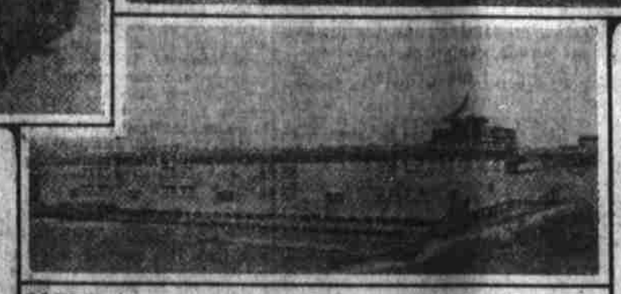
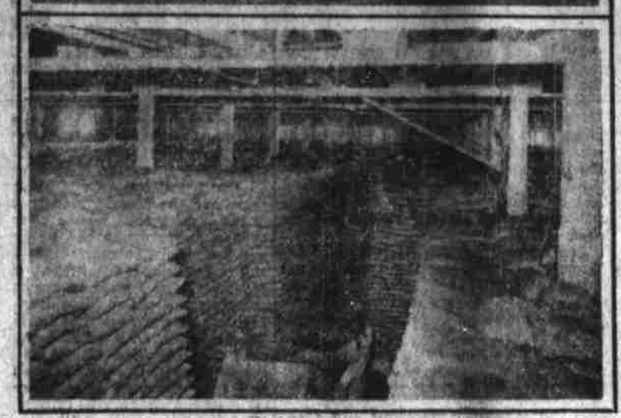
Busy, Modern Plant of California and Hawaiian Sugar Refining Company

Where Hawaiian Sugar Keeps One Thousand Men Busy On the Final Process

Where Hawaii's Sugar Will All Go—The Crockett Refinery. Top, Right—General View of Refinery. Top, Left—A Matson Liner Unloading. Below—Interior and Exterior of Storage Warehouse, Capacity 30,000 Tons.





On the Straits of Carquinez, adjacent to the point where the Southern Pacific Overland permits itself to be ferried across San Francisco Bay, stand the factory and warehouses of the California and Hawaiian Sugar Refining Company. Together, says a writer in the Pacific Service Magazine, they present an imposing figure, taking up an area of about eight acres between the railroad tracks and the waterfront of Crockett, just below Port Costa.

Here the hum of industry is never-ceasing. Day in, day out, by night and by day, the great factory grinds on, while the accompanying stretch of warehouses and wharves ever presents a busy spectacle. To and from this point great steamers from the Islands ply continuously, for here the raw cane sugar that is the chief product of our tropical neighbor is converted into the pure white commodity that graces the breakfast table.

A Modern Factory

The California and Hawaiian Sugar Refining Company employs at its Crockett plant about 600 men on its regular staff. When steamers are discharging this force is increased to 1000 men or more. During the past year the company has made very extensive improvements some idea of which is afforded by the information that it is today in a position to melt 2,000,000 pounds of raw sugar in every twenty-four hours.

The steamers delivering raw sugar to this plant represent the latest skill in the shipbuilding trade, and cargoes of 13,000 tons capacity have been discharged at the company's wharves. The facilities for discharging and receiving the sugar are excellent, inasmuch as 2500 tons are discharged from one ship in nine hours' time.

Refining Process

The raw sugar is melted and refined of its molasses and other impurities by filtration through closely woven cotton lagging and then through bone-char. It is then boiled down in vacuum pans to crystallization and dried in centrifugals.

After the centrifugals it is sent through large revolving drums, through which is drawn a strong current of very hot air which takes out the last of the moisture in the sugar, delivering the dry grains to the packing room with not more than three one-hundredths of one per cent of moisture. In the packing-room, the sugar is sent over screening devices which eliminate any lumps that may have been formed in the centrifugals, also eliminating any dust that may have accumulated after the sugar is dried, and at the same time, sort the grains according to size, to meet the market demand. These grains are then packed in various kinds and sizes of containers, from 2-lb. cotton bags and 2-lb. cartons to 100-lb. bags and 350-lb. barrels.

Intelligent Machines

The small package machines for putting up the 2-lb., 5-lb., 10-lb. and 25-lb. packages seem to be endowed with almost human intelligence. Two operators will fill, weigh, sew and deliver, ready for the market, thirty packages a minute of the smaller sizes, and the weight will not vary one-sixteenth of an ounce from absolute correctness.

The warehouses at the plant of the California and Hawaiian Sugar Refining Company are very extensive, as all the raw sugar is received during a period of nine months, while the refinery is operated during the entire year. At times there is as much as 60,000 tons of sugar stored at Crockett, representing conservatively a value of $4,200,000.

The natural point of interest to the casual visitor, however, when he has done admiring the immense warehouses and the wharves along which they run, is the big seven-story factory that is operating night and day, without cessation, practically 365 days in the year. The refinery proper contains an immense amount of machinery on every floor from basement to roof.

Tremendous Plant

This one building alone covers a ground area of 300 feet in length by 200 feet in width, and is only one of a group of many buildings which comprise the whole plant. The area covered by all the buildings represents about eight acres, and information is given out that the improvements which have just been completed are but the beginning of a series of enlargements that will ultimately make the refinery at Crockett one of the largest, if not the very largest, in the world. Plans that are at present drawn, of which the recent enlargements are a part, contemplate a refinery with a melting capacity of 4,000,000 pounds of sugar per day.

All of the machinery is electrically driven. The refinery uses a number of transformers with a maximum capacity totaling about 7000 k. v. a. In addition it has a steam generating boiler plant of 5500 h. p.

A City Beautiful

The C. & H. S. R. Co. operates its plant on the basis of thre[illegible]fts of eight hours each, it be[illegible]st refinery in the Unite[illegible] augurate this system.

The company ha[illegible] great deal to improve civ[illegible] the town of Crockett [illegible]ory is located. New stre[illegible] laid out and constructed [illegible]ry has installed sewers. [illegible]lished parks, children's pl[illegible]thletic fields and a club h[illegible] under the auspices of the [illegible] The company has set a[illegible] clean-ing up and improv[illegible]ucant lots. It endeavors t[illegible]perty in model shape, be[illegible] the vacant [illegible]owers [illegible]on, it is [illegible]let a [illegible]r the [illegible] large [illegible] which [illegible]ipped [illegible]est at [illegible] bowling alleys, handball courts, reading and study rooms, and last, but not by any means least, a large swimming pool.

Company Hotel

The company also operates the largest hotel in Crockett, and, strange to say, the company hotel is the most popular in the community. It is very seldom that a room is available for the transient guest. The policy of the company, however, has been rather peculiar in this respect, as it has refused to employ people at its works merely because they stopped at the company hotel. A prospective employee has a very much better chance of securing employment if he stops at some hotel other than the company's. After securing his position, however, he may change to the company's hotel, if he so elects.

The company adopts a very liberal policy in connection with the hotel, as any profit made in conducting it is immediately reinvested in the hotel property for the benefit and comfort of the guests stopping there. It is really a very attractive place, with its large lobby, comfortable seats, 24-hour grill room service, clean rooms, extensive tub and shower bath equipment, commodious dining-rooms and good meals. The gardens surrounding the hotel would do credit to a hotel located at one of our seaside resorts or in a much more populous place. An employee of the company or any person living in Crockett can secure board and lodging at this hotel for the sum of $23 per month.

Safety First

"Safety First" is also a motto of this institution. Several years ago, before the present compensation bill went into effect, the sugar company had safety engineers inspect its plant, and it carried out all the recommendations then made. When the inspectors for the state visited this plant since the first of this year, they found very little left to be done, and the report made was very favorable. Accidents have been reduced to a minimum.

There has been formed, also, among the employees of the company a "Safety Commission," which meets regularly and makes recommendations to the management from time to time as to additional safety devices that should be installed. This commission holds meetings similar to a board of directors, and its members are paid a fee for each meeting attended. The results of the commission's work have been very gratifying indeed.

Another good idea that is carried out at this plant is the Suggestion Bureau. Paper, envelopes and cards soliciting suggestions are placed at convenient points throughout the factory, and all suggestions that are practicable and carried out result in compensation to the employee submitting them in proportion to the value of a suggestion.

Fire protection is another point that is well looked after. The company has all of its men trained for special duty in case of fire, and drills are held at least once a month. Weekly reports showing the condition of all apparatus and stating that it has been tested are in vogue. The Gamewell fire alarm system is installed at the plant, and the company has voluntarily donated boxes and run the fire lines to many points in the town where its factory is located, thus giving that community as efficient a fire alarm service as any modern city.

On the whole, the California and Hawaiian Sugar Refining Company is a customer of whom we may well be proud. It represents a capital investment of over $7,000,000, and its monthly pay-roll is in excess of $60,000. Its president is Mr. R. P. Rithet, who has been prominently identified with San Francisco commercial life for many years. The vice-president, Mr. Wallace M. Alexander, of Alexander & Baldwin, Ltd., San Francisco, is also prominent. The remaining officers and directors are also all California men.

CHAMBERLAIN'S COUGH REMEDY.

This remedy has no superior as a cure for colds, croup and whooping cough.

It has been a favorite with the mothers of young children for almost forty years.

Chamberlain's Cough Remedy can always be depended upon and is pleasant to take.

It not only cures colds and grip, but prevents their resulting in pneumonia.

Chamberlain's Cough Remedy contains no opium or other narcotic and may be given as confidently to a child as to an adult. For sale by all dealers. Benson, Smith & Co., Ltd., agents for Hawaii.

Pioneer Declares Extra Dividened $20,000 Month

The directors of Pioneer Mill Company met yesterday and declared an extra dividend of ten cents per share or one-half of one per cent monthly for October, November and December. This brings the monthly dividend up to twenty cents per share.

The extra dividend will amount to $20,000 per month for the last quarter of 1914

Contract with Eastern Refiners Has One Year Yet to Be Completed

Upwards of 325,000 tons of Island sugars have gone to the Pacific Coast refineries this year.

The Sugar Factors' Company shipped 50,000 tons to the Western and 200,000 tons to the Crockett plant. Plantations whose sugars are not controlled by the Sugar Factors' Company, have sold over 75,000 tons to the Western. The Factors' contract with the latter concern is on a yearly basis and their contract for Atlantic ports delivery has another year to run.

If the plans now made are fulfilled, practically all of the 1916 Hawaiian crops will go to the Crockett and Western refineries.

Yellow Caledonia might be renamed the "Hilo" cane just as the old Bourbon was renamed "Lahaina." This variety grows better and produces better yields and more sugar in the rainy districts of Hawaii than any other variety. Also, Yellow Caledonia does better there than anywhere else in the Territory. There is no other district where this variety has equaled its records made in windward Hawaii for sucrose, purity and yields per acre.

Onomea Sugar Company yesterday declared extra dividends of seventy-five cents per month for September, October and November, payable on the twentieth of each month. This special payment will amount to $56,250 per month.

The plantation finished grinding August 29 with a total crop of 15,992 tons.

With fully 1000 tons of sugar still unharvested the Kohala Sugar Company has had to close down its mill on account of the terrific rainfall on the windward coast of Hawaii. T. H. Petrie stated yesterday that the plantation managers are almost in despair over the weather conditions in Kohala. They have been holding off and praying for sunshine. Kohala has finally decided not to wait any longer for the clouds to roll by.

C. Brewer & Co. report that the outlook in Kau is exceptionally good for all crops now in the ground. There have been splendid rains throughout the district and just the right amount of hot growing weather so that bumper crops are assured for 1915. The 1916 crop is planted and all field operations are well in hand.

Hawaiian Agricultural has had plenty of water for fluming. Grinding on this plantation continues every month in the year, provided there is water. The prospect is that harvesting will continue through without interruption until the end of the year.

Hutchinson Sugar Plantation is also in splendid condition. The 1915 crop will be heavy and the 1916 cane is in fine shape.

The case of George E. Smithies against David K. Notley, an action for the collection of a promissory note, which was to have come up for trial in Judge William J. Robinson's division of the circuit court, was continued until next Tuesday, on account of the absence from the city of the defendant and some of the witnesses in the case.

TO CURE A COLD IN ONE DAY

Take Laxative Bromo Quinine Tablets. All druggists refund the money if it fails to cure. E. W. Grove's signature is on each box.

PARIS MEDICINE CO., St. Louis, U. S. A.

PREDICTS BEET SUGAR SHORTAGE

Louisiana Planter Says Lack of Seed May Reduce Domestic Crop 600,000 Tons

The Louisiana Planter prints the disquieting information that:

"A feature of the domestic sugar industry that will become of paramount importance if the European war continues, is that of sugar beet seed now imported from Europe almost exclusively. If this source of supply should be cut off entirely as seems very possible, we would have 600,000 tons of domestic sugar less in 1915 than in 1914. Thus the war clouds envelop the future of sugar."

Germany, Austria and France have hitherto supplied all of the sugar beet seed used in all beet producing countries. Seed production has been one of the specializations of the industry, a trade within a trade.

Seed Breeding Experiments

The United States department of agriculture officials have often urged that American farmers take up this industry. The efforts have been working for years to breed up a new strain of beets that would have only one fertile seed in the little cluster of ripe fruits that is referred to by farmers as "a seed." Beet "seed" usually sprouts two to five seedlings from each cluster. A very material part of the cost of cultivation of sugar beets has always been the laborious and exacting thinning of the rows, plucking out all but one of the growing seedlings from a group.

The department's efforts have been directed towards producing a one-seeded beet, at the same time paying especial attention to maintaining the sugar content.

While the sugar beet is an annual, as far as its growth for sugar production is concerned, it is a biennial for purposes of seed production.

War Cuts Seed Supply

The European war commenced so late in the year that growing a crop of new seed in 1914 for planting the 1915 crop was out of the question.

It therefore looks as though the Louisiana Planters' prognostication of a very short American sugar beet crop in 1915 is correct. The size of the 1915 crop will depend absolutely on the amount of first quality seed that can be obtained in Europe and no whatever seed can be produced in California by replanting and forcing seed production in time for the spring plantings.

It takes many years of cross-breeding and selection to produce a type of beet that will yield the highest sucrose content and have all the other qualities required of a profitable cropper—heavy yield per acre, heavy leafage and high purity of juice. It is therefore extremely problematic whether a large crop of beets can be depended on in the United States next year even if the western farmers succeed in producing a domestic supply.

The world is going to require every pound of cane sugar that the tropics can produce for the next ten years, at least.

HEAVY RAINS HOLD UP CULTIVATION

But Make Prospects for 1915 Crop Good on Windward Hawaii

The windward Hawaii plantations have suffered terrific floods of rain all this summer. August records varied from thirty-one inches in North Kohala increasing to forty from Kukaiau to Laupahoehoe and then decreasing to thirty-three inches at Waimea and Hilo. Manager David Forbes reports over two and a half inches an hour as a record one day last week.

F. M. Swanzy said yesterday that the amount of rain that has fallen in that whole ninety miles is beyond belief. All the plantations are much behind in their work. Planting has been delayed and cultivation has been out of the question so that many fields are overgrown with weeds and grass. Next year's crop is all right. The cane has grown tremendously and there is bound to be a big crop. The 1916 crop is the one that is going to feel the effect of this year's lack of cultivation. However, if there is any sort of luck and dry weather ensues between now and January there may be a complete recovery of lost ground.

WAIALUA OVERRUNS ESTIMATE—EWA IS FALLING SHORT

T. H. Petrie of Castle & Cooke stated yesterday that Ewa has finished grinding the 1914 crop. The total sugar milled was 39,858 tons made up of 29,933 tons Ewa and 925 tons Apokaa. Apokaa over ran the estimate sixty-five tons while Ewa fell 1094 tons below the estimate. Ewa's reduction in yield is reported to be due to some of the new seedling canes which are being grown to replace Lahaina not having come up to their trial yields when grown under field conditions.

The Waialua outturn stands at 30,180 tons, 1180 tons over the estimate.

REORGANIZATION OF SUGAR INDUSTRY FORESHADOWED IN NEWS OF THE WEEK

Cheaper Freight to Chicago Likely to Divert Whole Island Output to Coast—Crockett Refinery May Be Doubled—Effect On American-Hawaiian Is Matter of Interest

Recent developments foreshadow a complete reorganization of the sugar trade of Hawaii. With the final completion of the plans admittedly under way the Crockett refinery is to be increased to at least double its present capacity. This refinery and the Western have handled over half of the sugar crop harvested in 1914. If worked at maximum capacity this plant is now capable of refining one thousand tons of sugar daily. The Pacific Coast refiners are getting ready to handle double that amount.

The market west of Chicago has been surrendered to its rightful owners, the western beet producers and raw cane refiners as a result of the recent inter-state commerce commission's rate decision.

The Crockett refinery is largely owned by Hawaiian capital. Hawaiian capital will be forthcoming to enlarge the capacity of this plant and enable it to prepare the entire raw sugar crop for the ultimate consumer, the man who buys white sugar to put in his coffee.

If refinery profits are large it will increase the dividends paid shareholders in Hawaiian plantations. In addition to the refinery profits transporting the entire Hawaiian crop to one West coast refinery will work a tremendous saving in freights.

This foreshadows the release of a part of the American-Hawaiian sugar fleet, which, as soon as available will find ready employment on the Atlantic seaboard where American-owned freighters are in great demand to take over the South American trade. Freight rates are higher on the Atlantic than on the Pacific. Opportunities for extension of the American export trade are tremendous. The change in destination of Hawaiian sugar cargoes from New York to Crockett is going to work out to the financial betterment of all concerned.

The European entanglement has given our planters the opportunity to do now what would have taken years for its accomplishment had there been no war and no increase in sugar prices.

SUPERVISOR A. E. COX WILL NOT MAKE RACE

Supervisor Andrew E. Cox has withdrawn his candidacy for nomination at Saturday's primary election. This action, says his brother, Oscar P. Cox, who is Republican candidate for sheriff is due to the poor condition of the supervisor's health. Mr. Cox has been in bad health for some months, following a stroke of paralysis which he suffered one night at the city hall while waiting for the board of supervisors to meet. Last week Mr. Cox accidentally shot himself with a gun which he was putting away out of reach of children.

William T. Brigham, director of the Bishop Museum announces that on September 12 the Bishop Museum will be open to the public as usual.

SCRATCHED SO SHE COULD NOT SLEEP

Child of Two had Masses of Eczema Over Face, Head and Body—They Took Her to the Best Doctors and Tried Salves and Medicines in Vain—Suffered for Five Years.

SOON RELIEVED AND CURED BY CUTICURA

"I write to tell you how thankful I am for the wonderful Cuticura Remedies. My little niece had eczema for five years and when her mother died I took care of the child. It was all over her face and body, also on her head. She scratched so that she could not sleep nights. I used Cuticura Soap to wash her with and then applied Cuticura Ointment. I did not use quite half the Cuticura Soap and Ointment, together with Cuticura Resolvent, when you could see a change and they cured her nicely. Now she is eleven years old and has never been bothered with eczema since. My friends think it is just great the way the baby was cured by Cuticura. I send you a picture taken when she was about eighteen months old.

"She was taken with the eczema when two years old. She was covered with big sores and her mother had all the best doctors and tried all kinds of salves and medicines without effect until we used Cuticura Remedies. Mrs. H. Kiernan, 663 Quincy St., Brooklyn, N. Y., Sept. 27, 1909."

For thirty years Cuticura Soap and Cuticura Ointment have afforded speedy relief to tens of thousands of skin-tortured and disfigured sufferers from eczema, rashes, itchings, irritations and chafings, from infancy to age, bringing comfort and peace to distracted households when all else failed. Guaranteed absolutely pure and may be used from the hour of birth.

Cuticura Soap (25c.), Cuticura Ointment (50c.) and Cuticura Resolvent (50c.), or in the form of Chocolate Coated Pills (25c. per vial of 60), sold throughout the world. Potter Drug & Chem. Corp., Sole Props., 135 Columbus Ave., Boston, Mass.

Mailed Free, 32-page Cuticura Booklet, an Authority on Affections of the Skin, Scalp and Hair.

ALASKAN CARGO GETS WAR PRICE

Shipment Increased $600,000 in Value During Voyage to the Breakwater

Alexander & Baldwin received a cablegram yesterday announcing the arrival of the Alaskan at Delaware Breakwater, fifty-eight days from Hilo.

The Alaskan's cargo of 10,768 tons of sugar got in in time to realize the advance to 6.145c or $122.90 per ton. The total value of the Alaskan's cargo was $1,323,000. The value increased more than $618,000 during the period between shipment and arrival.

This is the last shipment via Magellan. All other cargoes to Atlantic ports will go East by way of the Panama canal.

BIG WATER SYSTEM IS ORDERED RUSHED

Quartermaster Department Seon to Bore Well to Supply Artillery

Lieutenant Colonel E. B. Cheatham, chief quartermaster of the Hawaiian Department, was disappointed when he received in the mail yesterday instructions regarding the Fort Kamehameha water system, but nothing regarding the money for the other permanent construction on the Island.

The Kamehameha water project is a fairly large item in itself, the estimates calling for $100,000, which has been made available, but it is only an item of the general construction scheme. Just how much money will be spent here this year, and for what purposes, will not be definitely known until the advices are received from the war department.

Work on the new twelve-inch well at Fort Shafter, which is to supply the artillery post near Pearl Harbor, has begun, according to the department quartermaster. The well will be drilled down as far as necessary, probably 400 feet. For the completion of the project, which consists of piping the water to Kamehameha, about six miles, and through the post, bids will be advertised for during the next thirty days. This work probably will be done by contract.

TOWN IN FLANDERS BURNED TO GROUND

BRUSSELS, September 1[illegible]—(Associated Press by Federal Wireless)—According to reports from Termonde, East Flanders, which was taken by the Germans last Friday and Saturday, after a stubborn resistance, the town was burned to the ground. The Germans lost many men in the battle.