

QUEENSBORO ERROR COST TEN MILLIONS WASTED BY FAULTY CHANGES OF PLAN.

No Gain in Bridge Capacity, in Spite of Added Weight and Fastly Increased Outlay.

The waste of city money through the abortive attempt to increase the carrying capacity of the Blackwell's Island, or Queensboro, bridge has been \$10,451,500, according to the most conservative estimate, and the amount may run to \$12,000,000 before all the bills are paid.

Now that the grave and serious nature of the irreparable blunder made in the erection of the bridge is fully understood by every one who has tried to understand, this extravagant waste of public funds becomes a most important subject for the consideration of taxpayers.

When the construction of the Blackwell's Island bridge was authorized, nine years ago, carefully prepared estimates of its cost and carrying capacity were made by the Bridge Department.

In response to demands made chiefly by the residents of the Borough of Queens, the capacity of the structure was twice increased, so that the bridge as finally contracted for was to have a traffic carrying capacity of 8,000 pounds a linear foot of bridge for "regular" and 16,000 pounds a linear foot of bridge for "congested" load.

The official report of Messrs. Boller & Hodge, the engineering experts appointed by the Board of Estimate to investigate the safety of the bridge, makes it clear beyond misunderstanding that, instead of having a capacity of eight thousand pounds a linear foot of bridge, the structure as erected can carry safely only four thousand pounds a linear foot of bridge, and that, instead of being able to accommodate one wide roadway, four elevated railway tracks, four trolley tracks and two passenger walks, the bridge as erected will be able to accommodate only one wide roadway, four trolley tracks and two passenger walks.

Substituting for purposes of comparison the one wide roadway of the bridge as erected for the two narrow roadways of the bridge as first planned, and two of the trolley tracks with which the structure is now equipped for the two elevated railway tracks in the first plan, the traffic carrying facilities are identical.

The ultimate cost of the bridge as erected was given by Bridge Commissioner Stevenson in an official communication to the Board of Aldermen on July 23 of last year at \$21,000,000.

This figure did not include, however, the cost of making the changes recommended in the official report of Boller & Hodge as necessary to the safety of the structure before it should be opened for public use.

The net result of the blunders made by the Bridge Department in the erection of this huge structure over the East River is that the taxpayers of the greater city have been compelled to pay at the lowest estimate \$21,000,000 for a bridge substantially the same as that which was authorized to be erected at a cost of \$12,000,000, in the belief that they were getting what they paid for in a structure capable of accommodating twice the traffic facilities of the originally planned structure, and now it is definitely ascertained through expert examination that this supposedly stronger bridge can be made to carry safely less than the amount of traffic for which the original bridge was designed.

To understand how any kind of engineering blunder, no matter how serious, made in the erection of the superstructure of a bridge which was contracted for at \$5,132,985 could have resulted in the wasting of more than \$10,000,000 of public money, it is necessary to explain that the superstructure, or river spans, is only a small part of the entire bridge. The total length of the steel structure known as the Blackwell's Island bridge is roughly a mile and three-quarters, or, accurately, 8,990 feet from the masonry abutment on the Manhattan side of the river to the masonry abutment on the Queens side of the river.

The superstructure is only three-quarters of a mile in length, or, accurately, 3,724 feet. There is therefore just about a mile, or, accurately, 4,575 feet, of steel viaduct or approaches on the two sides of the river erected over streets and avenues which lead to the superstructure or bridge proper.

Each time the traffic carrying capacity of the bridge was increased beyond the capacity planned when the construction was authorized the amount and weight of steel put into the river spans had to be increased so that the structure might carry safely the increased load. But every increase in the amount and weight of steel put into the three-quarters of a mile of superstructure, or river spans, carried with it a corresponding increase in the amount and weight of steel put into the mile or so of viaduct, or stone spans, upon either side of the river.

Contract bridge twice as strong. With the bigger and heavier bridge also came the necessity for heavier roadways and railroads.

CROWD SEES MAN DIE. Ground to Pieces by B. R. T. Elevated Train Near Bath Beach.

Leo Gell, a shoe salesman, of No. 2030 Bath avenue, Bath Beach, fell between the cars of a Brooklyn Rapid Transit elevated train at the Bay 25th street station last night and was ground to pieces in sight of a crowd on the platform and a number of passengers in the cars.

The forward truck of the second car passed over his body, wedging it in the mechanism of the motor. It took nearly an hour to get the body out. John Myers, the motorman, was charged with homicide. Gell was unmarried and lived with a niece. He was forty years old.

FOUR DEAD, 140 HURT. Panic in Vienna Crowds at Festival in Honor of Emperor.

Vienna, Dec. 1.—A panic in the enormous crowds which turned out to-night to see the illumination of the city in honor of the diamond jubilee of Emperor Francis Joseph caused the death of three persons and the serious injury of forty. One hundred were slightly hurt. The stampede occurred directly in front of the Hofburg, where the crowds converged from three directions. Hundreds were trampled to the ground, among them being a parliamentary deputy named Holz and a woman, both of whom were crushed to death.

The Emperor was deeply affected by the accidents. The authorities took all possible precautionary measures, such as entirely stopping vehicular traffic after sunset, but were unable to cope with the enormous crowds. It is estimated that there were fully 1,500,000 people in the streets.

It is believed that in addition to the official list of killed and injured many others were hurt but were able to reach their homes.

The cathedral, city hall and all the public buildings were outlined in electric lights, the effect being enhanced by powerful searchlights and Bengal lights playing from the high towers. The outer gate of the Hofburg, the residence of the Austrian princes since the thirteenth century, bore a huge illuminated device of the imperial crown, flanked by columns seventy feet high, which were covered with thousands of electric bulbs and surrounded by gas flambeaus. In the windows of all private residences were lighted candles.

The Emperor has announced a partial amnesty, and has conferred high decorations on Baron von Aehrenthal, the Foreign Minister, and the Austro-Hungarian ambassadors abroad. Illuminations and festivities were general throughout the provincial towns. To-morrow's "Gazette" will name 3,400 persons in all classes who will receive titles, decorations and promotions in honor of the jubilee.

WARM ATLANTA CONTEST. Near Beer Barred in Election for Mayor To-day.

Atlanta, Dec. 1.—Atlanta will make a strenuous attempt to do a double somersault in majority politics to-morrow. James G. Woodward, regular nominee for Mayor, says she can't do it. Robert Maddox, banker and independent candidate, believes Atlanta is able to turn the trick. The campaign came to a close to-day with a big daylight parade of some three thousand Maddox followers, who marched through driving rain, cheered at by red bagged Woodwardites and cheered on by blue bagged Maddox men. To-night about four thousand of the red bagged torchlights paraded through the streets of the city.

Woodward was nominated for Mayor in September, beating two opponents. Two weeks later, after an alleged celebration in which it is said order and the serenity of the peaceful were jarred he was made the object of a police investigation. The citizens howled and held mass-meetings, from all of which Maddox emerged as a candidate for Mayor.

Woodward men say that the Maddox forces are trying to disrupt the white primary. They point out that Mr. Woodward is no worse now than he was before he was elected. To this the Maddox forces assent with suspicious alacrity.

All the near-beer saloons in Atlanta will be closed to-morrow.

WEDDED AHEAD OF TIME. "Tad" Jones and Miss Shearn in Pact with Denver Couples.

Denver, Dec. 1.—Miss Betty Shearn, daughter of John Shearn, the Texas land owner and stockman, carried out a pact of her Denver girl friends yesterday by becoming a bride ten days before the date set for the wedding. Telegrams received here to-day from New York announce her marriage to "Tad" Jones, the Yale football player, in that city. Some time ago announcement was made that Miss Shearn and Jones would be married on December 10.

Other Denver girls in the pact to marry before the date announced for their wedding were Mrs. Nagle, now wife of Gerald Hughes, son of the next United States Senator from Colorado; Gladys Chesman, now wife of John Evans, whose family controls the public utilities here, and Nell Singleton, now wife of James Newton, son of the State Treasurer.

SWARTHMORE MADE NON-SECTARIAN. Rule Which Linked It with Friends Abolished by Unanimous Vote.

Philadelphia, Dec. 1.—The stockholders of Swarthmore College at the annual meeting here to-day, by a unanimous vote, abolished a rule which practically made the school a Friends' institution. By this step the college, which has held a high place among schools controlled by Friends, becomes non-sectarian.

The establishment of Swarthmore College was first conceived in the Baltimore Yearly Meeting. The institution was opened in 1863.

DINNER FOR MR. MORGAN. Financier Was the Exclusive Guest of Tavern Club in Boston.

Boston, Dec. 1.—Exclusively and quietly the Tavern Club gave a dinner last night for John Pierpont Morgan, who came over from New York to be present. So far as can be learned, Mr. Morgan came to Boston unheralded. His intimate personal and business friends here were surprised to learn of his arrival.

No information was vouchsafed at the Tavern Club concerning the dinner beyond the fact that a dinner was being given for the financier under the auspices of the club, of which Gordon Abbott is president.

JOINT FAR EAST POLICY NOTES EXCHANGED WITH JAPAN MADE PUBLIC.

Ambassador Takahira Calls Declaration "A Transaction Between Trusted Friends."

Washington, Dec. 1.—The notes exchanged between the United States and Japan, defining their policy in the Far East, which have been the subject of correspondence between Secretary Root and Ambassador Takahira for some months, were made public at the State Department to-night. Accompanying the declaration are two letters, one from Mr. Takahira and one from Mr. Root, the former expressing the belief that a frank avowal of the aim, policy and intention of the two countries in the Pacific would not only tend to strengthen the relations of friendship and good neighborhood between the two nations, but would materially contribute to the preservation of the general peace, and the latter declaring that "this expression of mutual understanding is welcome to the government of the United States."

Each letter is dated November 20, the day on which the exchanges took place. The text of the notes follows: I. It is the wish of the two governments to encourage the free and peaceful development of their commerce on the Pacific Ocean.

II. The policy of both governments, uninfluenced by any aggressive tendencies, is directed to the maintenance of the existing status quo in the region above mentioned, and to the defence of the principle of equal opportunity for commerce and industry in China.

III. They are accordingly firmly resolved reciprocally to respect the territorial possessions belonging to each other in said region.

IV. They are also determined to preserve the common interests of all powers in China by supporting, by all pacific means at their disposal, the independence and territorial integrity of China and the principle of equal opportunity for commerce and industry of all nations in that empire.

Should any event occur threatening the status quo as above described, or the principle of equal opportunity as above defined, it remains for the two governments to communicate with each other in order to arrive at an understanding as to what measures they may consider it useful to take.

MR. TAKAHIRA'S EXPLANATION.

Ambassador Takahira, in a statement issued after the notes were made public, declared they were simply a reaffirmation of what was declared by the two governments years ago. It was "something like a transaction between trusted friends." The Ambassador said: The substance of the instrument which has already found its way to the press called forth exhaustive expressions of opinion in this and other countries, and the result has been that things to be added. As will be seen in their wording, the notes are simply in the form of a declaration, and are not a treaty or agreement.

Japan has entire confidence in the great moral strength of the United States government, and the latter fully trust in the strong good faith of the Japanese government, as has been amply proved by past experience. In this respect it is something like a transaction between trusted friends, and it is sincerely to be hoped that the people of each country will have the same confidence in the government in respect to the declaration of the other, and in doing so there will be everything to gain and nothing to lose, and friendly intercourse and commercial relations will be fully developed.

Some changes were made in the drafts of the letters passing between Mr. Root and Mr. Takahira as originally written, copies of which had been sent to Europe. Ambassador Takahira's letter as finally drafted was as follows:

Sir: The exchange of views between us, which has taken place at the several interviews with I have recently had the honor of holding with you, has shown that, Japan and the United States holding important outlying insular possessions in the region of the Pacific Ocean, the governments of the two countries are animated by a common aim, policy and intention in that region.

Believing that a frank avowal of that aim, policy and intention, and the desire to strengthen the relations of friendship and good neighborhood which have immemorially existed between Japan and the United States, but would materially contribute to the preservation of the general peace, the Imperial government has authorized me to present to you an outline of their understanding of that common aim, policy and intention.

Here follow the five articles of the declaration. If the foregoing outline accords with the view of the government of the United States, I shall be gratified to sign, on my part, a declaration to the effect that I take this opportunity to renew to your excellency, the assurance of my highest consideration.

K. TAKAHIRA, Honorable Elihu Root, Secretary of State.

The changes in Secretary Root's letter are unimportant. Its text follows: Department of State, Washington, November 26, 1908. Excellency: I have the honor of acknowledging the receipt of your letter of the 20th inst. and forth the result of views between us in our recent interviews defining the understanding of the two governments in regard to their policy in the region of the Pacific Ocean.

It is a pleasure to inform you that this expression of mutual understanding is welcome to the government of the United States, as appropriate to the happy relations of the two countries, and as occasion for a concise mutual affirmation of that accordant policy respecting the Far East which the two governments have so frequently declared in the past.

I am happy to be able to confirm to Your Excellency, on behalf of the United States, the declaration of the two governments, embodied in the following words:

Accept, Excellency, the renewed assurances of my highest consideration. ELIHU ROOT, Secretary of State.

The substance of the declaration was furnished in advance of its signing to the governments interested in Chinese affairs, and cordial expressions of sympathy and support came from them.

WELCOMED IN TOKIO. Text of Notes Defining Policy Made Public There.

Tokio, Dec. 2.—The text of the notes exchanged by Secretary Root and Ambassador Takahira, setting forth the American-Japanese declaration of policy in the Far East, was published here this morning. It was warmly welcomed on all sides.

RECORD PRICE FOR TOBACCO.

Lexington, Ky., Dec. 1.—The highest price paid for burley tobacco in the open market in years was received for some of the 1908 crop on the local breaks to-day, when \$9 a hundred pounds was bid for it. All the tobacco was raised by independent growers. During the day 100,000 pounds were sold at from \$45 to \$50.

TO REORGANIZE NAVY MR. NEWBERRY TAKES UP THE TASK.

Enlarges General Board So That It May Perform Duties of General Staff—Mr. Metcalf Retires.

Washington, Dec. 1.—The reorganization of the navy contemplated by the President, and which he at one time intended to confide to Secretary Root, was undertaken to-day by Truman H. Newberry, immediately after he had been sworn in as Secretary of the Navy. By a slight alteration of the order creating the General Board, Secretary Newberry provided for the enlargement of that organization so that it will be able to perform the duties of the general staff, long advocated by President Roosevelt and others who have made a study of the economy of the present naval organization.

While the Secretary of the Navy is empowered to enlarge the personnel and functions of the General Board, he cannot, of course, confer on it that legal status which would make its acts determinative instead of advisory, would provide additional compensation for its members and funds with which to employ clerical assistance, or would insure tenure of office for its members, regardless of changes in the Secretaryship of the Navy, as has been done for the General Staff of the army, and as the President has urged on more than one occasion should be done for the navy.

But so confident are the advocates of the general staff proposition for the floating portion of the military establishment that they believe the extension of the system, so far as is possible under the law, and the results which such extension will accomplish, will prove so desirable that the hostility to the plan which has always been shown in the Senate will be dissipated.

TO MEET OPPOSITION IN SENATE.

While the officials decline to discuss the President's change of plan, it is generally believed that when it was discovered Senator Hale purposed to retain control of the Committee on Naval Affairs throughout the coming session of Congress the Executive realized that an effort to obtain the creation by Congress of a general staff for the navy was hopeless, and therefore the plan put into operation by Mr. Newberry to-day was adopted.

The Navy General Board, as created by general order and as it has thus far existed, has consisted of seven officers, including the admiral of the navy, the president of the Naval War College, the chief of the bureau of navigation and the chief intelligence officer, all of whom served ex-officio. In addition there have been appointed Rear Admiral Royal R. Ingersoll and Captain Sidney A. Stanton, while Commander Joseph L. Jayne is the secretary; there being one vacancy. Designated for duty with the General Board have been Rear Admiral Evans, Commander Clarence S. Williams, Commander Frank K. Hill and Lieutenant Commander Henry V. Butler, and Admiral Dewey.

Secretary Newberry's amendment to the creative order provides that there shall be, in addition to the members who serve ex-officio, "such other officers as the Secretary of the Navy may designate," and it is his purpose not only considerably to enlarge the board, but also to designate as members some of the officers who are now members of the board on construction, which at present consists of Rear Admiral Converse and the chiefs of the bureaus of construction and repair, ordnance, equipment and steam engineering. It is also likely that this board will be somewhat increased.

One of the defects in the present system is that most of the officers designated for duty on these boards are already so occupied with administrative duties that they are unable to devote to purely military problems the time and attention they deserve; while another is that no officer is now a member of both boards. By the enlargement of the General Board it is expected to obtain members who will be able to devote abundant time to the study of military problems and to appoint some who are also members of the board on construction, so that the General Board shall at all times be in thorough touch with the views and proceedings of the former board. It is a safe prediction, moreover, that the staff will be much more extensively represented on these boards than at present, when their membership is composed almost entirely of line officers.

MAY LEAD TO GENERAL STAFF.

Secretary Newberry, whose capacity for organization and effective administration has already been demonstrated, believes it will be possible to convert, without further authority of law than he now enjoys, the General Board into an organization almost as effective for the welfare of the navy as is the General Staff for the army, and that the actual demonstration of the usefulness of the organization will prove so convincing that ultimately Congress will be led to appreciate the desirability of creating by law a navy general staff. The Secretary maintains, however, that his plans are experimental, and therefore, if the plan contains the defects which some congressional critics believe they see, they will be demonstrated to exist, and either corrected or the plan finally abandoned.

Of course the change which Mr. Newberry has made cannot be considered a violent departure from the policy which has for some time controlled the Navy Department, although it represents material progress along that line. Mr. Newberry took the oath of office as Secretary of the Navy and attended the Cabinet meeting. He was accompanied by the White House by Mr. Metcalf, his predecessor, who formally presented him to the President's official family. The oath of office was administered to the new Secretary in the Navy Department in the presence of Mrs. Newberry and Miss Carol Newberry, Mr. Metcalf, the chiefs of the bureaus and other officers of the service. In a brief speech Mr. Metcalf paid a high tribute to the new Cabinet officer, Mr. Newberry responding in felicitous terms.

The last official letter written by Mr. Metcalf was to Admiral Dewey, thanking him for "the most cordial and loyal support" he had given him. The retiring Secretary left Washington to-night for his home in California. After visiting his son in Los Angeles he will go to his shooting box, where he will hunt for some time. He expects to throw off all business cares until his health has been fully restored.

Walter A. Tamm, of New Hampshire, private secretary to Mr. Newberry while Assistant Secretary, has been appointed confidential clerk to the Secretary.

NEW, STYLISH SPECTACLES CALLED "JIKKI" WITH BLIGHT OR TORIC PEBBLES.

Spencers, 31 Maiden Lane.—Adv.

TROOPS RIDE DOWN MOBS. Hard Fighting in Prague—Czechs Beat British Consul.

Prague, Dec. 1.—The race riots between the Czechs and Germans are assuming the gravest character, and probably will compel a declaration of martial law. The disturbances yesterday were more serious than any of those which have taken place in the last few weeks, showing bitter, open resistance to armed authority. Order was not restored until long after midnight. Twenty gendarmes and several police were injured by stones, and a great number of the rioters were cut down.

The riots were resumed to-day with even greater violence, and dragoons were called out to clear the streets. The Czechs offered a determined resistance. They tore up paving stones to use as missiles, and wielded clubs and sticks with serious results to the police and soldiers. Imperial flags were torn and burned, and finally the troops drew their sabres and rode down the crowds, pursuing the rioters into the houses.

The British Consul, Captain A. W. Forbes, was dragged from a tram car and badly mauled by the Czechs, who mistook him for a German. Rioting continued up to a late hour in the suburbs. German shops were robbed and the rioters erected barricades of wire and other obstacles. The troops now occupy the streets of the city.

POPE'S DOCTORS ANXIOUS. Cold Following Usual Course, but the Patient Weak.

Rome, Dec. 1.—The Pope's physicians said to-night that the cold from which he was suffering was following a normal course, but expressed anxiety on account of his weakness.

A REVOLT IN SALVADOR. President Figueroa Promptly Crushes Insurrection.

San Salvador, Dec. 1.—A plot to overthrow the government of President Figueroa was discovered and frustrated to-day. Martial law has been proclaimed. The revolutionary movement, which was started in the Department of Sonsonate, was crushed immediately. Many persons well known in political circles opposed to the government were implicated and have been imprisoned. The public generally is satisfied with the government's success in suppressing the revolt, and quiet now prevails throughout the country.

HARRIMAN'S PHILOSOPHY. Says a Man Is Not Responsible for His After Dinner Speech.

E. H. Harriman refused yesterday to make any statement regarding the recent rumor current in Wall Street that he was to become chairman of the New York Central board. Asked regarding certain points in his speech at the Economic Club dinner on Monday night, Mr. Harriman responded: "No man is responsible for what he says in an after dinner speech."

40-YEAR FEUD REVIVED. Man and Woman Slain in Mountains of Kentucky.

Lexington, Ky., Dec. 1.—A sheriff's posse is searching the mountains in Laurel County to-day for William Tyree and Robert Barnes, who are charged with the murder last Sunday of William Barnes and Mrs. Emma Taylor. The shooting was the result of an outbreak of a feud of forty years' standing between the Whitaker, Mize and Barnes families, in which many persons have been slain on both sides.

William Tyree and Robert Barnes appeared at the home of William Barnes on Sunday, and without giving him a chance for his life shot and killed him. Mrs. Taylor appeared on the scene with a shotgun, but before she could fire she received the contents of a gun fired by Robert Barnes. The men then made their escape to the mountains.

At least a dozen persons have been killed in the last five years in the feud. Among the incidents in the Whitaker, Mize and Barnes families and their relatives was the killing of William Whitaker by "Tom" Bolton, Elisha Whitaker by James Mize, "Willie" Whitaker and John Farmer, who killed each other. "Harve" Mize killed his wife and dangerously stabbed her brother, Ray Whitaker; Lum Whitaker was killed by J. W. Woodall, Roy Whitaker by two of the Barnes boys; Julius Warren, who married a Whitaker, killed James Arnold, and his son, Harland Arnold.

The wife of William Barnes, one of the victims of Sunday's tragedy, was a Whitaker. Most of the victims of the feud have been of the Whitaker family.

YALE STUDENT A SUICIDE. Ends Life by Jumping 100 Feet from West Rock.

New Haven, Dec. 1.—John Alan White, of Walton, N. Y., a student in the Yale graduate school, committed suicide yesterday by jumping from the top of West Rock to the ground below, 100 feet. The body was found by Harry L. Agard, White's roommate. The coroner, in giving permission for the removal of the body, said it was undoubtedly a case of suicide.

The belief that White contemplated taking his life, it is said to be borne out by a letter found in his room, addressed to his father. It is thought that his mind was temporarily deranged from too hard work and worry over the illness of his brother and sister with typhoid fever.

Before entering the graduate school White was a member of the Academic Department of Yale, graduating at the head of the class of '07. He was the youngest member of the class, and during his course won many scholarships and prizes.

BURROWS CAN'T SUPPORT OPPONENT. Senator Fails to Enthuse Over Townsena's Candidacy for His Job.

Washington, Dec. 1.—Senator Burrows, of Michigan, received a telegram recently from a Kalamazoo paper asking him for an expression of opinion on the candidacy of Representative Townsena for the United States Senate. He sent the following answer: In reply to your telegram announcing the candidacy of Mr. Townsena for the Senate two years hence, and asking for an expression of my views, I have to say that I do not see how I can support him.

Senator Burrows expects to succeed himself.

CITY MAY BUILD NEW \$10,000,000 BRIDGE TO CARRY CATSKILL WATER OVER HUDSON. Efforts to Tunnel Under River Expected to Prove Fruitless, as Rock Bottom Is Too Deep.

It begins to look as if the city of New York will have to build a \$10,000,000 suspension bridge across the Hudson at Storm King, near Peekskill, to carry the giant conduit of the new Catskill water supply from the west to the east bank of the Hudson.

Professor William H. Burr has turned in to the Board of Water Supply a tentative report on the size and cost of the proposed bridge. His figures are regarded as conservative by the commissioners. It is understood that he estimates the bridge will cost around \$8,000,000, with \$10,000,000 as an outside figure.

If built, which now seems probable, the bridge will have a span of from 1,200 to 1,400 feet in the clear, with piers set well out from either shore. At first it was thought that the span would have to be fully 2,000 feet, but the cost of this would be practically prohibitive, and a shorter span is now planned. The height from the middle of the bridge to the water will be 150 feet, and the structure will be strong enough to carry wagon and streetcar traffic, although it is not expected that any streetcars will use it for many years.

The Board of Water Supply is greatly disappointed over its failure thus far to find a solid rock bottom to the river through which to bore the conduit, which will be 17 feet 6 inches in diameter and lined with concrete.

After various spots on the banks of the Hudson had been inspected, the board selected the site at Storm King for the proposed crossing. The channel is comparatively narrow there, and the rock seems to be less faulty than at other places. Before Storm King was chosen the engineers made many borings up and down the river for a distance of several miles each way. None of these borings was successful in so far as striking solid rock was concerned.

The test borings at Storm King are now down about seven hundred feet without finding solid rock. If the borings at one thousand feet show the same kind of formation it will be practically an even choice between a pressure tunnel and a bridge. The engineers do not feel like going below the surface of the Hudson River deeper than 1,400 feet. If a rock bottom can be found at a depth less than 1,400 feet it is certain that it will cost less to build a pressure tunnel than a bridge.

It is understood that a pressure tunnel built so as to last for ages, without any serious danger of needing repairs, will cost less than \$5,000,000, while a suspension bridge 2,800 feet in length will cost from \$8,000,000 to \$10,000,000.

Another possibility is a great pipe line on the bed of the Hudson. This, however, is the third choice, the engineers favoring a pressure tunnel if they can get it, and a suspension bridge as a second choice.

The bridge across the Hudson at Storm King is not the only huge engineering problem confronting the board. Proposals are asked for wash borings for a distributing system running from the Hill View reservoir, near Yonkers, three hundred feet deep under Manhattan Island and under the East River to Brooklyn. From this deep main there will be frequent uptakes so as to get the water into domestic use. The crossing under the Harlem will be between Seventh avenue and Washington Bridge, and under the East River between the Brooklyn and Williamsburg bridges. The pressure will be sufficient to send the water to the tops of twenty story buildings, making it unnecessary for the skyscrapers to install pumping plants of their own.

TUNNEL BIDS OPENED. Booth & Fynn Company May Build Walkill Pressure Tube.

The Booth & Fynn Company and the American Pipe Manufacturing Company seem to be the lowest bidders for the construction of the Walkill pressure tunnel, bids for which were opened yesterday forenoon by the Board of Water Supply.

Combined and separate bids for the north and south sections of the work were asked for. The Booth & Fynn Company apparently has submitted the lowest combined bid, its figure being \$3,365,000. The American Pipe Manufacturing Company seems to have submitted the lowest bid for one section of the work. The bids are being tabulated, and will be announced to-day.

The Walkill pressure tunnel contract was advertised once before as a single contract. The board divided it into two practically equal sections so as to induce some of the smaller bidders to come in. S. Pearson & Sons submitted the lowest bid the first time by more than \$1,000,000. The labor organizations charged that the firm could not do the work without employing the cheapest possible labor. After long deliberation the board threw out all the bids and re-advertised.

The northern section, or Contract No. 26, called for a tunnel 350 to 480 feet in depth under the Walkill River, between the Highlands on the east and the Shawangunk Mountains on the west, near the villages of New Paltz and Modena. A deposit of \$50,000 for each bid was required. The bonds for the entire work aggregating \$450,000. The tunneling covers a distance of about four and one-half miles. A similar tunnel is under construction in the Rondout Valley, where the test borings disclosed the presence of twelve varieties of rock. In the Walkill Valley there is only one kind of rock.

APPEAL TO PRESIDENT. Floods Threaten to Sweep Away Pine Bluff, Ark.

Pine Bluff, Ark., Dec. 1.—Citizens of Pine Bluff telegraphed President Roosevelt to-day asking him to intervene with the Secretary of War for permission to divert the channel of the Arkansas River here. The telegram was signed by Mayor W. L. Toney and a large number of citizens.

A message from the War Department refused permission to cut a new channel for the river, and unless the decision is reversed property owners must rely upon brush "fastening" to protect the river banks. The river is rising rapidly, and a stage of twenty-five or thirty feet is expected by Thursday. The flood stage is twenty-five feet. The fate of property aggregating probably \$5,000,000 is in the balance. Unless the brush "fastening" serves to check the water's force the "fastening" Hotel, the courthouse and other buildings are almost sure of destruction when the crest of the flood reaches this point, with the probability that nearly the entire business section of Pine Bluff will be destroyed.