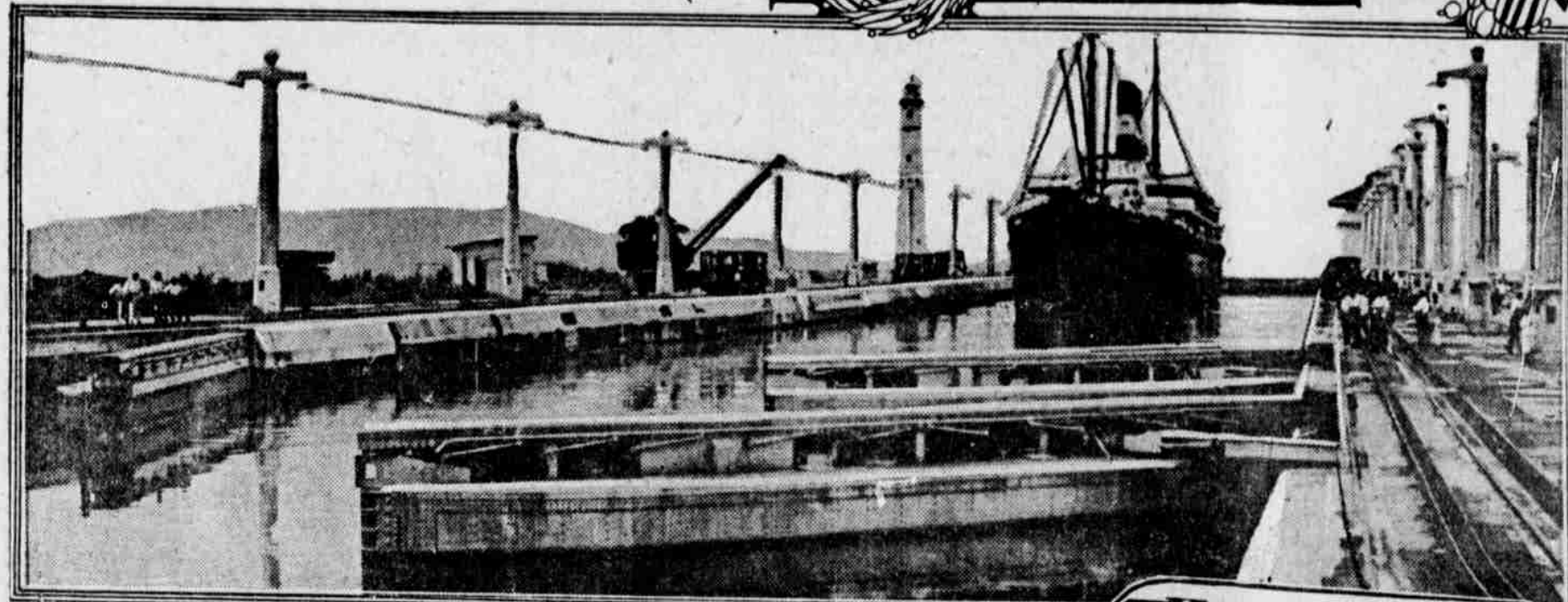
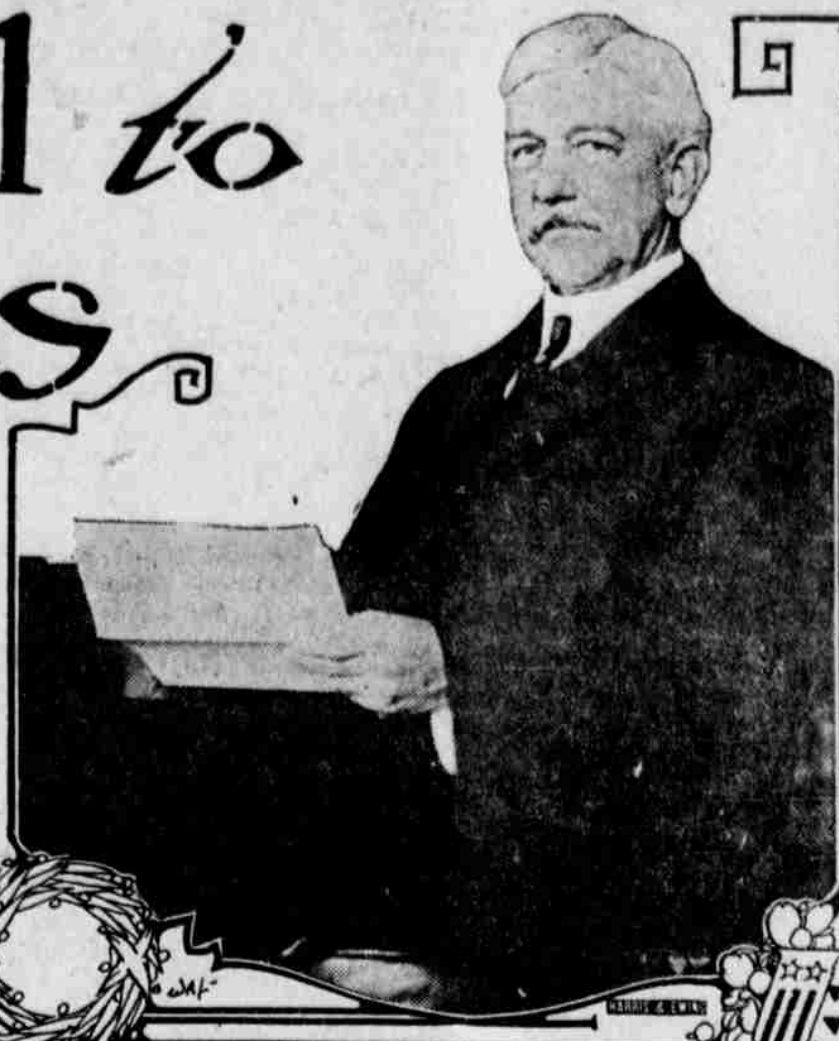
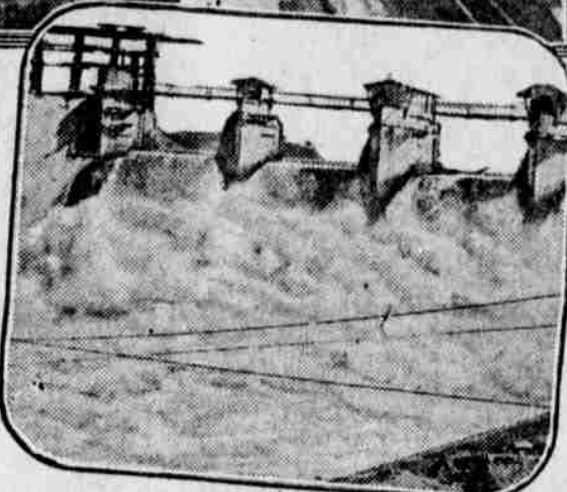


Memorial to Gorgas



GATUN LOCKS, PANAMA CANAL



GATUN RAILWAY

A MEMORIAL to Brig. Gen. William Crawford Gorgas, United States Army, is to be established in the form of "The Institute for Research in Tropical Diseases and the Study of Preventive Medicine."

This Gorgas memorial will be established at Balboa, the Pacific entrance to the Panama canal. The location is fitting, since it was General Gorgas who made the construction of the canal possible; it also puts the institute closely in touch with its work.

The memorial will be of international character. This is as it should be, since the fame of General Gorgas is world wide. It may be doubted if the work of any single man has meant more to civilization. It was his sanitary work that demonstrated to the world that the white man can live and work in the tropics and maintain good health. And the end is not yet, since when the time comes that the North American continent is crowded the next great migration of the white man will be to Central and South America. In fact it is no exaggeration to say that the settling of the tropics by the Caucasian dates from the completion of the Panama canal.

Anyone who has seen the old Panama at the time of the abandonment of the work of the first canal, involving so much wasted energy, life, and money, with its abandoned equipment and the evidences of unsuccessful labor, and the thousands of unknown and unnumbered graves of its workers, cannot help but be struck with the present aspect of Panama, its splendid sanitation, its beautiful cities, its fine hospitals, and the magnificent accomplishment of the completion of the work of the canal, making it one of the most beautiful and salubrious spots in the world, writes Rear Admiral W. C. Braisted, U. S. N., (Retired) in the Pan American Union.

The accomplishment of this great work and the sanitary regeneration of Panama are due to the efforts of the late William C. Gorgas, United States Army, and to his efforts more than to any other the success of this work must be accredited. His earlier work in the southern states and the West Indies, and particularly Cuba, and his later efforts in Ecuador and Peru, and his projected work in Africa give one an idea of the vast field of splendid endeavor which he accomplished and would have continued had his life been prolonged. His reputation has gone forth to all the world, and he is loved and revered in every household. Perhaps no single life has ever made possible so much for the good and well-being of humanity as has that of General Gorgas. There can be, therefore, no question as to the desirability of erecting some memorial which will do honor to this great man.

Many types of memorials have been considered in this connection, but I feel sure that the establishment of this memorial, The Institute for Research in Tropical Diseases and the Study of Preventive Medicine, carrying with it not only a permanent monument to his memory, but one that will continue his work and be of the greatest value to the welfare of the entire world, would be his ideal of this commemorative effort. Panama, situated in the heart of the Tropics and in the midst of the Central and South American states, which offer a splendid field for work of this kind, would seem to be the ideal location, furnishing a wealth of material for the institution which is being brought into existence.

The honor for the conception of this idea and of bringing it into actual existence must be given to Dr. Bellisario Porras, the president of the republic of Panama. It was owing to his efforts and those associated with him, such as the Hon. Joseph Lefevre, the representative of the Panamanian government in Washington, that a provisional board has been established to begin and carry on this work. Deep interest has been evinced in the success of this undertaking by all who have been

approached on the subject in every part of the world, and especially by the presidents and representatives of the Central and South American republics, to whom the project has been made known largely through the efforts of Dr. Franklin Martin, who has just returned from a tour of these countries, which he visits from time to time in the interests of the American College of Surgeons.

In this connection I would state that the subject of tropical medicine has been one of deep interest to all medical minds in every part of the world. While much has been done in our largest and best educational institutions to endeavor to carry on research work and to acquire knowledge of tropical diseases, and a great deal accomplished by many special institutions and departments, such as the London and Liverpool schools of tropical medicine, and the work of institutions such as Harvard, Johns Hopkins, the University of California, and many other organizations of this kind, nevertheless, all this work has been limited and hampered by the dearth of material for such study and research, and on account of the distance of these institutions from the tropical centers.

Panama offers the ideal situation in almost every respect for the successful investigation of these diseases, which have in the past proven to be an insuperable obstacle to the development of some of the most splendid sections of the earth. What has been done in Panama proves that hitherto uninhabitable and undeveloped countries of the greatest possibilities for successful human habitation, with attendant prosperity and well-being, in the most attractive and desirable parts of the earth, are easily within our reach if we can apply in their development the knowledge that will come from this great institution.

Another splendid feature of this endeavor is its international character, bringing about a community of interest and kindly intercourse among the humanitarian leaders of all countries, making for a better and kinder feeling than has been possible where the association has been one merely of political and diplomatic relations. As a single example of this, it is my belief that nothing will tend to cement the friendship of the American republics more than the common interest and intercourse brought about by the work of this institution for the welfare of their individual countries.

The proposed memorial will consist of a dignified and classic building, housing the laboratories for the work and providing every facility for the teaching of students from the various countries who may be privileged to undertake work at this institution, and who will carry to their homes the knowledge that when applied will, it is hoped, produce results as splendid as have been produced in Panama itself.

Until the completion of the Gorgas memorial building proper the laboratories and equipment of the new Santo Tomas hospital have been offered for use, so that it is hoped that active research work may begin by January 1, 1922. This work is actually in progress now. The study of the plans for the memorial building proper is well under way, and construction will be begun as soon as these are completed.

The Tropics, which are so prolific in vegetation of every kind, seem equally fertile in the development of all types and kinds of dread diseases, which tend to make them unsuited and impossible of habitation until careful sanitation makes them safe, when they become the most desirable, the most attractive, and most prosperous of abiding places.

It would not be feasible in this short article to direct attention to all the known diseases that it would be possible to study in this institution, but among them would be found such as malaria, yellow fever, plague, dengue, human trypanosomiasis, beriberi, pellagra, leprosy, the various helminthic infections, cholera, the various mycoses, the myxas, etc. Added to these are many unknown and undiscovered banes of existence, which remain to be found out and to be made innocuous. We are

but on the threshold of tremendous advances that can and will be made through the efforts of research work. Every scientist today realizes that it needs only effort with willing, conscientious, and untiring workers, and the proper provisions for carrying on efforts of this kind, to discover and control diseases in a way that never was dreamed of in the ages gone by. Already the nucleus of a corps of men specially skilled in tropical and preventive medicine has been selected and is awaiting assignment to work as soon as the laboratories are ready. Almost all the leading institutions have expressed an interest in the work and a desire to send the best of their research workers to take advantage of the privileges they will be offered at this institution for an endeavor of this kind.

It is hoped that many scholarships will be developed in the great educational institutions which will enable deserving young men of high attainments who wish to make a life work of these subjects to be sent to the Gorgas Memorial Institute for a thorough grounding that will enable them to carry on throughout their lives in all countries, the purposes that will mean so much to the well-being and happiness of their respective countries.

It must be remembered that the dangers of tropical diseases are not confined to the Tropics alone, but on account of world intercourse are constantly being carried to the non-tropical countries, endangering their health and well-being. With this institute at Panama, associated as it will be with the health department of the republic and that of the United States, whose officers are stationed in Panama, the constant flow of persons coming from the Tropics through the canal to the northern and non-tropical countries will be under most careful supervision, and any dangerous element should be discovered and taken care of at this point. The splendid chain of hospitals already built and building in Panama, which are the equal of any in the world, furnish opportunity for the care, isolation, treatment, and study of any infected persons that may be found. In view of this practical application of the work of the institute it is felt that all countries involved will be interested to assist in the maintenance of the institution when once established.

To my mind one of the important and special departments of the institute will be its library. It is our hope to gather here the most complete and the finest library on the subjects of tropical and preventive medicine in the world.

It should be mentioned in this connection that the headquarters of the provisional board have been established at the Pan American Union, under the personal supervision of the director, Dr. L. S. Rowe, who is a member of the provisional board.

It is easy for one who has been in Panama to picture this beautiful and useful institution, standing upon the shores of the Pacific and surrounded by the buildings of the new Santo Tomas hospital and those of the Panama Exposition, with their beautiful gardens and artistic embellishment, and to realize how splendid will be the ultimate result of these endeavors to perpetuate the life and work of General Gorgas.

CAREFULLY PREPARING POULTRY INSURES HIGHER MARKET PRICE



Preparing Poultry Under Modern Conditions for Market.

(Prepared by the United States Department of Agriculture.)

Not a day passes that inspectors employed by city, state or federal government, do not condemn food of one kind or another because it is unfit for human consumption. Sometimes this is due to deliberate adulteration, an intention to defraud the purchasers, but more often it is the result of improper packing, neglect to consider temperatures to be encountered in transporting from point of origin to destination, or failure to consider the time which must necessarily elapse before the product is likely to reach the consumers' tables.

All this entails not only great loss in money, likely to be reflected in prices demanded of the public, but also it endangers the public health, because occasionally some unworthy article slips through inspection and is served as food. Enough food products spoil every week to form a very important part of the amount needed by the people; and practically all of it might be saved through intelligence and care on the part of the producers and shippers.

After your chickens are fattened and ready to kill, it will pay you to study the methods of killing, bleeding, picking, chilling and packing described fully in bureau of chemistry circulars: 3, "How to Pick Chickens"; 52, "How to Wrap Heads"; 61, "How to Kill and Bleed Market Poultry." Issued by the Department of Agriculture, these circulars may be had by application to the division of publications. The man who hopes to succeed should know everything possible about his proposed market, and its demands.

Broilers in Demand.

Ordinarily the demand is for broilers of three sizes—squab broilers, small broilers and large broilers. Squab broilers weigh, dressed, from three-quarters to one pound; small broilers, the size most in demand the greater part of the year, weigh from one to one and a quarter pounds each, and large broilers from one and one-half to two pounds.

Broilers may be sold alive or dressed, in the discretion of the shipper; but if dressed, this should be done according to the demands of the market, and these demands one can learn only by inquiry and study. Getting the product ready for the buyer in the public market has much to do with the price received. The appearance of the article, the manner in

which it is packed, and its condition—these are the points that make a reputation for the shipper.

Temperature to Maintain.

The temperature of chickens when they are alive is 103 degrees Fahrenheit. This must be reduced after killing to 32 degrees Fahrenheit or less before they can be packed for long hauls in refrigerator cars. The time required to chill fowls usually is about 24 hours, and the packer must be sure that the body cavity, as well as the skin and flesh, are free from heat before the birds leave the chill room. Failure to observe this requirement is responsible for much of the ill-conditioned poultry found in the public markets. The range of temperature permitted, too, is small. Below 30 degrees Fahrenheit the flesh is frosted; above 35 degrees Fahrenheit decay proceeds too rapidly to permit of long hauls to distant markets. Of course, the birds can be frozen after they are chilled, and so shipped, and this is a very excellent plan, especially if the haul is across a hot country, say the specialists in the Department of Agriculture.

Packing for Market.

It is customary to pack broilers with the breasts up, and the feet hidden. The prevailing method at present, where refrigeration is available, is to pack the chickens in small boxes holding a dozen each, but small boxes suitable for one or two chickens have recently been placed on the market. If the business is to be permanent the containers should carry the farm name, or the name of the shipper if the farm has no name. An attractive advertisement on the box has a great deal to do with marketing, a fact proved long ago to the satisfaction of shrewd business men.

Small packages are becoming more and more popular. Two layers of chickens in a box are being discarded for a single layer, it being realized that refrigeration is more perfect if the carcasses do not touch, and if pressure on such tender tissue as chicken muscle is eliminated as far as possible. On this account heads are wrapped in waxed paper and turned back where they do not rest against the soft flesh of the breast or thighs. No longer does the packer thrust old cocks, broiling chickens and fowls indiscriminately into a big sugar barrel, pressing them down in his effort to pack tightly, and so bruising the flesh and tearing the skin.

KEEPING DOWN STABLE FLIES

Give Stable Refuse Proper Care and Stack Straw So That It Will Not Be Breeding Hole.

The numbers of stable flies can be kept down by caring properly for stable refuse and by properly stacking or otherwise disposing of straw in a way that will not make it attractive as a breeding place for the flies. Flies cause much distress among animals and at times heavy losses. Control measures are described in Farmers' Bulletin 1097. It can be had free of charge by writing Division of Publications, Washington, D. C.

BIG VALUE OF FOREST TREES

Material Supplied for Use on Farm, Such as Poles and Wood—Protect Live Stock.

Forest trees grown on the farm add to its value and beauty. They supply material for farm use, such as poles, posts and cordwood; and they afford shelter for live stock, and protect crops and buildings from the hot winds of summer and the cold winds of winter. Moreover, they often can be grown successfully on soils too poor or on slopes too steep for the successful production of the ordinary agricultural crops.

APPLY LIMESTONE ANY TIME

Usually Done to Best Advantage in Late Summer When Teams and Men Are Available.

Limestone may be applied at any time when men and teams are available, but this usually is done to best advantage in late summer, fall or early winter. It will seldom, if ever, pay to put on less than a ton to the acre, and more should be used if the soil is very sour. Applications usually are not made more frequently than once in four to six years. The usual application varies from one to two and one-half tons an acre.

INCREASED NITROGEN SUPPLY

Element May Be Added by Proper Soil Treatment, Rotation of Crops and Phosphate.

The supply of nitrogen, the most costly element of food for plants, can be increased through proper soil treatment, rotation of crops, the addition of phosphate and limestone and the growing and plowing under of legumes. All stable manure is to be utilized, and on the older, worn soils of the East and South some commercial nitrogen may be profitably used. Following a crop that is a heavy nitrogen consumer with one that is a light user is good farm practice.

PLAN TO DESTROY CUTWORMS

Pests Work at Night and May Be Killed With Aid of Paddle and Flashlight.

Cutworms sometimes give considerable trouble if the nights are cool and the weather unsettled. A good way to get rid of cutworms in the garden is to go out in the evening after dark with a flashlight and paddle and kill the pests. They may be found on the surface at work at night. It will take but a short time to get rid of cutworms in the garden. This is a quicker and more reliable way than using poisoned mash.

GIVE HARNESS PROPER CARE

Made of Good Leather and Heavy Enough, Set Will Last for at Least Fifteen Years.

Harness made of good leather and heavy enough for the work required of it will last for many years if cared for properly. It is more economical to buy harness that is too heavy than to buy that which is too light for the work. With good care, harness of the proper weight and quality will last at least 15 years, and in many cases harness used on the farm has been in service for 25 years or longer.