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TOURIST LEAVES WITH PLEASANT IMPRESSIONS

William Vogt, who has been spending the past month in the Paradise of the Pacific, is leaving this morning as a passenger on the S. S. Wilhelmina for the Coast.

Mr. Vogt devotes his time and talent to educational matters and is rated as an authority on school affairs in his section of California. Returning to his home at Hayward, California, Mr. Vogt carries delightful memories and good words for Hawaii. He visited the volcano last week and 1911 internationally describes the unusual manner of behavior and weird appearance of Kilauea.

TO CURE A COLD IN ONE DAY Take Laxative Bismarck Tablets. All druggists should have the money if it fails to cure. E. W. Grove's signature is on each box.

CENTRIFUGAL CLARIFIER, WHICH WILL PROVE BOON TO SUGAR MANUFACTURERS

A Honolulu Invents a Labor-Saving and Fuel-Saving Method of Handling Juice— Success Shown in Actual Use.

Ernest W. Kopke, familiarly known as "Jack," has invented a centrifugal clarifier that appears destined to revolutionize one process in the sugar making industry of the world. The machine has been tested and found satisfactory beyond the fondest hopes of the inventor and in spite of the doubts of the "Thomases." A private demonstration was given the representatives of the Formosa Sugar Company at Honolulu plantation last Tuesday morning. These were present, beside the inventor, his father E. Kopke, of the Honolulu Iron Works; W. J. Dyer, also of the Iron Works; George Renton, manager Ewa Plantation; Tom O'Dowda, veteran sugar boiler of Ewa; George Ross, late manager of Honolulu Plantation; K. Hibi and A. H. Kimura, of Formosa; Fred and Albert Waterhouse; Arthur Ewart and a representative of The Advertiser.

At the present time, in all the cane sugar mills of the world, the juice, after being treated with lime and other clarifying matter, is run into settling tanks, where the insoluble ingredients are removed by precipitation, the process occupying some hours. By the new Kopke process, the juice is run direct from the mixing tank into a centrifugal, which removes the insoluble within a few seconds and passes on to the boiling tanks a clearer juice than is possible by the settling process. The machine has been in operation at the Honolulu Plantation during the past season and several hundred practical tests have been made, each proving the claim of the inventor that the apparatus is commercially practical and demonstrating thoroughly its value to any plantation. It was shown in Tuesday's demonstration that all of the juice extracted from the cane can be clarified more nearly perfect than is possible with any process now in use and in less than one minute. By the method which has been in use for years



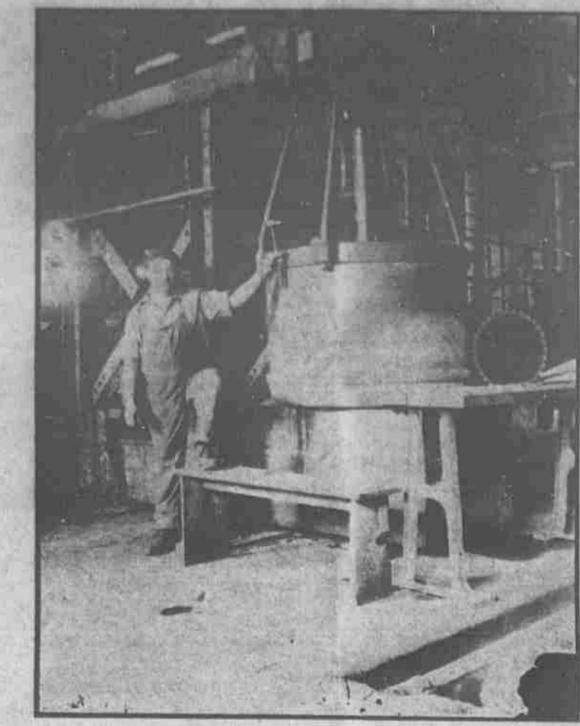
E. W. KOPKE, Inventor of Centrifugal Clarifier.

the juice is under process of clarification for over two hours, and the saving of time means a great saving otherwise, the juice retaining the heat now lost by radiation. Under the Kopke method, also, clarification is not dependent upon such careful observation and skill as is now necessary, and this is another saving.

Saves Labor. While the machine was running on Tuesday, Mr. Renton was a close observer and was emphatic in his statement of approval. The machine runs along without having to be watched, he said. "Eliminating the mud press is going to be a saving both in time and money and leaves now only the question of the power necessary to run the centrifugal. This process will save labor, and that is everything in this country."

In speaking of the results Mr. Kopke, the inventor said: "The mud and scum accumulated in the centrifugal machines or separated from the juice, may be washed practically free of any sugar contents and with a minimum of water. In other words, there need be no sugar lost in the mud, and as little water need be used to save it. As whatever may be used must be later evaporated at the expense of fuel, it is, of course, desirable that no more be used than is necessary. I have provided for this saving in fuel, for the amount of water used in washing in the centrifugal is less than by any method now in use."

Skilled Labor Not Required. As no filtering medium is used, a



THE CENTRIFUGAL CLARIFIER. A new machine that means much for sugar men.

very great saving is effected on this item. The labor necessary to operate the centrifugal clarifier, it was said at the mill on Tuesday, in any case will not be over thirty per cent of what is now necessary for the settling tanks and skilled labor is not required. The space occupied by the new apparatus is small compared with that demanded for the settling tank system and the installation would not require any change in the arrangement of the factory.

The present method of clarification is difficult of scientific control and scarcely permits of any scientific supervision, such as may be exercised over most of the other machinery. The new system is practically "fool proof" and its high efficiency may be maintained with the minimum amount of trouble.

Mr. Kopke is naturally enthusiastic over the machine and he is free to admit that some of his statements may be questioned but he insists that each has been proven and the data collected was recorded under observation of disinterested parties in relation to the work the machine has done during the past season. Excellent results have been obtained with centrifugal machines involving special and undesirable features in the bowl of the machine, at the same time operating at high speeds, but it has been found in this case, that with proper design and arrangement, the desired result can be obtained at a reasonable speed using very little power and with an imperforate bowl that is almost as simple as that used in the regular sugar-drying centrifugal. To the experienced eye no complicating features, either in the design or operation of the machine, are to be found and its extreme simplicity may be illustrated by the fact that the bowl in Tuesday's demonstration was brought to a full stop from high speed and all of the mud—about 500 pounds—thoroughly cleaned out in two minutes.

Four machines would clarify all the juice from a thousand tons of cane a day and the machine may be designed for almost any desired clarifying efficiency. The excellent results attained are attributed to its simplicity as much as anything else. A complicated machine is almost prohibitive for many reasons.

Patents Secured. The apparatus, equipment and processes found in practice to be most desirable have been thoroughly covered by patent applications and while it is known that others have worked along the same line, the practical progress during the past year at Honolulu Plantation and the success obtained from all points is far in advance of anything heretofore accomplished in this direction.

The Kopke proposition is one of inestimable value to all sugar factories regardless of the nature and quality of the product. Further it has been shown to facilitate the use of other processes that have heretofore been handicapped by inefficient means of eliminating the insoluble from the juice. The efficiency of a sugar factory and the recovery of the maximum amount of sugar from the juice is largely dependent upon the thorough clarification of the juice and the removal from it of all insoluble matter.

Most of the methods employed in modern sugar mills have undesirable and objectionable features some of which are the large quantity of juice that is under treatment; the extensive settling tanks; filter presses and sand filters, which require much space and an elaborate equipment of supply tanks, pipes, pumps, valves, etc. The Kopke process eliminates much of this and if its adoption resulted merely in the saving of space in the mill it would still be worth while but the reduction



MUD BRIDGES FROM KOPKE CENTRIFUGAL. A portion of the mud removed after Tuesday's demonstration.

in labor-cost and time makes it invaluable.

Proud of Protege. Tom O'Dowda was one of the most interested spectators at the experiments on Tuesday, for he looks upon "Jack" as his protege whose success reflects credit upon him as a tutor of the young man in the intricacies of the boiling house. Every revolution of the machine had its attractions for Tom and the final result brought words of praise for the capabilities and inventive genius of "his boy."

A Practical Education.

Young Kopke comes from engineering stock; for his father was for years connected with Lahue Plantation on Kauai on which island Kopke, Jr., was born twenty-seven years ago. The elder Kopke now fills a responsible position with the Honolulu Iron Works. Jack went through the intermediate grades of the public schools in Honolulu and then spent a couple of years under Prof. M. M. Scott who is responsible for much of the prominence gained by Honolulu boys. When he left the high school Kopke went to California and entered at the Lick School of Mechanic Arts. After two years in the Lick he returned to Honolulu and spent a year in the draughting room of the Honolulu Iron Works following this with a regular apprenticeship in the machinists department where he served the time necessary for him to reach the rank of journeyman and while there he was made assistant engineer in charge of the erection of the Waiulua Sugar Company's mill.

When through with the mill he went out to Ewa and placed himself under Tom O'Dowda to learn sugar boiling but more particularly boiling house methods. Much of the progress made by him there was due to the encouragement received from Mr. O'Dowda and George Renton, manager of the plantation, combined with a natural skill in engineering and the technique of sugar manufacture. After attaining an enviable place in the mastery of the industry, a position which would have satisfied the ambitions of most men, he expressed a desire to delve further into the mysteries of the craft and went to Louisiana where he entered on a two years course in the sugar manufacturing department of the University of Louisiana at Baton Rouge, the premier sugar college of the world. His course had special reference to chemistry and he was under Mr. Agee, now of the Hawaiian Sugar Planters' Association at the experiment station in Honolulu. Before finishing the two years course he was employed on schemes to improve the clarification processes in sugar houses and one of those he suggested contained many novel ideas. In Louisiana he was for a season with Laurel Grove Plantation as engineer and chemist.

While at this work he was induced to accept a position with the International Clarifier Company, of New Jersey, with whom he remained as engineer and chemist for eighteen months. On severing connection with this company he developed the fundamental principles of the Kopke Centrifugal Clarifier. On putting his ideas into drawings and preparing his applications for patents he called his father into consultation. Kopke pere went carefully into the details and it was decided to purchase the necessary machinery on the mainland and have it shipped to Hawaii. Numerous changes and additions were found necessary and these were made at the Honolulu Iron Works. During the development other changes had to be made before the present results were obtained. Complex ideas were eliminated and the resulting simple machine is here for the benefit of the sugar industry.

It is another achievement for Hawaii and in the instance credit is due an island boy, a credit to be shared by the father who gave him an education which combined the various steps in the manufacture of sugar. Every rudiment was drilled into him and he was an apt scholar.

Thanks Those Who Helped.

Mr. Kopke feels under deep obligations to the management of the Honolulu Plantation for the encouragement and assistance which was always extended to him in charge of the mill. Mr. Renton, the superintendent, Mr. O'Dowda, Mr. Dyer and Mr. Robinson

ORGANIZE UNION; MAKE DEMANDS

STEVEDORES AND ROAD WORKERS IN CAHOOTS WITH MAN "BEHIND THRONE"

HILO, July 15.—The Hilo branch of the Longshoremen's Union, Local No. 38-44, was formally organized last night. The meeting took place at the Y. M. I. hall on King street, and so large was the attendance that many had to stand on the launi, the hall being filled. The attendance was very enthusiastic about the union, and so great was the anxiety to join that the work of initiating members went on until midnight, when 378 had been enrolled. The meeting was then postponed until next Friday, when it is expected that another hundred members, mainly men from Papaikou and other villages in the vicinity of Hilo, will join the organization.

The charter for the new organization was received last Sunday. It gives the Hilo branch jurisdiction over Hilo, Puna and Hanalei, and includes longshoremen, road workers, handlers of lumber, coal, grain and the like, but does not include mechanics.

The following officers were elected last Friday evening: John Kealoha, president; J. K. Paahoa, vice-president; Bernard Kekelolu, recording secretary; M. S. Pucheco, financial secretary, and treasurer, William Clark. It will be noted that David Ewaliko was not elected to any office. As a matter of fact he remains as the power behind the throne, having been appointed by the main organization on the mainland to be secretary-treasurer for the local.

Ready For Business.

The new branch will get ready for business immediately. It has been decided to lease a room at the Y. M. I. building, where an office will be established with a telephone, etc., and at the meeting this week the matter of appointing a paid business agent, who will be in attendance at the office, and of an executive board will be taken up.

On August 1, says Ewaliko, the union will be ready for active business. He will call on the shippers and will ask them to employ only members of the union in the discharging and loading of their freight. The union will particularly insist that no Japanese be employed on the longshoremen's work. The union will not insist on having a union foreman appointed, but will be satisfied as long as the foreman is not an Asiatic. This is in accordance with advice received from the organization headquarters. The union will also take contracts for the handling of freight and road work.

The union is satisfied with the wages paid longshoremen here at present, namely, two dollars a day, at least for the present; but it hopes soon to be able to show the employers that it can do so much better work than the Asiatics that a higher scale of wages will soon be given voluntarily by the employers.

Already Beginning.

At the meeting last Friday a motion was made by Ewaliko that the union communicate with the Pacific Coast district, and through it with the American Federation of Labor, asking that organization to take steps to prevent the employment here of sailors on the loading and discharging of vessels, the argument being that this work should be done by the local longshoremen. This motion carried.

Ewaliko also made an address to the union in regard to the statement which had been made that the Hawaiians would not work as stevedores. He stated that he had made a careful investigation of the matter, and that he had found that the Hawaiians were perfectly willing, as a matter of fact, very anxious to work on the steamers.

They complained that the Japanese foreman who had charge of the selection of stevedores, picked out the Japanese who lived in a house which he owned, and that very few Hawaiians were employed. Furthermore, the Japanese were given the pick of the work, and the few Hawaiians who were employed, were given the most dangerous and disagreeable work, the result often being that they became so disgusted that they failed to turn up the following day for work. Furthermore, the Hawaiians objected to working side by side with the Japanese, anyhow.

EAGLES WILL PRESENT PIONEER DAY SCENES.

SAN FRANCISCO, July 9.—California of the days of gold will be reproduced by the local series of Eagles during the national convention of that order in August. "The Luck of Roaring Camp" will be one of the tableau features of the pioneer show to be given in Central park, Eighth and Market streets. Local artists are submitting designs for the elaborate decorative scheme which will be used as the frontage of the "forty-sixer" camp. Life in the mining camps will be recalled by men garbed in the picturesque costumes worn there. Hundreds of local Eagles dressed as Indians will take part in the pageant. There will also be scenes of Mexican life in California during the fifties. Hundreds of trees will be used to produce forest scenes, a part of the decorative scheme of the carnival.

The Chilean government has under construction nearly 1500 miles of railway, the cost of which will be about \$75,000,000.

have done all in their power to help localize the results he was after.

"They were several months ago," Mr. Kopke, "of following and disorganizing work and when success seemed hardly possible unless features, not considered desirable by me, were adopted, and I cannot give too much credit to Mr. Nicholson, whose loyalty and exceptional ability as an engineer, I very much appreciated in this case. His absolute lack of selfishness was evident at all times and he did much to help the thing along. I cannot say too much in his praise."

BALLS OF FIRE FELL FROM SKY

THRILLING EXPERIENCE OF A PARTY OF TOURISTS IN HILO BAY.

An invisible arm wielding an invisible hammer, Thor-like, shot out of the dark threatening skies over Hilo on Saturday afternoon and struck the track of the jiggermast of the American schooner Gamble lying at the Inter-Island wharf, shattering the stick to the crossrees, and then, invisibly leaping to the foremast, split that tall stick at the crossrees, sending it to the truck.

It was a thunderbolt, affording one of the most spectacular of the many spectacular phenomena which have been taking place on the Big Island, witnessed by a large number of people, including the officers and crew of the Matson steamship Wilhelmina, anchored nearby. The Wilhelmina shivered as the electric hammer swept through the air, but that was all.

At the instant the bolt struck, the jiggermast splinters fell upon the deck and upon a launch which was cruising along from shore to the Wilhelmina. The launch, with a load of passengers, was passing under the anchorage hawsers and some of the passengers happened to be looking up at the rail and the cargo booms of the schooner, when suddenly the top of the jiggermast was crushed in. Pieces of the top of the mast shot out into space and fell clattering upon the schooner's deck and all around the launch. A trifle later there was a crash as if a shell had burst just above the launch, and instantly the air was full of globes of flame, each as big as a man's fist. The effect was startling and the launch passengers instinctively threw up their arms to ward off the fragments of the supposed explosive. There was a commotion on the schooner's deck where the crew, still at work unloading lumber, stood for a few seconds looking aloft from whence came the splinters from the deck, and then many went over the rail to the wharf, from which they studied the damage above.

Those aboard the Wilhelmina thought they saw smoke issuing from the wharf shed, but this was probably the smoke of a locomotive.

"In twenty-nine years in my sea experience," said Captain Johnson, commander of the Wilhelmina, "I have seen that sort of a spectacle only once before. It is unusual and certainly has all the elements of a grand spectacular demonstration. I am glad that my passengers had an opportunity to witness the striking of the thunderbolt. This, following so closely upon the phenomenon in the crater of Kilauea, where the lava is flowing into a hole directly in the center of the pit of boiling lava, is certainly some compensation for their voyage into the Pacific. They can travel in many parts of the world and not see two such freaks of nature as the fact, which I saw on the Big Island. The fact, also, that Prof. Perret, the famous volcanologist, is at Kilauea, just now studying the flow of the lava, and this hole in the pit is unusual and unique even to him, shows that the Matson Navigation Company is taking tourists to see things unparalleled in tourist attractions."

FAMOUS PAINTER LEFT ESTATE TO HIS WIDOW.

LOS ANGELES, July 10.—The will of Paul de Longpre, the famous painter of flowers, who died at his home here June 30th, was filed for probate today by his daughter, Blanche. The estate, valued in the document at \$57,433.51, consists of real estate and personal property, bank stock, cash and promissory notes, and was left entirely to the widow, Josephine de Longpre, with the exception of small bequests to his daughters, Blanche de Longpre, Aheo de Longpre Bourgeois, Pauline de Longpre, and his brother, Henri de Longpre of Paris.

Herschel Parker, of New York, noted for his efforts to climb Mount McKinley and for his exposure of Dr. Frederick Cook, sailed from Seattle for Valdez on the steamship Admiral Sampson. While in Alaska he will make arrangements for an expedition to ascend Mount McKinley, which will set out in February. The great peak can be climbed only in winter, when the snow is hard and the crevasses covered.

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