

18 WORK ON MISSOURI RIVER

Captain Chittenden Discusses Its Future Probable Expense. ESTIMATE FOR THE ENSUING TWO YEARS

Three Million Dollars Needed to Take Care of Improvements Under Way and for New Work Projected.

Captain Hiram M. Chittenden, U. S. A., engineer in charge of the Missouri river improvement work, has just forwarded to the chief engineer of the War department his report for the year ending June 30. It is a voluminous document, covering in detail the operations of the engineers and contractors engaged in the work, and gives much interesting data concerning that which has already been achieved. The really interesting part of the report deals with the future of the work, since the abolition of the Missouri River commission. On this Captain Chittenden writes:

In making future appropriations for the river the present arbitrary division into the upper and lower river should be abandoned and the river treated as a whole. While the appropriation should be based upon estimates for specific localities, it should itself be in a lump sum. Two years for this is that the river and work generally covers a period of two years and the expenditures authorized frequently extend to a period of three years from the date of the estimates. In an unstable stream like the Missouri, conditions are certain to arise within that period requiring work which could not be foreseen. The appropriation should have a flexibility to permit every emergency to be met as it arises. There could be no possible reason to divert funds from any necessary work included in the estimates, while at the same time the appropriation to meet any ordinary emergency not foreseen when the estimates were prepared. Following is a draft of the appropriation act which is recommended as covering the ground and giving recognition to the principle of bank protection:

REPAIRS AND MAINTENANCE. Pelican Bend, Mo., 15,000. Howard Bend, Mo., 5,000. Murray's Bend to mouth of Gasconade river, Missouri, 250,000. Wilhite's Bend, Mo., 30,000. Arrow Rock, Mo., 10,000. Little Blue, Mo., 2,000. Kansas City, Mo., and Kan., 75,000. Leavenworth, Mo., 20,000. Atchison, Kan., 20,000. St. Joseph, Mo., 100,000. Kelleys, Neb., 20,000. Nebraska City, Neb., 20,000. Omaha and Council Bluffs, 75,000. Sioux City, Ia., 50,000. Elk Point, S. D., 7,500. Fairport, S. D., 10,000. Pierre, S. D., 15,000. Bismarck, S. D., 12,500. Judith and Fort Benton, Mont., 1,500. Total, 724,000.

NEW WORK. Howard's Bend, Mo., 50,000. Murray's Bend to mouth Gasconade river, Mo., 200,000. Dam across Gasconade, Missouri, 100,000. Robinson, Mo., 100,000. Wilhite's Bend, Mo., 100,000. Arrow Rock, Mo., 100,000. Kansas City and vicinity, Missouri and Kansas, 400,000. St. Joseph, Mo., 100,000. Sioux City, Ia., 50,000. Elk Point, S. D., 7,500. Yankton, S. D., 15,000. Pierre, S. D., 100,000. Bismarck, N. D., longitudinal dikes, 200,000. Bismarck, N. D., 100,000. Manhattan, N. D., 20,000. Judith and Fort Benton, Mont., 1,500. Total, 2,136,000. AGGREGATE FOR TWO YEARS. Maintenance and repairs, 724,000. New work, 2,136,000. Snagging and dredging, 50,000. Total, 2,910,000.

Policy of Future Improvement.

In my last annual report I made the following reference to future work on both the upper and lower river: "The public work on the entire Missouri river has been consolidated under a single office. The discontinuance of the Missouri River commission and the greatly reduced appropriations, as compared with former years, for both the upper and lower river, indicate an intention on the part of congress to abandon the river altogether in the near future. In its final report the Missouri River commission dealt with the work and requirements of the lower river inasmuch as there will be no other river and harbor bill for two years, and, therefore, no need of present appropriations for congress to act upon, such estimates are omitted from this report. Before the rendition of the annual report for 1903 the officer in charge will be prepared to submit a comprehensive statement of the conditions along the entire river, and the advisability or non-advisability of further work upon it, together with estimates, if such work is considered necessary."

The drift of public opinion upon this subject during the past few years has been referred to is generally considered as forecasting an abandonment of the river, and upon the river. There is a strong feeling throughout the valley that such a course would be to grave the many interests, and that if the true situation were better understood, many more would be disposed to ignore them. In any event it is clear that the present is a crisis in the history of government, and that congress will probably take definite action one way or the other at the ensuing session. It is therefore important to submit at this time a full report upon the subject. In order that the wavering action be taken in the near future, a clear understanding of the situation as it actually exists.

Navigability of the Missouri River.

There is a widespread belief that the Missouri river is a navigable stream, or, ever navigable, that it has practically ceased to be a navigable stream. In the United States and probably no other on the globe, has a record for navigability been kept. It is a record that has been navigated by steamboats for nearly ninety years. The distance over which these boats have traveled is about 2,300 miles and the mouth of the river is 2,300 miles. The amount of traffic carried has been enormous. In the last year, for example, as from 150 to 160, some of the finest boats ever launched in the country. The boats of America were to be found upon this stream. Carries of 500 tons have been carried, a total of 100,000 tons, from St. Louis to Fort Benton, and occasionally two such voyages have been made by one boat in a single season—a total of 200,000 tons, or more than 10,000 miles.

In its natural condition, for at that time no work of improvement worthy of mention had been done. The river was navigable there is no other river in this country that has a record to compare with it. Its pre-eminence, this river, has remained unchanged. It is as navigable today as it ever was; for the recent improvements made by the government more than offset the obstacles formed by the numerous bridges. There is no physical obstruction to prevent boats from going all the way from St. Louis to Fort Benton at an average state of the river, just as they used to do forty years ago. But while the Missouri river is as much a navigable stream as any other, it is not so much as many streams that are being improved at great expense by the government. It is not so much as many streams that are being navigated through the use of locks and locks. The standard bank revetment, developed during twenty years' experience, is not so much as many streams that are being improved for the purpose of improving the channel it is undoubtedly more effective than any other form of work that has been done. The river has shown one thing more clearly than another, it is that the river is not so much as many streams that are being improved for the purpose of improving the channel it is undoubtedly more effective than any other form of work that has been done. The river has shown one thing more clearly than another, it is that the river is not so much as many streams that are being improved for the purpose of improving the channel it is undoubtedly more effective than any other form of work that has been done.

cannot be too strongly urged that the government should not suspend the policy of improvement so strenuously advocated by the Missouri River commission, should not relinquish any of its rights over the river as a navigable stream. It should zealously preserve every inch of its rights, and should not allow any of its rights to be lost. It should supervise the construction of bridges, and should see that they do not obstruct the river. All harbor lines should be laid out with the same prudent forethought as is shown in the case of its bed by private parties should be in possession of duly authorized plans. The present situation is a most serious one, and it is not until it is made plain to the public that it is not a matter of life and death, but a matter of life and death, that the government will take any action that may improve its condition.

Protection of Riparian Property.

The foregoing views and recommendations are based upon the basis of the present commercial value of this stream; they do not take into account the value of the stream as a public work assigned to promote the welfare of the people. It is a matter of fact, there are reasons of a most pressing character why the government should not abandon its work there. It should radically change the purpose of its work, and should not allow the work to be abandoned. It should not allow the work to be abandoned. It should not allow the work to be abandoned. It should not allow the work to be abandoned.

Cost of the Work.

The full magnitude of the work, as outlined above, would not be as great as might at first sight appear. It is a fact that the river tends to cling to the smooth banks and, without any attempt to train it by force, it would grow more and more confined. Every mile of revetment built would not only serve its own immediate end but would also tend to place the limit of its performance at the main banks and wherever it attacks them there to meet it in this way relief will be brought where most needed. Every dollar will be effectively and usefully employed. In the course of years, will form connections with other parts of the river, and the river will be confined within reasonable limits.

Snagging and Dredging.

For the exclusive benefit of navigation no work should be done except where boats are in actual operation. The work should consist only of snagging and dredging. The last river and harbor bill directed that the examination of that portion of the Missouri river below Sioux City, Ia., with a view to ascertain the feasibility of navigation, and as a settlement of the question of the removal of obstructions, should be made on account of the cost, to build and equip a dredge boat to make the examination, with the understanding that it is necessary to do so. Existing data are sufficient to answer the question. Snagging has been systematically carried on for many years and there is no question of the great value of this improvement. It is not a matter of great cost, and it is not a matter of great cost, and it is not a matter of great cost.

Maintenance of Existing Works.

Apart from the question of new work of future policy of improvement is that of what should be done with the existing works. There is now in existence along the river work whose aggregate cost is probably \$10,000,000. A part of this work is doing service, with greater or less effect, in protecting the bottom lands. It is a matter of great importance to the people along the valley whether it is going to be preserved or abandoned. It is not a matter of great cost, and it is not a matter of great cost, and it is not a matter of great cost.

Remedial Agencies.

The situation is one that must be met sooner or later with some adequate remedy, and the question now is what shall this remedy be. It cannot be the private individual. He is practically helpless, for the destructive agencies extend beyond their jurisdiction and they are liable to find their efforts null and void. The states themselves will never go into the work of protecting the banks of an interstate waterway. The work which this duty naturally and rightfully belongs, and the only one that has the authority and resources to undertake it, is the federal government. There is no duty pertaining to its public works that is more deeply grounded in justice. Every argument that will justify construction on the Mississippi applies with an astringent force to the case here in question, for the works proposed, as will presently appear, not only serve the purpose of protection, but of improvement of the channel as well, whereas the levees can exercise no appreciable influence on the navigable channel of the river. The government owes it as a duty to the people of the valley to keep the river open, and to prevent it from being closed by the action of the river along its shores. It is a duty that is as much a part of the government's obligation as it is a part of the government's obligation.

Moral Obligation Involved.

Even if it were true, is the government going to adopt the alternative of paying for the destruction of the river? The question itself carries its own answer. Moreover, the merit of the work should not be estimated by the relation of the cost to the value of the property involved. It is a matter of fact that the government has a moral obligation to the people of the valley to keep the river open, and to prevent it from being closed by the action of the river along its shores. It is a duty that is as much a part of the government's obligation as it is a part of the government's obligation.

Religious.

Bob Burdette has accepted a call to be the pastor of a Baptist church in Los Angeles. As a humorist he always trained with another degree, that of a humorist. The pope has conferred the degree of doctor of divinity upon Rev. Father James L. Meagher, president of the Grand Rapids, Mich., Association, Publishing company of New York.

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should be had in a practical way to meet an existing situation. Where destruction of the banks is going on, there would be done by the government. It should not allow any of its rights to be lost. It should supervise the construction of bridges, and should see that they do not obstruct the river. All harbor lines should be laid out with the same prudent forethought as is shown in the case of its bed by private parties should be in possession of duly authorized plans. The present situation is a most serious one, and it is not until it is made plain to the public that it is not a matter of life and death, but a matter of life and death, that the government will take any action that may improve its condition.

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PRATTLE OF THE YOUNGSTERS.

"Oh, mamma," exclaimed little Elsie on seeing a calf for the first time, "that must be one of the little cows that give condensed milk!"

A little girl was in the habit of ending her prayer by asking for a dozen relatives, naming each of them. But being very sleepy one evening she closed as follows: "And please, God, bless papa and mamma and the rest of the crowd. Amen."

Johnny—Papa, who was Horace Greeley? Papa—He was a famous editor, Johnny. Johnny—And I didn't he write the base ball news?

Papa—No, I don't believe he did. Johnny—Huh! He couldn't have been much of an editor, then.

Teacher—Willie, if one horse can run a mile in two minutes and another horse can do it in three minutes, how far apart will they be at the end of eight miles?

Willie—Madam, I was brought up strictly. Above all things my parents have warned me to avoid racing. Consequently I cannot answer your question.

President Roosevelt's son Kermit has a face of the gravest solemnity, which when he was a little chap, gave a humorous turn to everything he said. One day the children came running into Mr. Roosevelt's den in the greatest excitement over a snake they had seen. Teddy, Jr., was so worked up over the glitter of the reptile's eyes, as it lay on the floor, hissing and darting out its forked tongue, that all he could get to say was: "Oh, papa, it had a head—such a head—I wish you could have seen the thing's head!"

"Well," said Mr. Roosevelt, "and didn't it have a tail?" Kermit, standing wide-eyed beside his brother, looked into his father's face and said solemnly: "It was a tail."

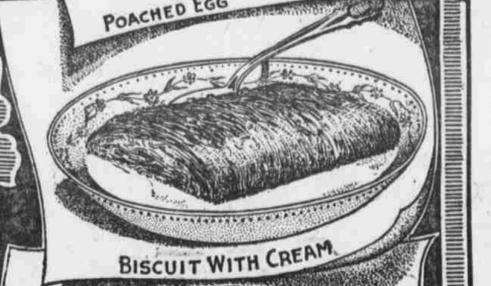
The New York Times tells this story about a country surgeon who once had three leg amputation cases in a week. The unusual number of serious and similar operations naturally caused talk in the surgeon's household and his little daughter was greatly interested. A few days after the last operation the surgeon's wife and daughter were rummaging in the attic. In a trunk was found a daguerreotype depicting a girl of about 15 years of age. The portrait, through a peculiarity of pose, showed only one leg of the subject, the other being doubled up under her in a manner truly feminine.

"Whose picture is that, mamma?" asked the surgeon's daughter. "Mine. It was taken when I was a child not much older than you are now." "Did you know papa then?" "No, dear. Why do you ask?" "I thought maybe you did, 'cause you've only got one leg."

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FISH BALLS

scraped from the cob, add to this two beaten eggs, half a cup of milk, quarter of a cup of flour, half a teaspoonful of baking powder, salt to taste. Beat with small cups and fill three-quarters full of the mixture; steam thirty minutes. Serve with roast beef or friend ham.

Corn Porridge—Take young, tender green corn and cut from the cobs. To each two and a half cups of corn add one quart of water and a bright fire of coals by watching carefully and turning when one side is done. Do not allow it to burn, as it will be bitter.

Stewed Corn and Tomatoes—Strip off all the husks from the corn and carefully free from all silk. Split down each row of kernels with a sharp knife and shave off the cob. Place the corn in a saucpan, cover with hot water and simmer slowly for five minutes. To every pint of corn add a tablespoonful of butter, season with salt and pepper to taste, then add one cup of peeled and chopped tomatoes. Bring to the boiling point and cook twenty minutes and serve in covered dish. Roll the butter in flour before adding if there is too much liquid.

Baked Corn—Use only fresh, tender ears of green corn of equal size. Remove all silk, but not the husk. Tie the husks around the ears carefully with clean white cord. Place the corn in a hot oven and bake until tender, about twenty minutes. Serve on a napkin, removing the husks before serving.

Green Corn Cakes—Add to one pint of corn pulp two well beaten eggs, stir in one tablespoonful of flour and one of corn-starch, season with salt and pepper and mix thoroughly. Bake a light brown on a hot griddle. These cakes can be made of canned corn finely chopped by adding two tablespoonfuls of milk, canned corn being less moist than the green. Corn Cakes—Take one cup of corn that has been cut through the kernels and then

Don't let day pass without relaxing limbs, muscles and expression. Don't fret and worry—these are the best cosmetics. Worry is called our national disease, and "Americanitis" is its distinctive name.

Don't "putter," do your work, rest or play. Don't forget that a twin sister to worrying. Don't put too much of yourself into the ordering of the household or the management of servants if you wish to keep fagged cheeks and hollow eyes at a distance.

Don't exhaust all your reserve force over petty cares. Each time that a woman loses control over her nerves she moves a fraction of an inch farther on in the path that leads to premature old age.

Don't forget that a course of prevention is worth several pounds of cure. It is better to begin to take care of complications before they begin to show and wear.

Don't think it superlatively virtuous to disregard beauty. The divine gift of beauty is the second great blessing of life—health being the first.

Is an ordeal which all women approach with indescribable fear, for nothing compares with the pain and horror of child-birth. The thought of the suffering and danger in store for her, robs the expectant mother of all pleasant anticipations of the coming event, and casts over her a shadow of gloom which cannot be shaken off. Thousands of women have found that the use of Mother's Friend during pregnancy robs confinement of all pain and danger, and insures safety to life of mother and child. This scientific liniment is a god-send to all women at the time of their most critical trial. Not only does Mother's Friend carry women safely through the perils of child-birth, but its use gently prepares the system for the coming event, prevents "morning sickness," and other discomforts of this period. Sold by all druggists at \$1.00 per bottle. Book containing valuable information free. The Bradford Regulator Co., Atlanta, Ga.

MOTHER'S FRIEND