SUGAR and PLANTATION NEWS

MARKET STRONG; MAY GO HIGHER

Willett & Gray Anticipate Firm Prices Around Four Cents January to March

Willet & Gray's report for the week ending November 25 states that at the close, the market was strong. Notwithstanding a statement from German sources that one-third of the beet crop remains unharvested, the estimate still stands.

The Cuban grinding season has begun. Buyers of new crop are slow. Future prices depend on whether Great Britain or France again enter that market.

In part, their report follows:

Raws.—The quotation at the close of last week's review was at 3c c. & f. (4.10 per lb. duty paid), for 96° Centrifugals. The Friday following 75,000 to 100,000 bags Centrifugals were sold from store and for prompt and first half December shipments.

On Monday 8,000 bags Cuban Centrifugals, for December 1 clearance, sold to refiner at 3.03c c. &f. advancing the market quotation to 4.04c per lb. The same day 7,000 bags December shipment sold to a speculator at 3c c. & f. (4.01c). Other speculative business done in later months at the same price. These sales comprised the business of the week, the effect being shown in the exports of 20,000 tons Cuban to Atlantic Ports from entire Island of Cuba (Mr. Himley). The stock in Cuba six ports is 48,000 tons and in outports 13,000 tons (Mr. Himley). The weather has turned favorable for ripening the cane and two or three estates will begin grinding the first week in December. There is a firm disposition on part of sellers to hold the remaining stocks for a further advance before new crops sugar becomes available. The remaining time is short and the demand for raws by refiners is limited to the requirements of the domestic trade, which is only moderate, the bulk of demand being largely supplied by the domestic Beet factories.

There is no foreign buying just now to help the raw situation.

At one time it was possible that the demand for France would continue to an extent that would curtail the supplies of refined for domestic use sufficiently to warrant the domestic Beet sugars being sold at or near the value of cane granulated.

Domestic beet sellers keep note of conditions and have advanced prices in Colorado.

The Atlantic ports receipts for week are 16,910 tons, meltings 48,000 tons and stocks decreased 31,990 tons to 203,648 tons.

Very little trading in Cuba new crop has taken place this week, and while sellers are disposed to make contracts for January-March deliveries, the buyers see no reason for hurrying purchases until the crop season opens, although quite well convinced that this opening for first productions is not likely to be below three cents, c. & f. (4.01c) basis.

German refined fine granulated can be had today by buyers, undismayed by the difficulties in the way, at 9 marks per 50 kilos—say 2c per pound f. o. b. Hamburg, or with freight named via neutral ports to New York, including insurance, and also duty of 1.33c per pound, a total cost of 4.17c per pound landed New York, against present quotation of 4.80c per pound for United States domestic beet granulated.

It will be noted from our statement on beet seed that purchases of sugar must be paid for at shipping port against bill of lading and invoice that it may become American property, thus rendering it possibly free from danger of seizure. Only a considerably higher value here in the future would seem to warrant such importations.

Latest mail advices from Great Britain indicate that certificates of country of production are not required for exports of refined from the United States to Great Britain.

The United Kingdom consumption of sugar increased in October to 137,298 tons, against 104,232 tons in September, and 123,986 tons in October, 1913. There is talk in the United Kingdom of an increase of duties on sugar.

Germany herewith reports October 30 that one-third of the crops was unharvested, and beet roots were being used freely for cattle feed. Several European estimates of the German crop outturn came to hand, running from 2,400,000 tons to 2,600,000 tons.

We revise our European crop estimates, reducing France 100,000 tons and increasing Austria-Hungary the same. We retain our German estimate for the present, and give estimates of the other European countries herewith.

Our special column regarding domestic beet crop is interesting. Michigan is ending its campaign rather earlier than usual.

Refined—There is little to add about the refined sugar market.

There is no real foreign demand, although constant contact is being kept with export quotations by France. There are buyers at 3.75c, with sellers at 3.90c, both net cash, in bond.

Local buying is on the hand-to-mouth basis for this month.

Cuba—According to special reports received by us from all parts of the island for the week ending November 20, 1914, rains continue to fall at frequent intervals, with perhaps a slight decrease in intensity during the week. Cool, clear weather is more and more desired to ripen the cane and put the roads in good condition for hauling. Temperatures were decidedly lower, which is a favorable factor.

United States Field and Factory.—Notes from the press:

"In reviewing the campaign at Anaheim, Cal., the manager is reported to have said that the beets cut averaged 18.64 per cent, which showed quite an improvement over 1913, and that, notwithstanding the farmers were paid on a basis 75c lower than last year, they receive only 35c per ton less, the difference being more than made up by the increased tonnage per acre. To November 12 the company had sold about half its sugar product. There is sufficient beet seed on hand for 1915, which will be sold to the farmers at the usual price. The campaign at Chino closed on November 8.

"The new contracts for beets at Oxnard provide for a bonus of 50c per ton of beets if the average net selling price of beet sugar received by the beet sugar factories of southern California shall equal or exceed 4½c per pound during the period between July 1, 1915, and May 1, 1916. The payment of such bonus to be made on or before July 1, 1916.

"The sugar beet digging in Utah has progressed more rapidly than usual under ideal weather conditions, and it is estimated that nearly three-fourths of the crop had been harvested by the middle of November. The campaign at Ogden is thought to be about half through. Some unusually good yields of beets are reported from Kansas, although the acreage in that State was below the average this year.

"Largely owing to the very favorable weather this fall the beet harvest in Michigan is already nearing its end and but few beets still remain to be delivered to the factories. The Michigan Sugar Co. at Bay City, reported only 5 per cent of its beets still out on November 19, and the German American not over 5000 tons. The West Bay City and the other factories expect to have practically all their crops in by December 1. Beets are now piled high at all the factories and weighing stations.

BEET SEED ARRIVES

Considerable shipments of beet seed are reported to have been made from Rotterdam, which will enter the United States both through New York and New Orleans. One lot of 16,000 bags reached New York this week.

Record and Forecast of Hawaiian Sugar Crops as of Uneven Dates to Dec. 9, 1914

There are forty-five sugar mills in Hawaii. In addition thereto, there are seven independent cane planters, whose cane is ground on shares, who do business on such a large scale that their share of sugar is listed separately. There are many hundred share planters on a smaller scale, whose sugar is handled by the mills and included in its record of output.

Planters without mills are indicated hereunder by a *; those marked † will not finish the 1914 crop until January, 1915.

* Estimates of certain plantations not having been received the 1914 return is inserted, marked ‡.

Statistics are of tons of 2000 lbs. each.

NAME OF PLANTATION.	Crop of 1914 revised estimate of total crop as of Dec. 8.	Crop of 1915, Agents and Sugar Factor's estimate as of Dec. 7.	H. S. P. A. crop figures from Oct. 1, 1913, to Sept. 30, 1914.	Grinding 1915 Crop Begins
*Apokaa Sugar Co.	926	450	925	
*Estate V. Knudsen	930	930	992	Grinding.
Ewa Plantation Co.	29,933	30,000	29,563	December 7, 1914.
*Gay & Robinson	5,903	5,000	5,172	January 2, 1915.
*Grove Farm Plantation	4,415*	4,800	4,415	
†Hawaiian Agricultural Co.	17,000	18,000	17,890	
Hawaiian Commercial & Sugar Co.	56,500	55,000	56,500	Grinding.
Hawaiian Sugar Co.	26,863	21,000	26,826	Grinding.
Hawaii Mill Co.	3,601	3,000	3,601	
Hamakua Mill Co.	7,057	11,300	7,057	January 1, 1915.
Hilawa Plantation	2,352	1,600	2,087	
Hakalau Plantation Co.	16,950	16,500	16,863	January 4, 1915.
Hilo Sugar Co.	18,930	13,300	18,937	January, 1915, first week.
Honokaa Sugar Co.	7,450	10,000	7,212	
Pacific Sugar Mill	6,250	7,000	6,250	
Hawi Mill & Plantation	6,200	8,600	6,745	January, 1915.
Honomu Sugar Co.	8,531	9,000	8,567	January, 1915, first week.
†Hutchinson Sugar Plantation Co.	6,750	8,000	5,909	
Honolulu Plantation Co.	20,150	19,000	20,154	Grinding.
Kilauea Sugar Plantation Co.	6,428	5,800	6,426	December 20, 1914.
Kipahulu Sugar Co.	2,126	2,500	2,126	
Kaeleku Plantation Co.	6,217	5,300	6,225	
Kahuku Plantation Co.	8,193	7,000	8,193	November, 1914.
Koloa Sugar Co.	8,572	8,500	8,572	December 14, 1914.
Kekaha Sugar Co.	17,165	15,100	17,183	November 25, 1914.
†Kohala Sugar Co.	5,768	6,500	4,475	
Kona Development Co.	3,477	3,200	3,477	
Kaiwiki Sugar Co.	7,000	7,000	6,933	
Kukaiau Plantation Co.	3,225	3,700	3,225	
*Koolau Agricultural Co.	1,137	1,100	1,137	
Laupahoehoe Sugar Co.	11,193	11,300	11,193	Grinding.
Lihue Plantation Co.	22,065	20,000	22,065	
*Laie Plantation	1,615	1,600	1,600	
Makee Sugar Co.	9,935	10,000	10,660	
Maui Agricultural Co.	33,660	34,000	33,660	Grinding.
McBryde Sugar Co.	16,370	15,000	16,345	
Niulii Mill & Plantation	2,600	2,500	2,700	
Oahu Sugar Co.	33,501	28,000	33,474	December 1, 1914.
Olaa Sugar Co.	24,754	32,000	25,736	December 7, 1914.
Olowalu Co.	2,026	1,850	2,027	January 2, 1915.
Onomea Sugar Co.	19,599	18,000	19,600	January, 1915, first week.
Paauhau Sugar Plantation Co.	10,766	10,000	10,767	January 4, 1915.
Pioneer Mill Co.	28,307	28,000	28,302	November 19, 1914.
Pepeekeo Sugar Co.	9,814	10,500	9,806	January 1, 1915.
*Puakea Plantation	1,029	1,000	1,035	
†Union Mill Co.	4,000	3,000	2,608	
Waiakea Mill Co.	14,920	14,000	14,922	Grinding.
Wailuku Sugar Co.	16,400	18,000	16,100	December 29, 1914.
Waialua Agricultural Co.	30,213	31,000	30,298	December 9, 1914.
Waianae Co.	4,512	4,500	3,083	
Waimanalo Sugar Co.	5,548	4,800	5,133	January 4, 1915.
Waimea Sugar Co.	2,003	1,900	2,358	
Total	620,366	612,530	617,038	

1915 BEET CROP BIGGEST YET

Brilliant Business Coup By American Buyers Lands Enormous Supply Seed

Willet & Gray state that because of brilliant enterprise on the part of American sugar men, enough beet seed has been purchased to make the 1915-1916 domestic crop the largest ever produced.

The article states that there was a time near the outbreak of the war when the absence of an adequate supply of beet seed promised to curtail the United States domestic beet crop of 1914-15 very severely.

Under such conditions representatives of our beet sugar industry took the matter in hand and after assurance from our Government of no impediments in the way of importations except such as were physical, proceeded to make the trip to Holland. The vessel came in contact with a mine in the North Sea, but fortunately was not seriously injured. The representatives of the United States beet factories reached their destination and were greeted with open arms by the beet seed sellers.

Action Prompt

Quick negotiations resulted in the prompt purchase and delivery at the shipping port of 70,000 bags of seed, which was paid for at the port of shipping at a cost with all expenses paid less than the factories have been paying for seed the past years. It required 600 "flat" cars to transport the seed from the country of production to the shipping port. No impediment was placed in the way of purchase or shipment by the Governments interested. While on the ocean the seed was American owned and not liable to seizure.

The bulk of the purchase has already been shipped and a good portion has reached the United States and is being distributed to the beet factories in need.

This unusual enterprise of American citizens assures probably the largest crop of domestic beet sugar in 1915-16 ever produced, and will no doubt contribute to produce considerably lower prices of sugar to consumers from October, 1915, than would otherwise have been made.

Some lessons of advantage to the United States domestic beet sugar industry will no doubt be drawn from this enterprising incident.

European Beet Harvest

These representatives on their return report the beet crops of European countries outside of the war zone are being harvested and turned into sugar without special difficulties; the possible lack of money only may be considered. A trip from London to Paris by rail passed through the beet fields of France outside the war zone as indicated in our war map of Europe, and heavy trains of cars were everywhere loaded with beet roots in transportation to the factories.

Oahu Plantation Leases of Ii Estate Cane Lands Now Confirmed

J. F. G. Hagens stated yesterday that the decision of the United States Supreme Court in the Ii Estate case is favorable to the Oahu Sugar Company in that it confirms the company's leases to the cane lands owned by the estate.

"I am particularly gratified to see the original decision of the Territorial Supreme Court upheld by the highest tribunal of the land. Had our Supreme Court's decision been reversed, the reversal would have given an impetus to the tendency of litigants to carry all cases on up," Mr. Hagens said.

THE CHILDREN'S COLDS.

Watch the children's colds and cure them before they weaken the vitality. Use Chamberlain's Cough Remedy freely. It is perfectly safe. It has been tested by chemists and pronounced free from injurious substances and costs but a trifle. For sale by all dealers. Benson Smith & Co., agents for Hawaii.

WASTE MOLASSES WORTH MONEY

Expert Chemist States Molasses Output Worth Two and a Half Millions

(The accompanying paper read yesterday at the sugar planters meeting by S. S. Peck, chemist of the H. S. P. A. experiment station is one of the best articles on utilization of by-products that has been contributed to this subject. Mr. Peck's report was ordered printed in both the proceedings and the record.)

By S. S. PECK

In the sugar factory the raw material entering the process is the cane, which is then divided into four final products, bagasse, presscake, molasses and sugar. The bagasse and presscake are entirely utilized. The former furnishes, or should furnish, all the heat necessary in the factory. The presscake is an efficient fertilizer, and is all used as such.

The molasses finds use both as food for stock or as fuel, but the bulk of it is a waste product. In some places it is a troublesome waste, since it must be gotten rid of by running into irrigation ditches, with more or less harmful results to the cane watered by these ditches; in other places more conveniently situated, the sea receives the bulk of this final product.

Alcohol Manufacture

The suggestion of the use of molasses for manufacture of spirit is not a new one. There are perhaps economic arguments against its employment for this purpose on these Islands, but there are other arguments which may possibly outweigh the objections.

The larger part of the alcohol produced in the United States comes from grains, and in Germany from potatoes. In order to produce this alcohol, the crop, whether it be corn, rye, or potatoes, must be grown, harvested, pass through some preparation, such as husking, then treated with acid or other converting agent to transform the starch into glucose, at a cost of labor, fuel, and malting material, and is then, and only then, in a condition to be compared with our waste molasses and ready for the fermentation process. It needs no explanation to show that all these preliminary operations are costly ones, and that much may be sacrificed in the way of prices or marketing expenses and still leave a profit to a molasses distillery.

A Gallon of Molasses

For the purpose of illustration, a gallon of molasses has been diluted and fermented, and the product of distillation is exhibited herewith. Naturally, working under laboratory conditions with small capacity for distillation, the work has not been very perfect. Nevertheless, ninety-three per cent of the possible alcohol, as obtained from analysis of the sugars in the molasses, was recovered.

Allowance was made for the non-fermentable reducing bodies always present in Hawaiian molasses, and for the by-products always produced during alcoholic fermentation. By repeated distillations an alcohol of ninety per cent strength was obtained. It will be noticed that there is present in this alcohol none of the odor so noticeable in alcohol from molasses. There has been no chemical treatment used to destroy these odors, simply a process of fractional distillation; and there is no reason that in a properly equipped still a product equal to or superior to this should not be obtained in one distillation.

Some Values Determined

As the result of this experiment, the gallon of molasses yielded a distillate equivalent to .42 gallon of ninety-four per cent alcohol. The wholesale price of cologne spirits of this grade is $2.50 per gallon, from which the internal revenue tax (about $2.13) must be deducted, leaving to the distiller thirty-seven cents per gallon of alcohol, equivalent to fifteen and half cents per gallon of molasses. This means $25 per ton of molasses, and it would seem that between this figure and $6, the present selling price of molasses, there is a margin far more than sufficient to pay for the expenses attending the manufacture and marketing of the product.

Or, if denatured alcohol is to be produced, with the old denaturant of 100 ethyl to ten wood alcohol, the ton of molasses would be worth $23.15. Allowance is made in this figure for the cost of the denaturant. There is of course still a considerable value to the lees or residue from distillation, a point which will be taken up later.

Objections to Alcohol Manufacture

Three arguments have been in general presented against the manufacture of alcohol from molasses, as follows:

The red tape of the internal revenue department. As a matter of fact, this is largely imaginary. This department does indeed make a multitude of demands, and the first reading of its requirements leaves one with a sense of dizziness; but intelligent study of the laws, and particularly an understanding of the whys and wherefores of them, clarifies the situation wonderfully. Actually the regulations are not any more stringent or complicated than those which surround the large banking and insurance corporations, and they are continuing to do a very profitable and satisfactory business.

The costs of operation. These have in previous estimates been greatly overestimated. Some have been based on results from distilleries where corn or potatoes furnish the raw material, and as previously explained, such costs would not be incurred in a molasses distillery. A distillery requires but three intelligent members to each shift, a stillman, fermenter or yeast man, and engineer. All the rest of the work is done by a few laborers and the pumps.

The final objection is that of the marketing of the spirit. This is the most valid of the three, but not necessarily unsurmountable. The demand for spirit exists, here, on the mainland, and in the Orient. The number of manufacturing operations which require alcohol is surprising. An aggressive campaign will open up a market for our product; it does not have to be made, but it must be solicited.

Other Molasses Products

In addition to the alcohol possibilities of molasses, there is that of its fertilizer content. Our Island molasses contain about four per cent of potash, worth at the present market price five cents per pound. That is, a ton of molasses is worth $4 for the potash it contains. Whether it is thrown into the sea or sold to the mainland, the corresponding amount is taken from our soils and must eventually be replaced in commercial fertilizers. The sole source of potash at present is the Stassfurt mines of Germany, and now we are shut off from them.

The Potash Crop

We must therefore either do without potash or develop another source of supply. The 1915 crop has been estimated to be about 600,000 tons of sugar, and a corresponding molasses output of at least 120,000 tons will result. This means 4800 tons of potash, which at the old market price would be worth $480,000.

Today if obtainable at all it would be worth five times that amount, as the wholesale prices of ordinary commercial potash salts outside of fertilizers have advanced already to that extent.

Potash may be recovered from molasses either directly, or after the process of fermentation and recovery of alcohol has been accomplished. In the latter case the molasses will have more than a double value, but the expense of recovering the potash will be greater.

If molasses is partially dried and then heated to ignition, it will burn to an easily pulverized char. In one trial, a char containing nineteen per cent of potash was prepared. No further treatment is necessary, the potassic fertilizer is complete. The potash exists largely as muriate, to a lesser extent as sulphate, and in small quantity as carbonate.

It is well known that at the high temperature of a furnace and the usual strong draught that there is loss of potash when molasses is burned, actual loss by volatilization and loss in availability through the formation of insoluble potash slags or clinker. In laboratory tests, it was found that molasses could be burned to an almost white ash in an open porcelain dish without appreciable loss of potash. If burned in platinum at a white heat, considerable volatilization of potassium chloride resulted.

Manufacturing Methods

If desired to have the potash in a more concentrated form, it can be leached with water from the char. One trial resulted in the production of a salt containing forty-two per cent of actual potash.

Potash Fertilizers May Be Produced At Home From Plantation Wastes

By a modification of the procedure, a still purer salt can be obtained as will be shown later. The salt obtained in this instance contained all the potash as muriate and sulphate in about equal proportions. The sulphate is the salt used pratically exclusively in our mixed fertilizers, and it would add but little to the cost of preparation to obtain the potash all in this form.

Distillation Residues

In the preparation of the lees or residue from distillation for fertilizer purposes, the mere evaporation thereof will not suffice. The lees do not dry readily and the evaporated and dried material is very hygroscopic. A method recently suggested for beet molasses vinasse is the addition of superphosphate to the partially concentrated lees, when a permanently dry mass will result.

In a trial with the cane molasses lees, the resultant mixture dried very slowly, and a dry product was obtained only with considerable difficulty. This product is, however, a good fertilizer. It contained 1.4 per cent nitrogen, 10.13 per cent of potash, soluble in water, and 3.5 per cent of water soluble phosphoric acid. It is possible that with further trials this method may be made suitable for residues from cane molasses distillation.

In this connection it must be noted that in usual fermentation and distillery practice it is customary to add some nitrogenous material as food for the yeast. In this case no such material was added, and the nitrogen in the residue originated entirely in the molasses itself. If nitrogenous food had been used, this would all have been recovered in the residue, adding to its fertilizer value; and furthermore, there may have possibly been a better showing at the alcohol end.

A Complete Fertilizer Produced

An attempt was further made to dry this lees—superphosphate mixture by the aid of a partial charring with strong sulphuric acid. This attempt was not entirely successful, the product being too hard and not easily pulverized. Nevertheless it is worthy of further trial, should occasion demand it. The black powder analyzed, 1.12 per cent nitrogen; 19.95 per cent total potash; 9.42 per cent potash, water soluble; and 4.13 per cent water soluble phosphoric acid.

It is thus seen that the procedure does not cause any great loss of nitrogen, nor does it change the condition of the phosphoric acid added as superphosphate. With a little more experience, it may be expected to avoid the reaction which caused so much of the potash to become less readily available.

Another lot of lees, to which no superphosphate was added, was evaporated and burned at a low temperature, leaving a char containing thirty-four per cent of potash, all available. The charring of this material differed from that of the molasses alone, in that after the source of heat was removed the coke continued to burn slowly for several hours, resulting in a more thorough combustion of the organic matter, and therefore less carbon, a lighter colored ash, and a higher potash content. The nitrogen was of course entirely lost.

Saving the Nitrogen

There would be no object in incinerating this material if it were possible to get it into a shape easily handled; and as stated already, the superphosphate or sulphuric acid method may yet accomplish this purpose, with the further saving of the nitrogen content. This char was leached, yielding a salt containing 56.3 per cent of potash, probably largely the chloride salt.

The following comparison will be of interest as showing the purity of this product:

	Per cent of Potash
Sulphate of potash chemically pure	54.06
Sulphate of potash, fertilizer salt	40 to 52
Double Manurial salt	25
Chloride of potash, chemically pure	63.18
Chloride of potash, fertilizer salt	40 to 60
Kainit (crude potash salt)	10 to 11

Now Entirely Lost

A considerable quantity of molasses is being burned today in mill furnaces, but the method of burning is such that part of the potash is volatilized and the remainder forms a slag in which its availability is largely diminished if not entirely destroyed. A method of burning in retorts was described at the last engineers' meeting which will conserve the potash in available form, and the value of molasses should be considered as carefully from this as from the fuel view point. It is not impossible that retorts burning molasses on the producer gas system can be devised, obtaining thus both heat and the no less valuable residual potash in an available form.

In connection with the divorce suit of Elsie Cross Howard against Ernest Justin Cross, filed some time ago in the local circuit court, an affidavit signed by Walter Stockton of Victoria, British Columbia, was filed yesterday setting forth the fact that the complaint had been duly served on Cross in that city November 27 by Stockton.

CUTICURA CURED TWO BROTHERS

One had Face Covered with Itching Eruption—Eyesight was Affected—Raw, Itching Humor Spread Over the Other from Head to Feet in a Single Day—Dreadful

SKIN-TORTURES YIELD TO EASY TREATMENT

"In 1907 my face broke out in a mass of itching sores which finally affected my eyesight. I tried several highly recommended salves that cost one dollar an ounce, but to no avail. A friend of mine urged me to try Cuticura Soap and Cuticura Ointment as he was sure of good results from his own experience. I used the Cuticura Ointment for about six weeks after washing thoroughly with the Cuticura Soap. My face is in perfect health now which I owe to the Cuticura Remedies. I shall always stand by them as one of the greatest blessings to the suffering thousands. Arthur D. Gridley, 532 Dean St., Brooklyn, N. Y., Apr. 9, 1909."

"In the middle of the night of March 30th I woke up with a burning itch in my two hands and I felt as if I could pull them apart. In the morning the itching had got to my chest and during that day it spread all over my body. I was red and raw from the top of my head to the soles of my feet and I was in continual agony from the itching. I could neither lie down nor sit up. I happened to see about Cuticura Remedies and I thought I would give them a trial. I took a good bath with the Cuticura Soap and used the Cuticura Ointment. I put it on from my head down to my feet and then went to bed. On the first of April I felt like a new man. The itching was almost gone. I continued with the Cuticura Soap and Ointment and during that day the itching completely left me. Frank Gridley, 325 E. 43rd St., New York City, Apr. 27, '09."

Complete External and Internal Treatment for Every Humor of Infants, Children and Adults consists of Cuticura Soap (25c.) to Cleanse the Skin, Cuticura Ointment (50c.) to Heal the Skin and Cuticura Resolvent (50c.), (or in the form of Chocolate Coated Pills 25c. per vial of 60) to Purify the Blood. Sold throughout the world. Potter Drug & Chem. Corp., Sole Props., 135 Columbus Ave., Boston, Mass. Mailed Free, 32-page Cuticura Book, an authority on treatment of Skin and Scalp Diseases.