

"We are all greatly indebted to Mr. Bierd for his untiring attention and courtesy. I will make my own remarks short as an example and ask Mr. Beird to say a few words before we take leave of him."

Mr. Bierd's response was as follows:

"Mr. Chairman and gentlemen of the Commercial Clubs: I assure you it has been a great pleasure not only to myself, but to everyone else that has had the privilege of trying to make your trip interesting and agreeable, to see you here and to show you what is being done toward the construction of the Canal. I want to say that of the very many visits that have been made to the Isthmus, to inspect the Canal work and the railroad (and by the way, I may say that the railroad is but an auxiliary of the Canal), of the many visits that have been made here by those desiring to obtain a better understanding of the character and magnitude of the work going on here and the conditions under which it is performed — there has never been, I say, a visit paid the Isthmus that has been to us — and I believe when I say that I voice the sentiments of all my associates — I repeat, there has never been a visit paid the Isthmus in the interest of the Canal that has equaled the visit you gentlemen have just made, and none which we feel to be such an honor.

"We appreciate very highly, gentlemen, the kind and friendly feeling that has been shown toward us who are engaged in this undertaking. The interest you have taken is very encouraging to us. I think everyone present here tonight really enjoyed and appreciates this interest. And I believe the visit of your Clubs will have a lasting effect upon the Canal work. It is these encouragements that help us. There have been some who came and found fault. As long as the fault-finding is reasonable and justified we are perfectly willing to accept it and to try and correct the lapses. But where it is without foundation and is the result of malice or misrepresentation, we strongly resent it.

"Gentlemen, we want to express our appreciation of your kind words and the good cheer you have infused in us, and we hope sincerely that the remainder of your trip may be safe and pleasant."

Captain von Leitner arose with evident determination to hasten the departure. He said:

"Gentlemen, I am glad you all come back and you enjoyed your trip on the Isthmus. I must say one thing. I now see one thing. That the Commercial Clubs made one mistake, that they did not bring the ladies with them. I can see it now because everybody wants Mrs. Hudson to sit at their table.

"I ought to say I see here tonight some guests whom I saw before in Panama. I see among others the head man that builds the Canal, and I think it no more than right that everyone take his glass and drink his health."

Mr. Goepper introduced the Chief Engineer, saying:

"Gentlemen, you will be detained only a short time longer, and while I realize how much might be said in introducing the next and last speaker of the evening, yet in effect little could be added to what was said last night.

"The Panama Canal is — perhaps I should say the adoption or taking over of the Canal by the United States — may indirectly, at least, be traced to the interest which the four Commercial Clubs of Boston, Chicago, Cincinnati and St. Louis took in it. How they practically inaugurated the movement is past history. During the past two days it has been the privilege of the members of the Clubs on this visit to see that the work is being carried on as they had hoped it would be. We came to make sure that it was. We came with the wish in our hearts really to know that what we are so deeply interested in is being accomplished. But we struck a minor chord when we reached here. The pleasure which we would have felt in leaving after having attained our object has been tempered by the announcement of the withdrawal of the Chief Engineer. You had occasions yesterday to see what he has accomplished and better speakers than I have borne testimony to his work. I merely wish on behalf of the four Clubs to express to him our gratification, and our appreciation of the great work he has done, our regret that he is thinking of leaving, and our earnest hope that he may not

adhere to his decision. In any event, however, our good wishes go with him, and I will now call upon Mr. Stevens to say a few words and give him the opportunity to say good bye."

Mr. Stevens replied feelingly:

"Mr. President, Lady, and Gentlemen of the Commercial Clubs, your leaving us tonight makes me sad. We are glad you came and we wish your stay could be longer, but I am sensible of the fact that you are all busy men, and that you are compelled to neglect your business to be here. We hope the two days you spent on the Canal Zone have proved enjoyable and profitable in affording you a clearer idea than you have had before of the character and progress of this undertaking.

"Let me say on behalf of all the employees of the Canal Commission that we are proud that you came to see us at our work, and hope you can find your way clear to come again. May this good German ship bear you safely home, and on behalf of every American citizen on the Canal Zone I wish you Godspeed."

The speaking concluded with brief remarks by Mr. David R. Francis, of St. Louis, who said:

"I crave, Mr. President, Gentlemen and Representatives of foreign countries present here this evening, your indulgence for but two or three minutes.

"We have accomplished the main, if not the objective purpose of our visit. We have traversed the Isthmus; we have seen the work being done on the Panama Canal. We have been pleased with what has thus far been achieved. We are better pleased with the spirit which permeates the men who are engaged in this great undertaking, and just as every citizen of the United States, when called upon to defend the flag, will sacrifice every financial interest and take up arms in behalf of his country, just next to that do we think that every citizen of our beloved country, when called upon to take part in this work, should respond to the call.

"This is one of the great undertakings of the age and every man should feel proud to be connected with it. When we go home it will be our duty as well as our pleasure to tell, not only the people of our respective cities, but the people of the entire country, what is being accomplished here; and we shall be proudest of all to tell them of the spirit that inspires every man engaged in this project.

"I feel that it should be considered a duty on the part of every American citizen who is qualified to perform any work to feel that the government of the United States may call upon him to perform it.

"In closing, sir, I am sure I voice the sentiments of every member of these Commercial Clubs when I say that we extend hearty congratulations to the men who are engaged in this work for the physical progress made. And we say to them, go on.

"A speech was made last night by an employee—a timely and effective speech—which said that regardless of who may lead this work, the speaker would be loyal to the head, and he trusted every employee of the Commission would feel likewise. That was a proper and an opportune speech for an employee to make, and I hope it will have its effect. But we all know that when there is a change in the leadership of such an organization as this, demoralization follows. Therefore I am confident I express the views of all present when I say that it is our sincere hope there will be no change in that leadership."

At this point Captain von Leitner, who had been manifesting a little anxiety, arose, his face beaming with good nature, his manner marked with a sense of duty, and said:

"Gentlemen. I think it is time to go."

The Captain did not progress further. There was no weathering that hurricane of merriment. The dinner was over. As Mrs. Hudson was escorted from the dining saloon there followed her in a great chorus:

"Good-night, lady. We're going to leave you now."



A STOP AT BAS OBISPO

Reading from left to right: Laurence Minot, Edward F. Swift, James A. Green, T. P. Egan, N. H. Davis, C. L. Hutchinson, W. B. Lawrence, J. D. Bascom, James R. Carter, L. D. Dozier, General Manager Bierd (Panama R. R.), Consul General Shanklin, David R. Francis, Robert M. Burnett, H. L. Laws, A. H. Chatfield, Charles S. Dennison, David B. Gamble, C. H. McCormick, William Worthington, L. A. Ault, W. D. Bolick, Joseph D. Bascom.
On the train—E. G. Cowdery, Robert Moore, Robert Batcheller, George M. Wright, Charles H. Thorne, Lucien Wulsin, L. W. Noyes, J. W. G. Cofran, Henry C. Scott.

The tug carrying the guests back to Colon had barely passed from view of the waving handkerchiefs and sound of the cheering when the "PRINZ JOACHIM" raised anchor and turned northward for the run of 550 miles to Kingston.

What the Canal officials thought of the visit of the Commercial Clubs was summed up by Superintendent Bolick, who remarked just before the departure: "I am pumped dry."

The heads of departments of the Isthmian Canal Commission have met many visitors and have answered a great variety of questions. They found in the members of the Commercial Clubs observers who for comprehensiveness and number of inquiries broke all records.

The Panama STAR AND HERALD had this to say of the impression which the Clubs left behind them:

The business and financial standing of each and every one of the eighty odd commercial men in this party is such as to make their report of the conditions they found to exist on the Canal Zone second in point of public interest only to the special message to Congress in which President Roosevelt told of what he found when he was here. Last November the Canal officials on the Isthmus had to answer the questions of one man determined to learn all that he could about the Canal work. Last Friday and Saturday the men in charge of the several departments had to stand the examination of eighty odd gentlemen, who have been, or are at present, in active management or control of some of the largest and most representative business organizations in the United States and the commercial world today. The gentlemen in this party represented every shade of political belief. As soon as they had greeted the Reception Committee they inquired as to which of them they should go for information along the several lines of inquiry that it had been decided before landing was wanted, not only by members of the party actually present, but by the members of the Clubs who had not been able to come to the Isthmus.

Before the special train chartered by the party had left the big new yards at Cristobal the visitors interested and familiar with railroads were crowding around General Manager Bierd, plying him with all manner of questions about the Panama Railroad. Mr. Joy Morton, of Chicago, and President Frank J. Jones, of the Little Miami Railroad, gave Mr. Bierd a searching examination, and when they had finished Mr. Joseph B. Russell, President of the West End Street Railway Company, and Treasurer of the Boston Wharf Company, brought



THE TWO MAYORS AT LA BOCA

◀Rolla Wells, Mayor of St. Louis, and Don. J. Francisco de la Ossa, Mayor of Panama.

out Mr. Bierd's reasons for claiming that, owing to the material improvements at Colon, the steamship business of the Panama Railroad at that point is handled at a reduced cost and at speed that, considering labor conditions, is hard to equal in any other port in the world.

The methods for receiving, caring for and distributing all of the supplies needed on the Isthmus were the subject of study for the gentlemen who know the most modern methods by which it is possible to do this work. Charles S. Dennison, Vice-President of the Dennison Manufacturing Company; James A. Green, one of the firm of Matthew, Addy & Company, of Cincinnati; John G. Wright, of Boston, one of the biggest wool merchants in the country, and Mr. Edward Swift, Vice-President of Swift & Company, whose Chicago house has business connections almost all over the world, put the Chief of Department of Material and Supply through a running fire of questions that made some of the Material and Supply men say it was worth a day's pay to have the work of answering so many questions.

At Gatun, the engineering members of the party, Mr. Elihu Thomson and Mr. Robert Moore, with the plans in hand made a personal inspection of all the points about which they had any doubt. Mr. Gerig and his assistants were prepared for questions, but asserted last Friday night that they had never experienced a more exhausting examination.

At Matachin the magnitude of the operations carried on by the big shops under Mr. Cummings detained the visitors longer than the reception committee had expected. Mr. Brook, the Superintendent of Motive Power and Machinery, needed all of the time the train took in travelling from Bas Matachin to Culebra Cut to explain to the presidents and managers of the big firms represented to just what use the Canal Commission puts all the old iron and scrap machinery of which so much is to be seen on the Isthmus.

At the entrance to the Culebra Cut, the reception committee transferred the visitors to some flat cars so that in going through this interesting section of the Canal they might see, as the Chief Engineer had directed, the top, bottom and the sides of all that was to be seen. This was the portion of the trip to which the members of the Chicago Commercial Club had been looking with especial interest. Chairman Shonts had delivered an address before the Club in January last and told them some very interesting points about the Canal. They wanted to see every place he had mentioned. Chief Engineer Stevens joined the party at Culebra, but Mr. Bolick, the Division Engineer at Culebra, was the principal expositor of the work done in the Cut. The Chicago men wanted to know everything. They inquired into almost every problem that he mentioned.

Questions of sanitation brought every one of the visitors, at some time during their visit, to Colonel Gorgas, "the Grand Old Man of the Isthmus" as some of them called him. The Colonel seemed about the only head of department that was unperturbed by the exactions of the trip, and yet he personally explained to most of the gentlemen in the party the methods by which he has so completely altered the health conditions of this Isthmus.

Commissioner Jackson Smith had to meet all questions as to where, how and through whom he has secured the men now here and how he expected to secure those still needed to carry on the work, and as to the ways and means adopted for feeding, and caring for the thirty-five thousand men of which his department has charge.

Impressions

THE day after the departure from the Isthmus Mr. Wulsin, Chairman of the Committee on Observation of the Panama Canal, called together the chairmen of the eight groups and the members of his committee. The participants in the conference were Messrs. Thomson, Boit, Burnett, and Carpenter, of Boston; Mr. Schmidlapp and Mr. Maxwell, of Cincinnati; Mr. Farwell and Mr. McCormick, of Chicago; Mr. Moore, of St. Louis.

On account of the illness of Mr. Knox, of St. Louis, Mr. Burnett and Mr. Carpenter, of Boston, were in charge of the work of the group on Housing and Food — Mr. Burnett on Housing, and Mr. Carpenter, who is commissary general of Massachusetts, on Food.

To the conference Mr. Wulsin submitted the question whether the groups should be asked to put their impressions in writing. It was the unanimous conclusion that each group should make a concise written report.

The conference further agreed that a general meeting of members of the Clubs should be held, at which each group should be given fifteen minutes in which to present the written report and such verbal additions and comments as the members of the groups might see fit to make.

Following the conference the chairmen of the groups called together their associates. The preparation of the reports was undertaken. It was a work of hours. In the meetings of the groups there was thorough discussion of what had been seen and heard on the Isthmus.

On the 4th of March the general meeting of the members was held in the dining saloon, Mr. Farwell, of Chicago, presiding. In announcing the purpose of the meeting Mr. Farwell said that each group would be entitled to occupy fifteen minutes in the report of impressions received.

Mr. Boit, Chairman of the group on Hygienic and Sanitary Conditions, presented the following:

The subject given your committee on Sanitation and Hygiene is a broad and far-reaching one, and it would be impossible to treat the question in a manner worthy of it in the space that we should take. We shall, therefore, confine ourselves as strictly as possible to certain details of the work which our committee think may be of interest to you, and shall be happy to answer as we go on, any question you may wish to ask.

We shall divide the subject under three heads:

1. Water supply and drainage.
2. Street department.
3. General sanitation of the Zone, Panama and Colon, and the buildings in them.

Water Supply and Drainage

The water is supplied from three large reservoirs:

1. Located ten miles from Panama, consisting of two lakes, having a capacity of 500,000,000 gallons.
2. Located at Empire, containing 250,000,000 gallons.
3. Located three miles from Colon, with a capacity of 580,000,000 gallons.

These reservoirs are supplied from water sources long distances from the towns and camps, and at points entirely safe from the possibility of contamination; and either from natural lakes or rivers, or, as in the case of Colon, from a pond made by damming a stream in high land back of Colon, about one mile from Mt. Hope. In all cases analysis has shown the water is soft and contains nothing in solution that is deleterious to health. Filtering will remove any sediment there may be in it, though some prefer to boil it before using for drinking purposes.

The supplies for Colon and Panama are sufficient for towns of much larger areas and population, and the pressure is sufficient. At Panama the pressure varies from forty to sixty pounds, which is enough for protection in case of fire.

There are about twenty miles of water mains in the City of Panama, and ten miles of pipe leading to the city. The mains are from six to sixteen-inch pipe. All of the sewer pipes used are vitrified pipe. These are led from the towns in the Zone, except Panama and Colon, to rivers and points in them that cannot possibly endanger the health of the inhabitants. Many run into the Chagres River.

In certain isolated places, in temporary camps, the night soil is carried in buckets to remote points.

In Colon and Panama the sewers run into the sea beyond low water mark

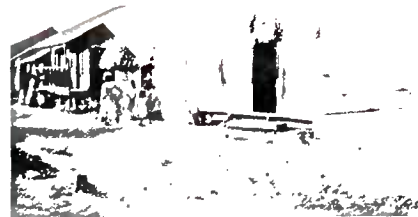
The work itself, the materials, the installation and plumbing, are all good and done by competent head plumbers and skilled labor. In a portion of the work poor material was used, as that was all they had on hand, but this is now being replaced. There are six inspectors of this work.

Every householder in Panama is taxed for water and sewer connections, whether he has them or not; and the mains are piped off to the curbs of the streets so that the owner's connection requires only opening under the sidewalks.

The law in Panama makes these water bills a direct lien upon the property, but in three cases only has it been necessary to resort to this method of collection.

With the introduction of running water, laws were passed prohibiting the use of cisterns and the collecting of rain water for domestic purposes, and under close and regular inspection this custom has been stopped. Those whose houses are not connected with the mains must draw such water as they need from the nearest street faucets.

The garbage in Panama and Colon is collected daily, and throughout the rest of the Zone it is taken at least once a week and either burned or carried



A Panamanian Village—Typical Huts on the Isthmus.



GROUP ON PLAN OF MANAGEMENT

Reading from left to right: Sitting—James R. Carter, David R. Francis, H. W. Cumner, Lucien Wulsin (Chairman), William Whitman, Chas. W. Knapp. Standing—Walter B. Stevens (Press Representative), E. C. Goshorn, Alfred L. Baker, Joy Morton, Robt. McK. Jones, Harry L. Laws.

out to sea, or to some point where filling is going on and dumped there, and the next loads of excavations cover it up.

Street Department

The roads in the villages are treated as are those of any United States village, but where there are to be permanent settlements they will be paved and sidewalks made; in several places this work has already been begun.

Most of your Committee did not see the streets of Colon and Cristobal except from car windows, but we were credibly informed that about a half had already been paved, or are in process of paving, and that the whole will soon be completed. We were also informed that they are raising the grade of depressions in the land to prevent the possibility of stagnant pools. For this purpose the government is supplying, from the excavations, material for filling and is forcing the inhabitants to do the work. In such cases the grade will be raised from three to four feet.

And now we come to Panama, which your Committee thinks in many respects is an object lesson. Two years ago this was a city of mud and chaos. And look at it today! In Panama there are in all about twenty miles of streets. During the last two years:

Ten miles of them have been thoroughly laid in vitrified brick,

Seven and one-half miles in good macadam and concrete—and about

Two and one-half miles remain to be completed after the drains have first been laid.

When the vitrified brick is used a filling is first made of broken stone, and over this a layer of concrete, and on the concrete rest the vitrified brick from curb to curb. Under this have of course been laid all of the water pipes and sewers of which we have spoken.

Besides this, there are the concrete curbs, and in many places the finished sidewalks. Thus Panama is today a town of well-paved streets. These are not flushed except by the rain, which is carried off by 200 sewer inlets, but they are swept daily—early in the morning—by machines, and your Committee doubts if you will find a cleaner looking town of its size from Maine to Texas.

General Sanitation

With regard to this subject, little can be said with which you have not all become familiar. You have seen the clearings of the hillsides and the burning of the brush, making broad open spaces about the working settlements. You have seen the draining and filling of the marshes near them. You have seen the use of petroleum on the pools of small streams that must for the present be allowed to remain. You have seen the draining of the surfaces of the hillsides themselves, on which dwellings and other buildings stand. You have seen the careful screening of the homes of the operatives. You have seen how these houses are built on posts that the ventilation under them may be perfect. And, in the opinion of your Committee, you have seen more suitable and better built and more comfortable homes for the laborers than you are likely to find provided anywhere in the world for a similar purpose.

You have seen the hospitals well laid out and equipped with every necessary appliance for first-class work.

And in statistics that may be given, it must be remembered that the French company reported only those deaths which occurred in the hospitals, whereas our records show every death in the Zone. The French company charged the contractors one dollar per day for every patient sent to the hospital, which resulted in them sending as few as possible; in the opinion of Colonel Gorgas this meant the reporting of not more than one-fourth of the actual deaths. You have noticed the little graveyards all along the line. These were the graves of the unreported dead of the former period.

Yesterday a boss laborer was heard to say to Colonel Gorgas: "Colonel, I was up at the hospital for a week, and they just treated me royally." And he spoke with evident and sincere gratitude.



GROUP ON SOCIAL CONDITIONS, INCLUDING WELFARE AND ETHICAL QUESTIONS

Reading from left to right: Sitting—Robt. Batcheller, Hanford Crawford, W. W. Taylor, Lawrence Maxwell, Jr. (Chairman), B. W. Campbell, Chas. H. Conover. Standing—John R. Morron, George M. Wright, Lawrence Minot, Charles L. Hutchinson, L. A. Ault.

The first part of the document is a letter from the Secretary of the State to the Governor, dated the 10th of the month. It contains a report on the state of the treasury and the public accounts, and a list of the names of the persons who have been appointed to various offices in the State.

Annals

The second part of the document is a list of the names of the persons who have been appointed to various offices in the State, and a list of the names of the persons who have been appointed to various offices in the State. The list is arranged in alphabetical order, and contains the names of the persons who have been appointed to various offices in the State.

President of the United States, and in other officers appointed by the governor, subject to the approval of the Isthmian Canal Commission.

The police force consists of a chief of police, 175 officers and men, and seven clerks. The community is law-abiding and order is well maintained. The amount of crime is remarkably low for such a large and heterogeneous population. The officers of the Zone report an appreciable advantage resulting from the decrease in the number of saloons in the Zone, following the adoption of a license of \$1,200. Lotteries and gambling were prohibited by one of the first executive orders of the President, and are also prohibited, as is prostitution, by the criminal code adopted by the Commission. The Commission has also enacted a code of criminal procedure.

Educational Facilities

There are 2,500 children of school age in the Zone. Of these, 1,531 colored children and 206 white children are enrolled, and about 700 colored children and seventy-five white children are not yet provided for.

There are thirty-one teachers. Of these twenty-one are white women from the States, nine are Jamaica men and one is a Jamaica woman. Text books and supplies are furnished by the Government. The schools are conducted almost entirely in English. Separate school-rooms are provided for the white and colored children. Education is compulsory, and the Zone police aid in enforcing attendance. Free transportation is furnished where needed. There are morning and evening sessions of three hours each.

The attitude of the people toward education is in most cases enthusiastic, and the large proportion of the pupils are apt scholars.

There are no adult or evening schools, but classes may hereafter be established for teaching Spanish and such subjects as are required for civil service examinations.

The pay of the teachers is \$80 a month for twelve months, for those who are graduates of normal schools and have had experience as teachers, and less for those not so well qualified.

Five new school houses are to be built and more teachers are to be brought from the States as soon as accommodations are provided for them.

Moral and Religious Conditions

As a means for providing for the religious and moral welfare of those in their employ, and to protect them against temptation by furnishing facilities for religious worship, and for entertainment and social recreation, the Canal Commission has authorized the construction of eight buildings, in as many different localities in the Zone, which are to be operated under the direction of the International Committee of the Y. M. C. A.

Four of these buildings are practically completed, the one at Culebra being ready to receive its furniture and equipment. The others will be constructed as soon as the first four are opened. Each is a double building of two stories and extension, with spacious verandas, social rooms, auditorium to seat 300, billiard and pool room, library, class rooms, bowling alleys, gymnasium, baths and lockers.

Spanish laborers in Culebra Cut. Mr. Maxwell, of Cincinnati, inspecting them.





GROUP ON HOUSING AND FOOD

Reading from left to right: Sitting—Edward F. Swift, Perin Langdon, Robert M. Burnett (Chairman), A. H. Chatfield, Dan C. Nugent. Standing—Clyde M. Carr, Fred. B. Carpenter, Stephen L. Bartlett, David B. Gamble, L. D. Dozier.

The plan of operation will be a modification of that followed in the army, navy and railroad Y. M. C. A. buildings so as to fit special Isthmus conditions.

The Commission is also erecting buildings to be used for church purposes, providing separate edifices for Roman Catholic and for Protestant worship, the latter to be used jointly by various denominations. As necessity requires, additional buildings will be erected.

At Ancon, Culebra, Cristobal and elsewhere, chaplains for the hospitals have been appointed, white and black, Catholic and Protestant, whose salaries are paid by the Commission.

Various denominations now have at different points in the Zone places for preaching and for Sunday School work; some have acquired sites and are about to erect independent edifices. In Panama and Colon there are additional church facilities, but they are not to any great extent patronized by Canal Zone residents.

There is a volunteer committee of fourteen, called the Visitation Committee; the members visit the hospitals regularly every Sunday morning from eight to ten o'clock, reading to the sick, writing letters for them, and performing other friendly offices.

There is also what is known as the Good Order Club; it has now twenty-three members whose names and identities are not known to the general public. These gentlemen aim to report to the proper officials anything which they observe and deem inimical to the best interests and welfare of the Commission or of those under its control. An effort is being made to extend this movement to include Panama and Colon.

Recreation and Amusements

It is evident that the provisions for the Canal employees is inadequate. The early completion of the Y. M. C. A. club houses will help materially, and it may be expected that the theatrical and other public amusements at Panama and Colon will improve with time. Lack of means of recreation has been one cause of the resignation and return to the United States of a considerable number of employees. The Commission is evidently alive to this need, and has taken steps to make conditions in this direction, as in others, as favorable as possible.

Baseball grounds have been established at several camps; great interest is taken in the game, and the rivalry between the clubs is as keen as it is in our leagues at home.

The gymnasiums in the Y. M. C. A. club houses will be sure to encourage a wholesome attention to other athletics, and they will become centers for all such interests.

In the matter of music, the organization of the Isthmian Canal Commission band, at first purely voluntary, was soon taken up by the Commission and encouraged by an allowance of extra pay for attendance on the weekly rehearsals. This excellent reed band of thirty-five pieces gives frequent concerts at the various camps besides playing at public functions. The Commission has made an appropriation for the employment of a professional musician to take charge of this band, as well as to establish singing societies.

Among social or benevolent societies, of which there are several, may be mentioned a masonic lodge, a university club a Panama and another in the Zone, while the excellent Hotel Tivoli at Panama provides still another center of social interest. Another hotel at Cristobal and possibly another on high ground midway on the Isthmus seem likely to be required in the future.

The reasonable provision by the Commission of facilities for social enjoyment is a wise expenditure. Such facilities will aid materially in attracting the best class of men to the service, and in keeping up their morale under conditions which involve, for the greater number, long absence from home.

LAWRENCE MAXWELL, JR., Chairman,
CHARLES L. HUTCHINSON, W. W. TAYLOR,
ROBERT BATCHELLER, L. A. AULT,
LAURENCE MINOT, B. W. CAMPBELL,
CHARLES H. CONOVER, HANFORD CRAWFORD,
JOHN R. MORRISON, GEORGE M. WRIGHT.

For the group on Housing and Food, Mr. Burnett, as Chairman, presented the report, as follows:

The Subsistence Department on the Isthmus furnishes supplies of first-class quality at reasonable prices. Mr. Jackson Smith is in charge of commissary supplies. Lieut. Wood, of the Third Cavalry, U. S. A., is his assistant and looks after issuing same.

There are no restrictions as regards diet. The purchaser of food from the Subsistence Department has the choice of the kind of food and the quantity he desires. In the case of the negro laborer, thirty cents per day is deducted from his pay for his meals, which are furnished him cooked, from the government kitchens. This is done to compel the negro to take sufficient nourishment as it was found he economized in his food at the expense of his health and strength.

The United States has built at Cristobal an up-to-date bakery with a capacity of from 20,000 to 30,000 loaves daily, and bread of first-class quality is furnished therefrom.

There are three grades of meals:

First. A thirty cents meal, served to Americans, where table-cloths, napkins and glassware are provided. This meal is served by waiters in the hotels. It consists of the following dishes:

Breakfast: Fresh fruit, cereals, bacon and eggs, potatoes, batter cakes, tea and coffee.

Dinner (at noon): Soup, an entree, roast beef, pork or mutton, (chicken twice a week), two vegetables and dessert.

Supper: Cold meats, canned or dried fruits, tea and coffee, bread and butter.

Second. The forty cents per day meal to Europeans, consisting principally of rancho stew made of meat, beans, potatoes and macaroni, with bread, tea and coffee.

Third. The thirty cents per day meal to negroes, consisting of bread, potatoes or yams, rice, beans, fresh or cured meat or salt fish, tea and coffee.

An ample supply of good drinking water is available at all times from the government reservoirs.

There are about 3,000 Americans and 3,000 Europeans who are fed at hotels and mess-halls, and 7,000 negro employees who are fed from the government kitchens, making a total of 13,000. There are 15,000 additional employees who get their stores from the Subsistence Department.

The Committee thinks it important that fresh vegetables be furnished employees, and if necessary, believes that the government should undertake truck-gardening for this purpose.

Some complaint is made as to the cooking and the preparation of the food, which the Committee believes is well founded, and thinks increased attention should be given to this matter, as well as to the table service at the hotels.

The Committee on housing employees of the Canal has only words of commendation. It gives as information to the Committee of the Whole the following description of the different houses which the government has adopted as standard. These houses are simply but comfortably furnished:

No. 1. For a family. Dining room, kitchen and pantry, two bed rooms, toilet and shower. Porches screened.

No. 2. For two families (double house). Same accommodations for each family as No. 1 provides. Porches screened.

No. 3. For officials' family. Dining room, parlor, kitchen, pantry, store room, servant's room, toilet and lavatory for servant on first general floor. Second floor, three large bed rooms, drying room, shower, toilet and lavatory.

No. 4. Bachelor's house. Four rooms on each floor, two stories, with shower, toilet and lavatory on each floor detached. Screened all around.

No. 5. For four families. Each two bed rooms, kitchen, pantry, toilet and shower. Screened all around.

No. 6. For one family. Two bed rooms, kitchen, pantry, space on porch for dining room. Toilet, shower and lavatory. Screened front and back.



GROUP ON CLIMATE AS IT AFFECTS AMERICANS

Reading from left to right: Sitting—Jas. E. Mooney, William A. Fuller, Daniel Catlin, J. G. Schmidlapp (Chairman), John M. Clark, John G. Wright. Standing—Oscar L. Whitelaw, Chas. F. Cutler, Edward Goepper, William B. Lawrence.

No. 7. For bachelors. Two floors, eight rooms each. Shower, toilet and lavatory detached. Screened all around.

Standard laborers' barracks, consisting of room 30x40 feet, table down center with benches. Three rows of standard bunks, forty-eight in all. Windows screened in front and back; ends screened. Toilets, five showers and lavatory.

At each important town a station hotel, like the one at which the party lunched on March 1st, has been erected. Dining room 30 x 100 feet. Second story: sixteen large rooms 16 x 16 feet, eight toilets. In another building, connected by piazza, is assembly hall, billiard and pool room, and above dormitory of sixteen small bed rooms 10 x 12 with showers and toilets.

There were over 2,100 dwellings of different sizes which came into possession of the Commission from the French. The poorest of these were destroyed and the balance have been repaired and put in first-class condition. The government is adding constantly to the number of dwellings, and is constructing many at the present time.

The excellence of the housing seems to us one of the striking features of the Canal work. Those familiar with labor quarters in any section of our own or other countries cannot but feel that the housing offered on the Isthmus is the best in the world.

ROBT. M. BURNETT, Chairman,

F. B. CARPENTER,	A. H. CHATFIELD,
CLYDE E. CARR,	DAVID B. GAMBLE,
EDWARD F. SWIFT,	L. D. DOZIER,
PERIN LANGDON,	D. C. NUGENT,

STEPHEN L. BARTLETT.

For the group on Climate as it Affects Americans, Mr. Schmidlapp, of Cincinnati, Chairman, read the following report:

After making such inquiries as opportunity offered and such observations as the length of our visit permitted, we feel justified in stating that:

1. The climate is equal, if not superior, to that of any other tropical region of similar altitude.
2. Its effects upon Americans are not injurious.
3. We believe there is no reason why Americans, observing proper precautions, should not be able to live in the Canal Zone for years.
4. We believe there is no climatic reason that prevents a satisfactory continuation of the work and the successful completion of the great undertaking.

J. G. SCHMIDLAPP, Chairman,

WILLIAM B. LAWRENCE,	CHARLES F. CUTLER,
JOHN G. WRIGHT,	JOHN M. CLARK,
WILLIAM A. FULLER,	EDWARD GOEPPER,
FRANK J. JONES,	JAMES E. MOONEY,
DANIEL CATLIN,	OSCAR L. WHITELAW.

Mr. Farwell, Chairman of the group on Efficiency of Labor, was presiding over the meeting. He called upon Mr. Worthington, of Cincinnati, to read the report of that group. The report was as follows:

The labor can be most conveniently classified for our purposes as skilled and unskilled.

Before our inquiries upon the ground we had supposed the supply of unskilled labor presented a problem of continuing difficulty, but we were assured on all sides that this problem was practically solved.

The unskilled labor now employed consists in the main of West Indian negroes, Italians and Spaniards. A considerable body of

Jamaica laborers in the Canal Zone.



Greeks is expected shortly. These white men are sending home for their families and friends, which is encouraging as showing their liking for the work.

The negroes are paid thirteen and one-third cents silver per hour, and their meals; the white men, forty cents silver per hour, and they furnish their own meals. Every laborer of each class is furnished lodging, light, fuel, water and hospital service free of charge.

Nine hours constitute a day's work, viz: from 6:30 to 11:30 a. m. and from 1 to 5 p. m.

The difference above mentioned in the scale of wages indicates a marked difference in the efficiency of the work; and if the comparative results achieved were correctly stated to us, the negro is the better paid of the two. For, reducing these figures to a common basis by taking gold to silver at two to one, according to Isthmian usage, and counting the white man's meals at forty cents gold per day, at which rate he can procure them from the Isthmian Canal Commission, he receives net per day \$1.40 gold, while the negro receives sixty cents gold, thus making a ratio of two and one-third to one, while the comparative ratio of efficiency in work as given us is approximately three to one.

The reasons assigned for the greater efficiency of the white laborer are greater intelligence, physical strength, endurance and vitality. When instructed as to a new piece of routine work the lesson lasts and needs no repetition, while the negro needs constant supervision. The white man attacks his work more vigorously and he keeps in good health. This matter of health has led to requiring the negro to eat the food supplied by the Canal Commission as, when left to his own desires, he preferred the toothsome but innutritious yam to the strength-giving bean. As a result, the efficiency of the negro has greatly increased and [he has worked more steadily. The President having recommended the change, it is interesting to note what has been accomplished.

No trouble has been experienced lately in getting an adequate supply of each class of labor, and none is now anticipated. Of course the force must be constantly recruited to keep up with the present demands as well as to be prepared for the future.

It is estimated that over eighty per cent. of the black force has changed during the year; and yet, while over ninety-five per cent. of the whites in a given force can be relied on for constant service, less than seventy per cent. of the negroes will be available.

We were assured that the force now on hand was as large as could be profitably employed with the present equipment. An increase in cars and tracks will open the field for more men; but there seems no doubt that men, white and black, can be obtained in sufficient numbers as needed. We say, "white and black" for two reasons:

First. Because we were assured that notwithstanding the superiority of white labor by every test, it is desirable to employ both kinds to prevent each from fancying it could control the situation.

Second. Because Chinese labor is not wanted. While the Chinese coolie would meet every requirement of intelligence, strength and vitality, yet his introduction would lead to difficulties of administration and segregation which it seems desirable to avoid unless the confronting of the subject becomes necessary.

The only serious trouble now noticed is the difficulty of securing efficient gang bosses from the ranks, the general scale of intelligence not being quite equal to this demand.

