of way for all time across the bay, were pushed through the Florida Legislature and the last governmental obstacle was overcome.

Early in 1918, Gandy was ready to proceed with his construction plans, but the United States was at war and it was impossible to secure materials for construction. Gandy's forces took advantage of the delay by perfecting their plans, making new surveys and sub-soundings on the broad shoals which extended from either shore. Although but a few years ago, these surveys were made at a time which soon will be considered as the pioneer days of the development history of the Old Tampa Bay area. The upper arm of Tampa Bay was then a lonely body of water. Its wooded shores were sparsely populated except at such points as Port Tampa and Safety Harbor. Through the virgin pine woods, sand trails were few and far between and there was no indication of the paved highways and real estate developments of today. Machettes were used to cut the survey lines through the palmetto and mangrove.

The new soundings made at this time disclosed the fact that the flats contained sufficient sand for dredging purposes, making it possible to build long sand-filled causeways from the shores to the deeper water in the middle of the bay. Over these sand flats the average depth of water was found to be little more than one foot.

In the middle of the bay a broad bed of rock was discovered, the eastern half of which was covered by an overburden of sand several feet deep. Upon this natural rock foundation it was decided to erect a concrete bridge. This deeper water across the middle of the bay showed an average depth of ten and one-half feet, with a maximum depth of 23 feet at the main channel, where the draw-bridge now stands.

After the armistice, materials were so high in price that another delay in construction was considered advisable. Following the period of expansion came the financial depression when it was impossible to finance any new project, but in the fall of 1922, twenty years after the plan was conceived and seven years after the first surveys were made, a determined effort was made to obtain the money necessary to build.

The initial plan for financing the project was to enlist the aid of northern capitalists. Many propositions were considered with this in view and at one time it appeared as though the negotiations

were closed. It was soon discovered, however, that when the time came to confirm tentative plans in black and white, that Wall Street money was a more costly article than preliminary arrangements indicated and that a high contract price for construction replaced a lower tentative bid. Worse of all, Gandy learned that to get Wall Street's help he would have to relinquish control of the project. Gandy balked, broke off all negotiations, and decided to finance the bridge through the sale of securities to residents and winter visitors of Florida.

Within six months from the offering of the stock the entire issue had been subscribed and the money provided. Nearly four thousand Florida and tourist investors joined hands with Gandy and expressed their faith in St. Petersburg and Tampa and their belief in Gandy's intentions. A construction contract was awarded the Bay Construction Company, an organization closely affiliated with the Gandy Bridge Company, and work was started.

The first dredge, the "Tusawilla," went to work on the Pinellas causeway on September 24, 1922; the second dredge, the "Florida," on November 22, 1922, and the third dredge, the "Reliable," on March 28, 1923. The dredging operations were carried on continuously for more than a year and a half. The fleet of the dredges first threw up a ridge of sand along the line to a height just above high water, then worked back and brought the causeways up to an elevation of ten feet above mean low water, which is above the height of the tide of October 25, 1921.

The causeways, which have a minimum width of 400 feet at the base, slope very gradually from the roadway in the center and engineers assert that the action of the tides and waves will tend to build them up, rather than cut them away. The causeways have an aggregate length of nearly three and one-half miles, the eastern causeway being three-quarters of a mile long and the western nearly two and one-half miles long. To make them, approximately 2,500,000 cubic yards of sand were dredged from the bottom of Old Tampa Bay.

The construction of the concrete bridge over the deeper water in the bay was a formidable task, beside which the building up of the causeways appeared like child's play. Before work could be started on the concrete section, a construction camp had to be established "out in the wilderness," dormitories had to be provided for the hundreds of workmen, lines of transportation had to be established between Tampa and Port Tampa, and machinery obtained from all parts of the country had to be assembled. More than a dozen buildings had to be erected.

The construction camp, appropriately name Ganbridge, was a scene of almost frenzied activity during the spring and summer of 1923. A force of 500 men and a miscellany of cranes, derricks, locomotives, pile drivers, motor trucks, concrete mixers, tug boats, tractors, drilling outfits, dredges and work-shops were in action. The eastern shore of Old Tampa Bay was a place of noise, smoke and progress.

The first concrete of the bridge was poured at the pile-casting plant on May 15, 1923. It was an occasion for celebration. Workmen laid down their tools for the moment, all the whistles on

the job screamed amid the sharp staccato of firearms. After months of preparation, the hundreds of workmen welcomed the first sight of Gandy Bridge concrete.

The concrete plant continued the manufacture of piles until October 1923, and completed 2,400 of the long sticks of reinforced concrete. The piles were 16 inches square and from 20 to 60 feet in length. Each batch of concrete was subjected to rigid tests in a laboratory at the camp. It proved to be of exceptionally high quality, as proven later by the ease with which the piles were handled by cranes and driven with steam hammers into the bottom of the bay.

After the piles were cast they were allowed to "cure" or "season" for a month in the pile yard, then were picked up by locomotive cranes and moved to storage space on the eastern causeway, from where they were later transported by railroad and barge to the middle of the bay and placed on the line of the bridge.

The first concrete pile was driven in the bay bottom in July 1923. In the eastern part of the bay the piles were driven through sand to the rock. Some of these piles penetrated sand to a depth of 45 feet. The large quadruple pile driver placed four piles at a time, by use of water jets and steam hammers, in a group of "bents" of four piles, spaced five feet apart across the width of the bridge and 24 feet apart along the length. In the western part of the bay where the rock bottom was not covered by an overburden of sand, the piles were placed in holes drilled to a depth of five feet or more in the solid rock, guaranteeing a bridge structure which would be as solid as the rock itself.

The placing of the piles was only the first step in the construction of the bridge. After being placed, they were of uneven heights and had to be cut off to the proper level. Hand tools, air tools and explosives were used at various stages of the work. The reinforcing rods in the piles were cut with acetylene torches. Owing to the hardness of the concrete and the fact that the work was done over water in all kinds of weather, the cutting off operation was most tedious work.

After the piles had been placed, aligned and cut off, wood forms for the concrete "caps" were clamped into place. These caps, strengthened with reinforced steel, bound each bent of piles into a rigid unit.

The next operation was the placing of heavy wood and steel forms for the concrete deck beams and spans. These were floated in place on barges and raised to position by especially designed screw-jacks. After a large crew of carpenters had completed assembly and made tight and several part of the deck forms, an intricate network of reinforcing steel was wired in place in the forms, around which concrete was poured by the large floating plant.

The weather man did everything within his power to delay work on the concrete structure during the winter of 1923-24. It was one of the worst winters Florida ever experienced. For weeks at a time, strong Nor'westers broke over Old Tampa Bay, making it almost impossible to work out on the open water. One night in March a blow came which capsized the big floating concrete plant in 20 feet of water. Heavily loaded as she was with machinery, cement and gravel, several weeks were

spent in raising the hull and re-equipping the plant for work. In the same storm a number of barges and motor boats were capsized or swamped.

The concrete bridge, as it stands today, is two and a half miles long and 24 feet wide on the road surface between curbs. Along each curb line of the bridge stand substantial reinforced concrete railings for the protection of vehicles. These were completed in September 1924. The operation consumed six months of work. There are more than 3,500 posts and twice that many rails.

Over the main channel near the eastern end of the bridge stands a steel double bascule draw bridge, with a clear opening of 75 feet, for the passage of ships. The draw span is electrically operated. Had it not been for delays encountered in securing the material for this drawbridge, the bridge would have been opened several months ago.

The entire length of the bridge and causeway, nearly six miles, is to be brightly illuminated at night by lights set at the top of tubular steel poles, 30 feet high, set in bases of concrete.

At the shore end of both causeways, large toll stations have been erected which span a system of four feeding roads in a manner to expedite the handling of traffic during rush hours.

Statistics make dry reading, perhaps, but only through figures can the magnitude of the Gandy Bridge job be truly shown. More than 1,600 cars of equipment and materials were shipped into Ganbridge before the structure was completed. Here are the quantities of some of the materials used: 170,000 sacks of cement, 30,000 tons of gravel, 15,000 tons of sand, 3,500 tons of steel, 1,500,000 feet of lumber, 7,000 tons of rock, 1,125,000 brick, 75,000 feet of electric cable, hundreds of thousands of feet of wire, 50,000 feet of water pipe, 40,000 gallons of gasoline, 30,000 gallons of fuel oil, 2,500 tons of coal and 9,000 gallons of lubricating oil.

Gandy Bridge is built. It will be opened to the public in a few days. No longer is it a dream of Gandy, "the dreamer." It is a reality and the skeptics who said a few short years ago that it was an impossible project are forced to admit that Gandy was right and they were wrong. Once again has "Dad" Gandy achieved one of his "absurd" ideas.

The value of Gandy Bridge to Pinellas and Hillsborough Counties already has become apparent. Great sections of land, once considered almost worthless, have been opened up for development. Three years ago, tracts of land along the Bridge route could be purchased for even less than \$ 25 an acre. Today, nothing can be bought along the main highways leading to the bridge less than \$ 1,000 an acre and the better tracts are bringing many times that price.

The sale of lots along Fourth street extension, the highway connecting St. Petersburg with the bridge, was started more than a year ago. At the start, good lots could be purchased for as low as \$500. Today nothing can be purchased along the entire length of Fourth Street for less than \$1,200 and lots at that price are few and far between.

It is safe to say that the increase in realty values in the sections affected by the bridge amount to at least ten times the cost of the entire structure.

In this connection it is interesting to note that "Dad" Gandy has not shared in the great profits made from the buying and selling of this Gandy Bridge land. Better than anyone else, he knew how great the realty increases would be. And to him there was not the slightest doubt but that the bridge would be completed. But rather than have anyone believe that he was engineering a real estate promotion, he concentrated all his efforts on the bridge itself and left the real estate to others. As a result, many have made fortunes and countless others have profited materially, but Gandy so far hasn't made a cent. His profits will come after the bridge is built, and not before.

Gandy Bridge has already benefited Pinellas and Hillsborough counties. And yet it is certain that the benefits now apparent will be as nothing compared to the benefits that are to come. When the bridge is actually opened, and St. Petersburg and Tampa become as one, the growth of both cities unquestionably will be hastened. The rush of traffic which will go over the bridge will carry prosperity.

Pinellas County already has prepared to take full advantage of the bridge. A splendid thirty-foot road, as fine as any in the country, is now being built to connect St Petersburg with the bridge. It will be completed by the time the bridge construction is finished. Direct roads have also been built from the bridge to Pinellas Park and the Gulf Beaches, and to Clearwater, the county seat. On the Hillsborough side there is a completed road connecting the bridge with Tampa.

The time required to drive from St. Petersburg to Tampa by automobile is now about two hours. Less than half that time will be required after the bridge is open. The round trip from one city to the other will not take more than half a day, with plenty of time left over to go shopping, take in a show, or transact business.

St Petersburg and Tampa have completed plans for the celebration which will mark the formal opening of the bridge on November 20. Governors of forty states will be present, the event being of such importance that they agreed to go to the West Coast for the sole purpose of seeing the bridge following the conference in Jacksonville on November 17 and 18. The presence of the governors at the opening will be a fitting tribute to "Dad" Gandy, the builder. After attending the ceremonies and entertainments in St. Petersburg and Tampa, the executive party will be conducted on a tour of Central Florida and down the East Coast to Miami.

George S. Gandy, Jr., who has charge of the construction of the bridge bearing his father's name, recently placed a large night force on the job in order to make certain that the bridge would be completed in plenty of time.

It is expected that at least ten thousand automobiles will drive over the bridge on the first day that it is opened to the public. Inasmuch as the construction of the bridge is one of Florida's greatest engineering feats, the whole state is anxious to see it, and it is probable that every section of the state will be represented in the great parade which will pass over the structure on the opening day.

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The bridge is completed in "Dad" Gandy's 73rd year. During the years which have passed since he first advocated its construction, his beard has whitened and a few wrinkles have appeared around his eyes, but he is a young man still. His actions are just as dynamic as they ever were and few of the younger generation have greater endurance. He even cusses with all the fervor of youth at the only enemies he has-the few men who opposed the building of his dream project.

When the bridge is opened, "Dad" Gandy will be the hero of the occasion. But it is certain that he will take the plaudits calmly-the praise will not "go to his head." For to him, the completion of the bridge always has been a foregone conclusion.

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