

AMERICAN FARMERS LOSE IN LONG RUN

George W. Perkins Picks Flaws in American Position and Talks Sugar

George W. Perkins, talked sugar among the things, in his address delivered October 12, 1915, before the American Bankers Association at Indianapolis. His address was entitled: "We Are an Unprepared People for War."

"At the present time our thought and knowledge on these two vast and all-important questions is superficial and sadly lacking," he said. "To illustrate what I mean, let me tell you the following story, recited to me only a few weeks ago by an American merchant just back from Germany."

"One evening this man found himself seated at dinner next to one of the officials of the German government's agricultural department. My American friend asked the German official what he thought of our country, and the German said he thought we had a wonderful country and that we had had a wonderful period of prosperity, but that he doubted if our future held in store for us the prosperity we had enjoyed in the past."

"My friend asked him 'why,' and he replied—because we were a superficial people, did not study our problems earnestly enough, and were not prepared for the world struggle in industry which was facing every civilized nation. To illustrate what he meant, he remarked that unless our annual wheat crop reached a billion bushels we thought we were poor. If we secured a billion bushels, we thought all was well and nothing could harm us."

"Then the German said that they were trying to get their people to try less attention to the raising of wheat to buy more of it from us, and to pay more attention to raising beans, and to manufacture into sugar and the sugar sold to us; that they knew that every bushel of wheat that came out of the ground took about twenty per cent of its enrichment from the strength of the soil, while the beans took most of their enrichment from the air; and they thought they were making a pretty good trade if they could eventually reach a point where they would exchange their wheat for our wheat, which would in effect be swapping their good air for our rich soil."

"That story may seem a bit fantastic, but to my mind it is an absolutely accurate comparison of the mental process by which Germany goes at her industrial problems and the mental process by which we go at our problems. She is thorough to the last degree and we are superficial to a great degree."

AIR AGAIN YIELDS NITROGEN FERTILIZERS

By a further development of the electric furnace treatment of lime nitrogen compounds a German chemist has invented a process of manufacturing nitrogen which is now being offered as economical quantities as a fertilizer. Experiments have been carried on to compare the value of urea, nitrate of soda, urea nitrate, lime nitrate, ammonium sulfate and guanidine nitrate in the production of crops. All these nitrogenous fertilizers except nitrate of soda have been manufactured synthetically, the nitrogen which they contain having been taken direct from the air.

In the annual report of the German experiment station for 1915 the results of soil tests with these fertilizers are given. It has been found that urea made in the electric furnace is nearly as good a fertilizer as Chile saltpeter. Urea nitrate on the contrary, decomposes into cyanogen and amide nitrogen, both of which are poisonous to therefore replace Chile nitrates for agricultural purposes as long as these are obtainable on account of the war.

Banana and Cane Disease

In the Journal of Agricultural Research N. A. Cobb, who was formerly plant pathologist at the H. S. P. A., experiment station, discusses a root-rot disease of bananas caused by nematode worms. He connects this disease with the root disease of cane which occurred in Hawaii in 1907, and has proved that the two are identical, the same worm being the guilty party.

Chili Saltpetre

Three quarters of the income of the Chilean government or over \$20,000,000 a year is derived from the export duties levied on nitrites. Over 50,000,000 tons have been shipped since the discovery of the deposits in 1830. It is estimated that there is still 250,000,000 tons available in the Peruvian and Chilean nitrate deposits.

SCIENTISTS SOLVE MANURE PROBLEM

Keep Stable Wastes Under Cover and Dry To Preserve Fertilizing Values

The losses in fertilizing value of stable manure piled in the open and exposed to the weather have been estimated at ten to fifteen cents per ton per month. This loss can be prevented by compacting the heap and storing it under cover. The rain that falls on a manure pile is the most potent source of loss.

From experiments at Rothamsted, England, in 1914 it is evident that the action of rain is something more than mere washing away of soluble material. This was proved by putting a tarp under cover and watering it daily, but never to the extent of causing increased drainage from the heap as compared with unwatered manure piles. In these months the manure that was watered lost 13.6 per cent of its nitrogen; over double that of manure kept dry.

Rain the Great Enemy

Some volatilization of ammonia undoubtedly takes place, but it is neither the sole nor the main cause of loss. The Rothamsted scientists have demonstrated that nitrates are formed at the surface of a manure heap but never in its interior. When manure exposed to the weather is wet by rain the nitrates are washed down into the pile and there decompose very rapidly. "It suffices that the nitrate be washed a short way down," they state, "and the decomposition then becomes complete."

Rain is the great enemy. Stable manure must therefore be kept under cover, and kept dry but compact. The shifting of manure heaps or working them over is a very potent cause of loss. "Fixers," like superphosphate, kainit, wood ashes and gypsum, are not needed if the manure pile is kept dry and compact.

To Get Full Value

To get the full fertilizing value from stable manures the liquid manures should be stored separate in cisterns and preserved by inoculation with lactic bacteria after sugar or molasses has been added. The cistern full should be sealed with a film of oil. The solid portion of the manure should be spread uniformly each day in a bin, trampled down, kept dry, and the pile only disturbed when it is ready to put on the land. Stable manure kept this way will breed no typhoid flies, and the liquid manures preserved in cisterns with an oil cap, will breed no mosquitoes.

Rubber Tapping Experiments

The effect of intervals of time between tapplings of Hevea rubber trees, is the subject of a recent bulletin issued by the Ceylon department of agriculture. Observations were made of the effect of tapping at various intervals of from one to nine days between.

Although the results were not conclusive they indicate that within limits the yield per tapping increases as the time interval between tapplings is increased. The greatest yield in a given time is obtained by tapping at the shortest interval within the limits of the experiment.

Fleas and Plague

The rat flea can carry the germs of plague when starved six weeks or more and still transmit the disease to mice and rats. This important fact was determined during 1915 by the British plague commission and is probably the explanation of sporadic outbreaks of plague at locations far distant from regions where the disease constantly exists. The important point is that fleas which have fed on diseased rats and mice will live without food, if conditions are right, as long as forty-seven days and can still infect other animals.

Water Measurements

In his monthly report to the board of agriculture and forestry, G. K. Larsson, superintendent of hydrography, states that the East Maui Agricultural Company is considering the installation of a large number of stream measurement stations on the lower boundary of their "fee simple" land which lies above the Territorial lands which furnish water to the ditches of this company under three water licenses, two of which terminate in 1917 and 1919, respectively. The Waikuku Sugar Co. is also planning an intensive study of its water supply and distribution system. A consultation with the officials of these corporations will be held early in the month, relative to handling this work by co-operation with this division.

Feeding Beet Pulp

At Michigan experiment station it was found that a thousand-pound steer will not consume over ten pounds of dried beet pulp per day. It was found to be a good ration for growing animals but would not fatten or finish them.

Honolulu Wholesale Produce Market Quotations

Table with columns for Butter and Eggs, Poultry, and Vegetables and Produce. Includes items like Island tub butter, Young roosters, Beans, Lima, etc.

Table with columns for Fruit and Livestock. Includes items like Alligator pears, Bananas, Pineapples, Hogs, etc.

Table with columns for Dressed Meats and Hides. Includes items like Beef, Veal, Pork, Mutton, etc.

Table with columns for Feed. Includes items like Corn, Soybean meal, Wheat, etc.

The following are quotations on feed, f.o.b. Honolulu: Corn, sm. yel., ton... 35.50 to 42.00; Soybean meal, ton... 42.00 to 43.00; Wheat, ton... 42.00 to 43.00.

The Territorial Marketing Division is under supervision of the U. S. Experiment Station, and in the service of all citizens of the Territory. Any produce which farmers may send to the Marketing Division is sold at the best obtainable price. A marketing charge of five per cent is made. It is highly desirable that farmers notify the Marketing Division what and how much produce they have for sale and about when it will be ready to ship.

By A. T. LONGLEY

Superintendent Territorial Marketing Division February 4, 1916. The effect of recent rains on the produce market is being felt more than ever. All kinds of green vegetables are high and scarce. The fact that the Chinese vegetable men are celebrating Kōhō also tends to scarcity.

Long Staple Cotton

Long staple cotton, with fibres one and three-sixteenths to one and five-sixteenths inch long, commands a premium of five to six cents per pound over short staple, one to one and one-sixteenth inch long. It is that difference that makes Hawaiian small farmers want to grow sea island and caribbean cotton, even though the pink boll weevil is still in the land.

Sprays For Rainy Districts

There have always been difficulties in the way of successfully spraying orchard crops in districts where the rainfall is high, in an attempt to artificially control fungus pests. L. C. Coleman, in a recent number of the Agricultural Journal of India, gives a formula which he has used with complete success in districts where it rains every day for months at a time.

Breeding Sheep

Utah experiment station has kept breeding records a thousand ewes and reports the gestation period at from 144 to 150 days, 146 days being the average. Shropshire ewes were more prolific than those of any other breed. Yearling rams are not good breeders, the best service being secured at three to six years.

Short-Tailed Sheep

A new race of short-tailed Cheviot sheep has been developed in Norway. The lambs do not have to be docked. This and an ear-length of only one and a half inches seem to be dominant Mendelian characteristics in the new breed.

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SPORTS

BALL GAMES SPECTACULAR

Another mainland baseball team, the "Winged O" stars of the Olympic Club of San Francisco, helped inaugurate a new baseball season in Hawaii yesterday afternoon at Honolulu Athletic Park. The boys with the snowy white uniforms and bright red trimmings and the Winged O on their shirt fronts, made a home for themselves with the local fans by their gingery ball playing and mainly efforts to win.

It was not much of an opening from a spectacular point of view. For the first time in the history of Hawaiian baseball, a mainland aggregation made its bow to a Honolulu crowd without the blaze of the band or the presence of the mayor or the Governor or some other celebrity of the Islands to set the first ball over or at the plate.

The score: AB RBH SB PO A E. Olympic: 4 0 1 0 0 3 0 1. San Francisco: 4 0 1 0 0 2 0 2. Buns, 3b... 4 0 0 0 0 1 0 0. Kennedy, 2b... 4 1 0 0 2 0 0 0. Freine, ss... 4 1 0 0 2 0 0 0. Riordan, c... 3 0 2 0 13 2 0 0. McGrath, lb... 3 0 0 0 7 1 0 0. Barker, if... 4 0 2 1 0 0 0 0. Martin, p... 3 0 0 0 1 6 1 0. xBurke... 1 0 0 0 0 0 0 0.

Summary—Home run, Kennedy; two base hits, Riordan, Lai Tin; sacrifice hits, Ayau, sacrifice fly, McGrath; hit by pitcher, Eu Sue; double plays, Martin to Riordan, McGrath to Riordan; bases on balls, off Martin 1, off Luik Lee 2; struck out, by Martin 10, by Luik Lee 5; wild pitch, Martin; unearned runs, 2; errors, McGrath, Buns on the base. Time of game, one hour and forty-five minutes.

Yesterday's ball game at Athletic Park between the Olympics of San Francisco and the St. Louis Alumni aggregation of diamond stars was a real exhibition of the national pastime with a thrill every minute and sometimes two and three a minute. Bart Burke's stalwarts took the long end of a five to three score but it was hard work from top of gong until the last Collegian had waited the breeze in the final half of the ten inning.

Several heroes stepped into the limelight during the scrimmage on the diamond and some of the fielding, pitching and hitting stunts those heroes pulled off kept the fans on keen edge during every second of the two hours and twenty-two minutes of play.

It was a regular Donnybrook Fair affair and the Winged O representatives and the representatives of the local college scrapped and fought for every inch of the way with the same gusto as the Phillies and Red Sox for the premier honors in baseball. It might not have been as good a game as those the big fellows put forth but the high salaried players did not work any harder for victory than did the Olympics and Saints.

The companies are represented by the following men: Machine Gun Company, Pvt. Kalish; Company A, Pvs. Connell and Doren; Company B, Pvs. Ogden, Helwig, Blair, O'Neill, and Wilkinson; Company C, Pvs. Lund, Stevens and Elbach; Company D, Cpl. Osterbo, Pvs. Horn and Bisher; Company E, Pvs. Barben and Casertona; Company F, Pvs. Morris and Platen; Company G, Pvs. May and Jira; Company H, Pvs. Downing and Bradbrook; Company I, Pvs. Maddux and Pitroski; Company K, Pvs. Scott, Amann and Myers; Company L, Cpl. Hallon.

THIRTY SHAFTER MEN TO COMPETE IN MEET

Thirty men from Fort Shafter have sent in their names as competitors in the service relay event to be swum at the swimming meet Washington's Birthday.

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HIGH SCHOOL MERMEN ARE RECORD BREAKERS

Intercollegiate swimming records were broken here last night. Loe A. Handy, of the Frookline High School negotiated the 100 yards in fifty-seven and one-fifth seconds; the 200 yards in two minutes, thirty-three and four-fifths seconds; and T. H. Chan, Hamilton High School, negotiated the fifty yards in twenty-six seconds.

AQUATIC ACHIEVEMENTS OF MAINLAND MERMAID

Miss Frances Cowells of San Francisco, is considered America's most promising woman swimmer and her work in the Washington Birthday events at the Naval Shipyard, will be closely watched by Honolulu followers of the game. In the recent aquatic meet staged at the Panama-Pacific Exposition, where the world's greatest swimmers competed, Miss Cowells broke four American records and proved herself the undisputed champion woman swimmer of the meet.

Her performances at the P. P. Exposition, where the world's greatest swimmers competed, Miss Cowells broke four American records and proved herself the undisputed champion woman swimmer of the meet. Her records are as follows: 50 yards at Suro Baths, 3:20-4.5; 100 yards at Suro Baths, 7:30; 200 yards at Suro Baths, 15:00; 50 yards back stroke. At Suro Baths, 0:46.

MILLS PROVES TO BE FAST-RUNNER

Twenty-fifth Infantry Man Distances Field in Regiment Field Meet

In a general order published at Headquarters of the Twenty-fifth Infantry, the following results of the fifty day meet held at the Twenty-fifth cantonment, on January 25, are announced: 100-yd. Dash—Benjamin H. Mills, Cpl., Company F, first; Clyde Gilbert, Pvt., Company G, second; Wilber Rogan, Pvt., M. G. Co., third; Robert Minter, Pvt., Company L, fourth; Charley Simon, Pvt., Company E, fifth; time—10 seconds.

Carrying Wounded without Litter—George P. Butler, Pvt., Company A, and Clarence Strupes, Cpl., Company A, first; Luke Wyche, Willie Woods, Pvs., Company F, second; Arthur Matthews and Arthur White, Pvs., Company F, third; Allie Crafton and Wendell D. Scott, Pvs., Company K, fourth; Charles Mason, Pvt., M. G. Co., and Hallie Anderson, Pvt., M. G. Co., fifth; time 17.25 seconds.

Baseball Relay—Third Battalion, first; First Battalion, second; time 21 minutes 11 seconds. 220-yards Run—Charles Simon, Pvt., Company E, first; Benjamin H. Mills, Cpl., Company F, second; Charles Stevenson, Mus., Company G, third; Alexander B. Harrison, Pvt., Company A, fourth; William Harris, Jr., Pvt., Company I, fifth; time, 23.15 seconds.

Baseball Relay—Third Battalion, first; First Battalion, second; time 21 minutes 11 seconds. 220-yards Run—Fisher Price, Pvt., Company E, first; James Smith, Pvt., Company M, second; Charles Mason, Pvt., M. G. Co., third; Charlie Matthews, Pvt., Company I, fourth; William Johnson, Pvt., Company G, fifth; time, 2 minutes 11 seconds.

Running Broad Jump—Elvin L. Sulinger, Pvt., Company I, first; Moses Herring, Pvt., Company E, 25th Inf., second; Branch L. Russell, Pvt., M. G. Co., third; John D. Valentine, Pvt., Company M, 25th Inf., fourth; Green I. Tate, Mus., Company B, 25th Inf., fifth; distance 20 feet 4 inches. Battalion Flag Relay—Second Battalion, first; Third Battalion second.

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BRUISES FAIL TO WIN HIM DIVORCE

(Mail Special to The Advertiser) LIHUE, Kauai, February 5.—Charles Gray, the owner of the Kapaa Wine Company, bruised above his right eye and above his left eye and cut on the upper lip and the right ear and bitten on the ring finger of the left hand, has asked the Lihue court for a divorce from his wife on the grounds of cruelty.

The question that faced the court centered about a lamp chimney. Did the wife throw it at her husband or did she merely smash it firmly down to emphasize a chance remark? It seems that various difficulties had arisen between the man and wife, and during one of the heated arguments, the lamp chimney was shattered by the wife. Gray then dashed after her and a hard struggle ensued, in which he received the injuries displayed.

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