PRESIDENT ON PANAMA

Sends Special Message to Congress Giving Results of His Observations in Canal Zone--Replies to Critics and Makes Recommendations.

The following is the text of President Roosevelt's special message to congress on the subject of the Panama canal:

To the Senate and House of Representatives:

In the month of November I visited the Isthmus of Panama, going over the Canal Zone with considerable care; and also visited the cities of Panama and Colon, which are not in the zone or under the United States flag, but are to which the United States government, through its agents, exercises control for certain sanitary purposes. I chose the month of November for my visit partly because it is the most healthy month of the year, the month in which the work goes forward at the greatest disadvantage, and one of the two months which the medical department of the French Canal company found most unhealthy.

Following the introduction to the message the president gives a resume of his programme during the days he was on the isthmus, and then says:

At the outset I wish to pay tribute to the amount of work done by the French Canal company under very difficult circumstances. Many of the buildings they put up were excellent, and are still in use, though, naturally, the houses are now getting out of repair and are being used as dwellings only until other houses can be built, and much of the work they did in the Culebra cut, and some of the work they did in digging has been of direct and real benefit. This country has never made a better investment than the $40,000,000 which it paid to the French company for work and betterments, including especially the Panama railroad.

An inspection on the ground at the height of the rainy season served to convince me of the wisdom of congress in refusing to adopt either a high-level or a sea-level canal. There seems to be a universal agreement among all people competent to judge that the Panama route, the one actually chosen, is much superior to both the Nicaragua and Darien routes.

Preliminary Work Being Done.

The wisdom of the canal management has been shown in nothing more clearly than in the way in which the foundations of the work have been laid. To have yielded to the natural impatience of ill-informed outsiders and begun all kinds of experiments in work prior to a thorough sanitation of the isthmus, and to a fairly satisfactory working out of the problem of getting and keeping a sufficient labor supply, would have been disastrous. The various preliminary measures had to be taken first; and these could not be taken so as to allow us to begin the real work of construction prior to January 1 of the present year. It then became necessary to have the type of the canal decided, and the only delay has been the necessary delay until the 29th day of June, the date when the congress definitely and wisely settled that we should have an 85-foot level canal. Immediately after that the work began in hard earnest and has been continued with increasing vigor ever since; and it will continue so to progress in the future, when the contracts are let the conditions will be such as to insure a constantly increasing amount of performance.

Successful Sanitation.

The first great problem to be solved, upon the solution of which the success of the rest of the work depended, was the problem of sanitation. This was from the outset under the direction of Dr. W. C. Gorgas, who is to be made a full member of the commission. It must be remembered that his work was not mere sanitation as the term is understood in our ordinary municipal work. Throughout the zone and in the two cities of Panama and Colon, which are within the sanitation work proper, he has had to do all the work that the Marine hospital service does as regards the nation, that the health department officers do in the various states and cities, and that Col. Waring did in New York when he cleaned its streets. The results have been astounding. The isthmus had been a byword for deadly unhealthfulness. Now, after two years of our occupation the conditions as regards sickness and the death rate compare favorably with reasonably healthy localities in the United States. Especial care has been devoted to minimizing the risk due to the presence of those species of mosquitoes which have been found to propagate malarial and yellow fevers. In all the settlements, the little temporary towns or cities composed of the white and black employes, which grow up here and there in the tropic jungle as the needs of the work dictate, the utmost care is exercised to keep the conditions healthy. Everywhere are to be seen the drainage ditches which in removing the water have removed the breeding places of the mosquitoes, while the whole jungle is cut away for a considerable space around the habitations, thus destroying the places in which the mosquitoes take shelter. These drainage ditches and clearings are in evidence in every settlement, and, together with the invariable presence of mosquito screens around the places, and of mosquito doors to the houses, not to speak of the careful fumigation that has gone on in all infected houses, doubtless explain the extraordinary absence of mosquitoes. As a matter of fact, but a single mosquito, and this not of the dangerous species, was seen by any member of our party during my three days on the isthmus. Great care is taken by the inspectors of the health department to secure cleanliness in the houses and proper hygienic conditions of every kind. I inspected between 20 and 25 water-closets, both those used by the white employes and those used by the colored laborers. In almost every case I found the conditions perfect. In but one case did I find them really bad. In this case, affecting a settlement of unmarried white employes, I found them very bad indeed, but the buildings were all inherited from the French company and were being used temporarily while other buildings were in the course of construction; and right near the defective water closet a new and excellent closet with a good sewer pipe was in the process of construction and nearly finished. Nevertheless this did not excuse the fact that the bad condition had been allowed to prevail. Temporary accommodations, even if only such as soldiers use when camped in the field, should have been provided. Orders were issued, I understand, to suspend the report of Dr. Gorgas on the incident. I was struck, however, by the fact that in this instance, as in almost every other where a complaint was made which proved to have any justification whatever, it appeared that steps had already been taken to remedy the evil complained of, and that the trouble was mainly due to the extreme difficulty, and often impossibility, of providing in every place for the constant increase in the numbers of employes. Generally the provision is made in advance, but it is not possible that this should always be the case; when it is not there ensues a period of time during which the conditions complained of exist, until a remedy can be provided; but I never found a case where the remedy was not being provided as expeditiously as possible.

Improvements in Cities.

The sanitation work in the cities of Panama and Colon has been just as important as the same itself, and in many respects much more difficult, because it was necessary to deal with the already existing population, which naturally had scant sympathy with revolutionary changes, the value of which they were for a long time not able to appreciate. In Colon the population consists largely of colored laborers who, having come over from the West Indies to work on the canal, abandon their work and either take to the brush or lie idle in Colon itself; thus peopling Colon with the least desirable among the imported laborers, for the good and steady men of course continue at the work. Yet astonishing progress has been made in both cities. In Panama 95 per cent of the streets that are to be paved at all are already paved with a excellent brick pavement laid in heavy concrete, a few of the streets being still in process of paving. The sewer and water services in the city are of the most modern hygienic type, some of the sewers having just been completed.

In Colon the difficulties are peculiar, and it is as regards Colon that most of the very bitter complaint has been made. Colon is built on a low coral island, covered at more or less shallow depths with vegetable accumulations or mold, which affords sustenance and strength to many varieties of low-lying tropic plants. One-half of the surface of the island is covered with water at high tide, the average height of the land being 1½ feet above low water. The accumulations are mostly shallow, natural reservoirs or fresh-water breeding places for every variety of mosquito, and the ground tends to be lowest in the middle. When the canal was originally built no attempt was made to fill the low ground, either in the streets or on the building sites, so that the entire settlement is practically a quagmire; when the quagmire became impassable certain of the streets were crudely improved by filling especially bad mud holes with rock or other material. In September, 1905, a systematic effort was begun to formulate a general plan for the proper sanitation of the city; in February last temporary relief measures were taken, and in July the application of the work was begun in good earnest. The results are already visible in the sewering, draining, guttering and paving of the streets. Some four months hence we expect to have the work of sewerage and street improvement will be completed, but the progress already made is very marked. Ditches have been dug through the town, connecting the salt water on both sides, and into these the ponds, which have served as breeding places for the mosquitoes, are drained. These ditches have answered their purpose, for they are probably the chief cause of the astonishing diminution of mosquitoes. More ditches of the kind are being constructed.

Colon Water Supply.

It was not practicable, with the force at the commission's disposal and in view of the need that the force should be used in the larger town of Panama, to begin this work before early last winter. Water mains were then laid in the town and water was furnished to the people early in March from a temporary reservoir. The reservoir proved to be of insufficient capacity before the end of the dry season and the shortage was made up by hauling water over the Panama railroad, so that there was at all times an ample supply of the very best water. Since that time the new reservoir back of Mount Hope has been practically completed. I visited this reservoir. It is a lake over a mile long and half a mile broad. It now carries some 500,000,000 gallons of first-class water. I forward herewith a photograph of this lake, together with certain other photographs of what I saw while I was on the isthmus. Nothing but the catchment will hereafter render it necessary in the dry season to haul water for the use of Colon and Cristobal.

Colon Pavements.

I rode through the streets of Colon, seeing them at the height of the rainy season, after two days of almost unexampled downpour. When they were at their very worst. Taken as a whole they were undoubtedly very bad; as bad as Pennsylvania avenue in Washington before Grant's administration. Front street is already in thoroughly satisfactory condition. However, Some of the side streets are also in good condition, and there is a change in the streets is rapidly going on. Through three-fourths of the town it is now possible, even in weather during the period of tremendous rain, in low shoes without wetting one's feet, owing to the rapidity with which the surface water is carried away in the ditches. In the remaining one-fourth of the streets the mud is very deep—about as bad as is the ordinary street of a low-lying prairie river town of the same size in the United States during early spring. All men to whom I spoke were a unit in saying that the conditions of the Colon streets were 100 per cent better than a year ago. The most superficial examination of the town shows the progress that has been made and is being made in sanitary matters. Complaint was condemning the work in Colon, which was made to me by an entirely reputable man, as to the character of some of the material used in repairing certain streets. On investigation the complaint proved well founded; but it also appeared that the use of the material in question had been abandoned, the commission after having found it to be of two streets finding it not appropriate.

The result of the investigation of this honest complaint was typical of what occurred when I investigated most of the other honest complaints made to me. That is, where the complaints were not made wantonly or maliciously, they almost always proved due to failure to appreciate the fact that time was necessary in the creation and completion of this titanic work in a tropic wilderness. It is impossible to avoid some mistakes in building a giant canal through jungle-covered mountains and swamps, while at the same time sanitating tropic cities and providing for the feeding and general care of from 20,000 to 30,000 workers. The complaints brought to me, either of insufficient provision in caring for some of the laborers, or of failure to finish the pavements of Colon, or of failure to supply water, or of failure to build wooden sidewalks for the use of the laborers in the rainy season, on investigation proved, almost without exception, to be due merely to the utter inability of the commission to do everything at once.

Unjust Criticism.

Care and forethought have been exercised by the commission, and nothing has reflected more credit upon them than their refusal either to go ahead too fast or to be deterred by the fear of criticism from not going ahead fast enough. It is curious to note the fact that many of the most severe critics of the commission criticise them for precisely opposite reasons, some complaining bitterly that the work is not in a more advanced condition, while others complain that it has been rushed with such haste that there has been insufficient preparation for the hygienic comfort of the laborers. As a matter of fact neither criticism is just. It would have been impossible to go quicker than the commission has gone, for such quickness would have resulted in disaster. Prepared, on the other hand, to refuse to do anything until every possible contingency had been met would have caused wholly unwarranted delay. The right course to follow was followed. Reasonable preparations were made in advance, the hygienic conditions in especial being made as nearly perfect as possible; on the other hand there has been no timid refusal to push forward the work because of inability to anticipate every possible emergency, for, of course, many defects can only be shown by the working of the system in actual practice.

In addition to attending to the health of the employes, it is of course necessary to provide for policing the zone. This is done by a police force which at present numbers 350 men, under Capt. Shanton. About one-fifth of the force are white men, the rest being black. In different places I questioned some 20 or 30 of these men, taking them at random. They were fine set, physically and in discipline. With one exception all the white men I questioned had served in the American army, usually in the Philippines, and belonged to the best type of American soldier. Without exception the black policemen whom I questioned had served either in the British army or in the Jamaica or Barbados police. They were evidently competent, and were doing their work well. Where possible the policemen are used to control people of their own color, but in any emergency no hesitation is felt in using their indifferent brethren.

Inasmuch as so many both of the white and colored employes have brought their families with them, schools have been established for their benefit, under Prof. Der. M. O'Connor. For the white public white American teachers are employed, for the colored people there are also some white American teachers, one Spanish teacher, and one colored American teacher, most of them being colored teachers from Jamaica, Barbados and St. Lucia. The schoolrooms were good, and it was a pleasant thing to see the pride that the teachers were taking in their work and their pupils.

Care of Employes.

Next in importance to the problem of sanitation, and indeed now of equal importance, is the problem of properly caring for the mechanics, laborers, and other employes who are at the work on the canal and the railroad. This great task has been under the control of Mr. Jackson Smith, and it has been well, very well, done. At present there are some 5,600 white employes and some 19,000 colored employes on the isthmus. I went over the different places where the different kinds of employes were working; I think I saw representatives of every type both at their work and in their homes; and I conversed with probably a couple of hundred of them at random, from among them at random from every class and including those who came especially to present grievances. Almost invariably expressed far greater content and satisfaction with their conditions than did those who called to make complaint.

Nearly 4,000 of the white employes had come from the United States. No man can see these men without approving energetically doing their duty without a thrill of pride in them as Americans. They represent the best type of the class. Doubtless to congress the wages paid them will seem high, but as a matter of fact the only general complaint which I found had any real basis among the complaints made to me upon the isthmus was that, owing to the peculiar surroundings and the high living, and the distance from home, the wages were really not as high as they should be. In fact, almost every man I spoke to felt that he ought to be receiving more money—a view, however, which the average man who stays at home in the United States probably will not hold as regards himself. I append figures of the wages paid, so that the congress can judge for itself. Later I shall confer on the subject with certain representative labor men here in the United States, as well as going over with Mr. Stevens, the comparative wages paid on the zone and at home; and I may then communicate my findings to the canal commission on the isthmus.

Chinese and Other Labor.

Of the 19,000 or 20,000 day laborers employed on the canal a few hundred are Spaniards. These do excellent work, and I forward to you that they did twice as well as the West Indian laborers. They keep healthy and no difficulty is experienced with them in any way. Some Italian laborers are also employed in connection with the drilling. As might be expected, they do very good work, and at present in the United States, it has not so far proved practicable to get any ordinary laborer from Italy to the States. The American wage-workers on the isthmus are the highly paid skilled mechanics of the types mentioned previously. A steady effort is being made to secure Italians, especially to procure more Spaniards, because the very satisfactory results that have come from their employment, and their numbers will be increased as far as possible. It has not proved possible, however, to get them in anything like the numbers needed for the work, and from present appearances we shall be the main hope to rely, for the ordinary unskilled work, partly upon colored laborers from the West Indies, partly upon Chinese labor. It certainly ought to be unnecessary to point out that the American workingman in the United States has no concern whatever in the question as to whether the rough work on the isthmus, which is performed by negroes in any event, is done by aliens from one country with a black skin or by aliens from another country with a yellow skin. Our business is to dig the canal as efficiently and as quickly as possible, and we have proved that nothing is done that is inhumane or that works any injustice to, or interferes with the wages of or lowers the standard of living of our own people. Having in view this principle, I have arranged to try several thousand Chinese laborers. It is desirable both because we must try to find out what laborers are most efficient, and furthermore because we should not leave ourselves at the mercy of any one type of foreign labor. At present the great bulk of the unskilled labor on the isthmus is done by West India negroes, chiefly from Jamaica, Barbados, and the other English possessions. Some of the governors of the lands in question has shown a so high degree of interest in our work and has thrown obstacles in our way of our getting the labor needed; if it is higher that they may give any outsiders the impression, however ill founded, that they are indispensable and can dictate terms to us.

The West India laborers are fairly, but only fairly, satisfactory. Many of the men do very well indeed; the better class, who are to be found as foremen, as skilled mechanics, as policemen, are good men; and many of the ordinary day laborers are also good.

Work of Construction.

But thousands of those who are brought over under contract (at expense) go off into the jungle to live, or lie idle around Colon, or work at labor for other the first three or four days of work to cause a serious diminution of the amount of labor performed on Friday and Saturday of each week. I questioned many of these West Indian laborers as to the conditions of their work and what, if any changes, they wished. I received many complaints from them, but as regards most of these complaints their companions flatly contradicted one another. In all cases where the complaint was as to their treatment by any individual it proved on examination that this individual was himself a West Indian negro of Colon, either a policeman, a storekeeper, or an assistant foreman. Doubtless there must be many complaints against Americans; but those to whom I spoke did not happen to make any such complaint to me.

The work is now going on with a vigor and efficiency pleasant to witness. The three big problems of the canal are the Culebra cut, the Gatun dams, and the Culebra cut. The Culebra cut presents difficulties, and of course changes as to the dams, or at least as to the locks adjacent to the dams, can still come after the locks dams offer no particular problem. The work on Culebra being so good that there is a practical certainty of being merely as to what can be achieved, but as to the time of achievement. The Gatun dam offers the most serious problem, but it may have to be solved, and yet the ablest men on the isthmus believe that this problem is certain of solution, along the lines proposed; although, of course, it necessitates great energy and intelligence, and although equally, of course, there will be some little risk in connection with the work. The risk arises from the fact that some of the material on the bottom may have to be good as could be desired. If the huge earth dam now contemplated is thrown across from one foothill to the other we will have what is practically a low, broad, mountain ridge behind which will rise the inland lake. This artificial mountain will press the more less seepage, that is, will have greater restraining capacity than the average natural mountain ridge. The exact locality of the locks at the dam—as at the other dams—is now being determined. In April next Secretary Taft, with three of the ablest engineers of the service, visited Nobis, Stearns and Ripley—will visit the isthmus, and the three engineers will make the final and conclusive examinations as to the exact site for each lock. Meanwhile the work is going ahead without a break.

The Culebra cut does not offer such great risks; that is, the damage liable to occur from occasional land slips will not represent what may be called major disasters. The work will merely call for intelligence, perseverance, and executive capacity. It is, however, the work upon which most labor will have to be spent. The dams will be composed of the earth taken out of the cut and very possibly the building of the locks and dams will take ever longer than the cutting in Culebra itself.

In Culebra Cut.

The main work is now being done in the Culebra cut. It is as striking and impressive to see the huge steam shovels in full play, the dumping trains carrying away the rock and earth they dislodged. The implements of French excavating machinery, which often stand a little way from the line of work, though of excellent construction, look like the veriest toys when contrasted with the new steam shovels, just as the French dumping cars look like toy cars when compared with the long trains of huge cars, dumped by steam plows, which are now in use. This represents the enormous advance that has been made in machinery during the past quarter of a century. No doubt a quarter of a century hence this new machinery, of which we are now so proud, will similarly seem out of date, but it is certainly serving its purpose well. The old French tools had to be entirely discarded. We still have in use a few of the most modern, but not most modern, of the tools, which but 12 yards of earth. They can be employed on much more sharp curves. But the recent cars hold from 15 to 30 yards capacity, and instead of the old clumsy methods of unloading them, a steam plow is drawn from end to end of the train which with great rapidity immensely economizing labor. In the rainy season the steam shovels have to do little in dirt, but they work steadily in rock and in the harder ground. There were some 25 of these shovels in the time was on the isthmus, and their tremendous power and efficiency were most impressive.

New Records for Excavation.

As soon as the type of canal was decided this work began in good earnest. The rainy season will shortly be over and then there will be a steady increase in the amount taken out; but even during the last three months of the rainy season, steady progress is shown by the figures: In August, 242,000 cubic yards; in September, 293,000 cubic yards, and in October, 325,000 cubic yards. In October new records were established for the output of individual shovels as well as for the tonnage haul of individual locomotives. I hope to see the growth of a healthy spirit of emulation between the different shovel and locomotive crews; just such a spirit as has grown on our battle ships between the different gun crews in matters of gunnery efficiency. Passing through the cut the amount of new work can be seen at a glance. In one place the entire side of a hill had been taken out recently by 40 tons of dynamite, which were exploded at one blast. At another place I was given a presidential salute of 21 charges of dynamite. On the top notch of the Culebra cut the prism is now as much as it will be; all told, the canal bed at this point has now been sunk about 200 feet below what it originally was, and it will have to be sunk about 130 feet farther. Throughout the cut the drilling, blasting, shoveling and hauling are going on with constantly increasing energy, the huge shovels being transferred from time to time to mountain howitzers, into the most unlikely looking places, from where they eat their way into the hillsides.

Railway Improvements.

The most advanced methods, not only in construction, but in railroad management, have been applied in the zone, with correspondingly economical in time and cost. This has been shown in the handling of the dirt, in the shaping of cars, and from cars into ships on the Panama railroad, where, thanks largely to the efficiency of Mr. Bierd, the managing director, the saving in time and cost, has been notable. My attention was lent to the fact that some of the departments had (doubtless necessarily) become overdeveloped, and I now have been informed by me that the work will be completed in about eight years; but it is not safe to talk about such a work as this, especially in the tropics.

Confident of Ultimate Success.

Of the success of the enterprise I am as well convinced as one can be of any enterprise that is human. It is a stupendous work upon which our fellow countrymen are engaged down there on the isthmus, and it is well that we hold them to a strict accountability for the way in which they [illegible] the work. Nobody [illegible] frank [illegible] severity, the epic [illegible] the [illegible] are [illegible] and [illegible] good [illegible]

Single Commissioner Desired.

A seven-headed commission is of course a clumsy executive instrument. We should have but one commissioner, with such heads of departments and other officers under him as we may find necessary, and he should be expressly permitted to employ the best engineers in the country as consulting engineers.

I accompany this paper with a map showing my conception of what the canal will be like when it is finished. When the Culebra cut has been made and the dams built (if they are built on the present proposed) there will then be a lake in the Pacific and Atlantic ends of the canal two great fresh-water lakes, connected by a broad channel running at the bottom of a ravine, across the backbone of the Western Continent. I do not now think it believe that the work will be completed in about eight years; but it is safe to talk about such a work as this, especially in the tropics.

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Sinders and Libelers.

So much for honest criticism. There remains an immense amount of as reckless slander as has ever been published. Where the slanderers are of foreign origin I have no concern with them. Where they are Americans, I feel for them the heartiest contempt and indignation; because, in the spirit of wanton dishonesty and malice, they are trying to interfere with and hamper the execution of the greatest work of the kind ever attempted, and are seeking to bring to naught the efforts of their countrymen to put to the credit of America one of the great feats of the ages. The outrageous accusations of these slanderers constitute a gross libel upon a body of public servants who, for trained intelligence, exalted ability, high character and devotion to duty, have never been excelled anywhere. There not a man among those directing the work on the isthmus who has obtained his position on any other basis than merit alone, still not one who has used his position in any way for his own personal or pecuniary advantage.

Plan to Build by Contract.

After most careful consideration we have decided to let out most of the work by contract, if we can come to satisfactory terms with the contractors. The whole work is of a kind suited to the peculiar genius of our people; and our people have developed the type of contractor best fitted to grapple with it. It is of course much better to do the work in large part by contract than to do it all by hired laborers, if it can be done in a way which will give us