

BY W. C. GRAHAM.

Culebra, Canal Zone,
Isthmus of Panama.

Very few people realize that the United States government is engaged in the biggest job in the history of man in undertaking the construction of the Panama canal.

The work has now been in progress for six years, and there is not the least doubt that it will be carried out to a successful consummation.

The casual passenger across the isthmus sees very little of the work being done, and it is always difficult to convey an adequate idea of the gigantic proportions of the undertaking, but the following figures may bring home to the reader some significance of it.

The length of the canal from ocean to ocean will be about fifty miles. The average bottom width will be 649 feet. The minimum depth will be forty-one feet.

The canal takes a southeastern course, starting from Colon on the Atlantic side of the Isthmus, and ending at Panama or (Balboa) on the Pacific or southern side. Most people think the canal runs east and west, but such is not the case.

The country through which the canal is being built is very broken, and there is scarcely a level spot to be found on the zone.

The Gatun dam and locks will be the largest in the world. Some of the proportions are: Length, 7,200 feet; greatest width, 1,900 feet; the height of crest of dam above sea level is 115 feet, width of crest, 100 feet; maximum width at bottom, 2,100 feet.

The area of Gatun lake, which will be formed by this dam, will be 167 square miles.

There are now forests, some small towns, and the old track of the Panama railroad will be submerged beneath this lake.

The total amount of concrete to be used in the construction of the locks will be 2,096,000 cubic yards. The side walls of lock chambers will be 50 feet wide at the bottom and eight feet at the top.

Besides the Gatun dam and locks, dams and locks of almost as gigantic proportions are being constructed at Pedro Miguel and Miraflores.

The official estimate for the construction of the canal is \$375,000,000, but it is thought that it will eventually cost close upon \$500,000,000.

A look into the Gatun dam or into Culebra cut and the mind is baffled in its attempts to adequately describe the work in progress. The Alpine tunnels, the subways of New York and all other modern engineering feats offer no parallel, nor any comparison in the matter of magnitude and modern engineering skill.

Gangs of steam and electric drills follow along wide swaths, boring holes of twenty to fifty feet deep into which go tons of dynamite to be electrically touched off each day at 11 or five in the afternoon. The roar is tremendous, one continuous bombardment thundering upon another, giving forth concussions so powerful even far distant from the blasting that one not accustomed to them feels most sensibly the heavy earth shocks.

Then follows upon this debris of earth and stones the steam shovels, which, scooping at the rate of a thousand tons a day, for each shovel digs out a new depth twenty feet wide and deep, loading one of the many trains of from eighteen to thirty-six cars which carry their tons away to the LaBoca sea wall or to the Gatun dam.

Between the locks of the canal will be the great lake filled mainly from the Chagres river, whose surface will be eighty-five feet above sea level.

To transport all the material used in the construction of the canal, and to carry away the earth and rock that is being excavated from the cuts the government has and maintains about 160 railway locomotives and hundreds of dump cars, and it takes thousands of men to operate and keep these in repair.

Railway tracks are laid all through the canal, and have to be shifted continuously as the work progresses. Telephone and electric lines have to be maintained throughout the length of the canal, to operate the trains by, and to fire the electric blasts with.

Monstrous electric cranes and towers are used in conveying the concrete for the locks and dam, and in different places suspension bridges span the canal, some of them being 100 feet above the present level or bottom.

Gold hill, commonly called the Culebra cut, is 660 feet above sea level, and the canal will be 85 feet above sea level at its highest point.

This hill has been the stumbling block for both the French and U. S. governments and as the work progresses the difficulties become greater for the hill keeps sliding in, and at times tons upon tons of earth and rock come sliding down in the cut.

Every foot of the canal is being worked upon, and all the men that can possibly be used to advantage are employed, but it takes years to make much of a showing on Culebra cut, it rains a little more each month until

from the fact that only a limited amount of men can be worked to advantage.

Certainly these men must be paid regularly, and must have competent foremen to see that each and every man gets his hours that are justly due him, and that he also gives the government value received.

A labor train is maintained and run on a regular schedule, to take the men to and from work and when the whistles blow for the noon or evening hour it is a sight well worth seeing to watch this vast army of man composed of people from almost every nation on the face of the earth, going climbing up the banks to their homes or to the mess house.

It must be taken into consideration that the natural conditions and resources of the Isthmus was not to be compared to any part of the United States, and that the proposition before the government was to make these conditions such that the men could live and live comfortably, else it could not expect to keep them here.

In order to make the canal zone a place where men and their families could live and enjoy the comforts of life, and to show what strides have been taken in this line, I will enumerate a few of the many improvements the government has made which will give some idea of the fitness of the canal zone at the present time.

Has built towns along the canal which are from one to three miles apart.

Built a sewer system in each and every town.

Installed electric light plants, which permits every town to have electric light and power.

Has a good water system and every house has water and bath.

Paid fire department in each and every town.

Metropolitan police system throughout the entire zone and order is strictly enforced.

Dispensary in each town where all employees can get free medical attention.

Commissioners in each town where all articles of merchandise such as are usually kept for sale in any first class general store, can be bought at a minimum cost.

Has built thousands of houses, which are classed as bachelor, or married quarters.

Bachelor quarters are built to accommodate from eight to sixteen men or ladies and are mostly all two-story houses with veranda all around, which is screened in, are all furnished with bed, springs, mattresses, dresser, commode, and all have electric lights and bath.

Married quarters are both one and two-story houses to accommodate from one to four families and are furnished complete, including ice box and water cooler. Coal, kindlings, light and sterilized water is furnished free of charge.

Have compelled the natives to clean up the hillsides, and also helped them to be more sanitary in every respect.

Maintains a prison and the prisoners are worked on the public highways.

Established a telephone system for each town.

U. S. money orders can be bought at U. S. rates.

Good banks in the principle cities and towns.

American news stands, where U. S. papers and magazines are furnished at double U. S. prices.

Has built and maintains magnificently Y. M. C. A's in each town which are modern in every respect.

Has built and maintains about twenty mess houses for white employees, where good table board is furnished at 30c per meal.

Established U. S. courts.

Has a large ice plant that furnishes ice (made from sterilized water) for the entire canal zone.

Maintains its own bakeries and ice cream plants.

Has cold storage houses, which are filled with the best meats, vegetables, creamery butter, and all kinds of eatables that can be procured in the states.

Has waged a war on all kinds of diseases until the once-dreaded yellow fever is entirely stamped out and the death rate is lower here today than in many cities in the U. S. A.

And above all "The Grand Old Rag" floats on the breeze of the country that Alonso de Ojeda discovered in 1499.

Most people have entirely the wrong opinion of the Isthmus so far as climate and health conditions are concerned at the present time. The time was when the canal zone was considered a veritable pest hole, but all these improvements, combined with what is now being done, have eliminated disease to such an extent that modern medical skill has conquered.

There are two seasons on the Isthmus, known as the wet and dry. The dry season begins about the first of January and last until May or June, and then the rainy season begins and it rains a little more each month until

In November or December, when the wet season is at its worst, and at times it will rain several times in one day and the sun will shine as often, although there is many days during the wet season that no rain falls.

It is said that at times there has been from 12 to 14 inches of rainfall in twenty-four hours, but statistics show that the annual rainfall is much less than in former years.

The nights are cool the year round and there is always a cool breeze throughout the day, and one not doing manual labor does not notice the heat any more here than in the states during the summer months.

The sun rises about 6:30 a. m. and sets about 6:30 p. m. and after sunset there is no lingering twilight, for darkness comes very quickly and is much the same in the morning. You may awake and it will be total darkness, and in a very few minutes the sun will appear, seemingly amidst the darkness of night and it is day before you realize it.

In a treaty with the Panama government the United States has perpetual rights over a strip of territory ten miles wide and extending from the city limits of Colon to the city limits of Panama. This territory is known as the canal zone and has a government of its own under the jurisdiction of the United States.

To carry out this monstrous undertaking a force of nearly 44,000 employees is engaged, about 5,000 of whom are Americans.

When one takes into consideration the fact that all the material used in the construction of the canal, the buildings along the canal, the food this army of employees consumes, and the clothing they wear, and in fact almost everything used in the zone, must be transported across the high seas, a distance of from one to three thousand miles, you may begin to realize the enormity of the undertaking, but magnificent will be the spectacle of seeing the white squadron, or the merchant marine ride majestically through these mountains crossing from ocean to ocean.

Electric lights will be provided to illuminate the canal for night service while at either extremity will be naval and military posts to safeguard national rights.

It is estimated that the canal will be opened for service January 1, 1915, which will no doubt be accompanied with imposing ceremonies.

The Modern Woodmen and its auxiliary, the Royal Neighbors, have leased the old Knights of Pythias hall over the Holthouse drug store and Wednesday night moved to their new quarters. Since the organization of these two orders they have occupied the Melchers hall, which in turn, was sub-leased by them also to others. Desiring to have a room strictly their own, the Woodmen and Neighbors decided to lease the old K. of P. hall and the moving thereto was speedily accomplished Wednesday evening. The moving of the Woodmen's goat occasioned no little difficulty, but it was finally boxed and with Clifton Haughton at the lead, was gotten safely over. The new hall is comfortably and conveniently arranged and will be a most admirable place for the orders to begin a new year's life. The Melchers' hall has been leased by the American Yeomen, who have been occupying it with the other two orders for some time.

FRED WIELTFELDT INJURED.

Dislocated Knee Cap Monday Evening When He Fell.

Fred Wieltfeldt, living six miles north of the city, sustained a painful injury Monday evening while doing some work around the barn. In some manner not clear to himself he slipped and fell, injuring his knee. He paid little attention to the matter at first, but later the knee became swollen and pained him severely. This morning he came to town and went to Dr. Beavers, who examined the injured limb, and found that the knee cap was dislocated, and the knee otherwise badly sprained. He dressed the injured limb, and Fred is feeling somewhat better, although it will be several days before he can use it as he did before.

REV. HUDSON REGAINS HEALTH.

In a letter to Mrs. Daniel Sprang, Mrs. C. G. Hudson of Anderson, wife of Rev. C. G. Hudson, former pastor of the Methodist church of this city, stated that Rev. Hudson has fully recovered from his recent disability and is in very good health. Following a stroke of paralysis recently, Rev. Hudson had been practically helpless, but has now regained his good health. This will be very good news to their host of friends here. Mrs. Hudson, however, has been suffering from rheumatism of the hand somewhat.

It takes a strong man to be mean. When I give a tip, it's not because I

don't honestly believe there is more good than evil in the world!

"All! You've found a dollar you didn't know you had, haven't you?"—Chicago Record-Herald.

Feit Good.

"Don't you honestly believe there is more good than evil in the world?"

"I fear the good man will feel lonely with no church mortgage to lift."—Louisville Courier-Journal.

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An Anecdote of General Jackson.

General Jackson while on one of his journeys to Tennessee about the time of the nullification excitement arrived at a Virginian village in a very important state of mind, both with public affairs and with the state of the roads. The president was entertained as a guest at the house of a lady in the village, and, although he tried to be polite, the state of vexation which he was in affected him visibly.

His hostess at the supper table was much alarmed to see the general swallowing with great rapidity a cup of almost boiling hot tea.

"Wait—wait, general!" exclaimed the lady. "Let me give you some cold water."

"No, thank you, ma'am," said the general, continuing to drink.

"But I don't see how you can drink that boiling hot tea without scalding yourself."

"No wonder you can't, ma'am," said Jackson. "I am scalding myself."

"But, sir, why do you?"

"Good gracious, ma'am!" exclaimed the general. "Don't you see that I want to scald myself?"

The lady refrained from making any further suggestions as to her distinguished guest's comfort.

Mercury Laden Swords.

Inserting running mercury in the backs of swords was a comparatively common practice among the Italian, French and Spanish swordmakers of the sixteenth and seventeenth centuries, but it was more of a fancy than anything else, for it never came into general use. It was not, of course, used for rapiers or the lighter kind of swords, but for the heavier cutting swords. The method was to cast the blade rather broader at the back than usual, with a hollow running down it. This was half filled with quicksilver and sealed up. The idea was that when a blow was struck with such a sword the quicksilver would fly to the point and so increase the weight of the blow. This theoretical advantage, however, did not at all counterbalance the general clumsiness of the weapon and its unhandiness in guarding, and so the mercurial swords, as they were called, from which their ingenious inventor hoped so much, were rather military curiosities than practical successes.

Tale of Two Fish.

A story is related of a Manchester fisherman who once tried to lure the dainty trout from some of the nearby brooks. The fisherman did not get a bite in the brooks. He drove back to Manchester rather disheartened and went to a restaurant to get something to eat. He asked the restaurant keeper if he had any trout and received an affirmative reply. He ordered some of the trout for his supper and then told the proprietor that he might put two or three of the uncooked fish in his fish basket out at the door, as he didn't care to go home and receive the railing of his friends. The proprietor of the restaurant told one of the clerks to carry out the order, and it was supposed to have been done faithfully.

But the clerk was not very alert, and when the fisherman got home and opened up the fish basket to his astonished wife there repose two fine salt mackerel, and the fisherman has not got through explaining yet.—Manchester Union.

A Little Too Much.

"A wife has a right to expect much of her husband," remarked the philosophically inclined person musingly.

"Yes, I suppose she has," replied the meek appearing man with wistful looking whiskers. "I suppose she has, but when she expects him to live up, steadily and without swerving, to the motto on her first husband's tombstone I somehow think she is expecting more than she really ought to expect from a common, everyday, earthly man."

Her Nationality.

When small Sigrid made her first appearance in an American school, says Harper's Magazine, she was asked the usual puzzling questions, one of which was:

"What is your nationality, Sigrid?"

"Sigrid tossed her dainty braids. "I'm an American of Norwegian descent," she said promptly.

Discretion.

"You say you left the house this morning and then went back. Don't you know that's unlucky?"

"It would have been blamed sight unluckier for me if I hadn't gone back."

"Why so?"

"My wife called me."—Lippincott's Magazine.

A Family Affair.

Casey's wife was at the hospital, where she had undergone a serious operation a few days before.

Mrs. Kelley called to inquire as to Mrs. Casey's condition.

"Is she resting quietly?" Mrs. Kelley